Saugos duomenų lapas
PRIMER 100% ACRILICO

Saugos duomenų lapo data 5/9/2025, patikrinimas 6

1 SKIRSNIS. Medžiagos arba mišinio ir bendrovės arba įmonės identifikavimas

1.1. Produkto identifikatorius

Mišinio pavadinimas:

Prekinis pavadinimas: PRIMER 100% ACRILICO

Prekybinis kodas: 3653

1.2. Medžiagos ar mišinio nustatyti naudojimo būdai ir nerekomenduojami naudojimo būdai

Rekomenduojamas naudojimo būdas:

Purųkiami dažai

Nerekomenduojami naudojimo būdai:

Griežtai laikykitės rekomenduojamų naudojimo paskirčių.

1.3. Saugos duomenų lapo teikėjo duomenys

Tiekėjas:

Arexons S.p.A.

via Antica di Cassano, 23, 20063

Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Už saugos duomenų lapą atsakingas kompetentingas asmuo:

arexons@arexons.it

1.4. Pagalbos telefono numeris

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Apsinuodijimų kontrolės ir informacijos biuras - 2 ligoninės pavadinimas - Miestas - Telefono numeris (informacija) +370 (85) 2362052

2 SKIRSNIS. Galimi pavojai

2.1. Medžiagos ar mišinio klasifikavimas

Reglamento EB 1272/2008 (CLP) kriterijai

Pavojinga, Aerosols 1, Ypač degus aerozolis. Slėginė talpykla. Kaitinama gali sprogti.

DECL10: Šis titano dioksido turintis produktas neklasifikuojamas kaip kancerogenas įkvėpus, nes jis neatitinka kriterijų, nurodytų Reglamento (EB) 1272/2008 VI priedo 10 pastaboje.

10 pastaba: Prie kancerogenų (įkvėpus) priskiriami tik miltelių pavidalo mišiniai, kuriuose yra ne mažiau kaip 1 % titano dioksido, kuris yra dalelių, kurių aerodinaminis skersmuo yra <= 10 µm, formos arba tokių dalelių sudėtyje."

Fizinis ir cheminis, aplinkai bei žmonių sveikatai įtakos turintis neigiamas poveikis:

Kitų pavojų nėra.

2.2. Ženklinimo elementai

Pavojaus piktogramos:

Pavojinga

Pavojingumo frazės:

H222, H229 Ypač degus aerozolis. Slėginė talpykla. Kaitinama gali sprogti.

Atsargumo frazės:

P101 Jei reikalinga gydytojo konsultacija, su savimi turėkite produkto talpyklą ar jo etiketę.

P102 Laikyti vaikams neprieinamoje vietoje.

P103 Atidžiai perskaitykite ir vadovaukitės visomis instrukcijomis.

P210 Laikyti atokiau nuo šilumos šaltinių, karštų paviršių, žiežirbų, atviros liepsnos arba kitų

degimo šaltinių. Nerūkyti.
P211 Nepurkšti į atvirą liepsną arba kitus degimo šaltinius.
P251 Nepradurti ir nedeginti net panaudoto.
P410+P412 Saugoti nuo saulės šviesos. Nelaikyti aukštesnėje kaip 50 °C/122 °F temperatūroje.

Specialios sąlygos:
EUH211 Atsargiai! Purškiant gali susidaryti pavojingų įkvepiamų lašelių. Neįkvėpti rūko ar aerozolio.

Specialios nuostatos pagal REACH XVII priedą ir tolesnes pataisas:
Nėra

2.3. Kiti pavojai
PBT, vPvB ir endokrininę sistemą ardančių medžiagų neaptinkama, kai koncentracija >= 0,1%.

Kiti pavojai:
Kitų pavojų nėra.

3 SKIRSNIS. Sudėtis arba informacija apie sudedamąsias dalis

3.1. Medžiagos
Netaikoma

3.2. Mišiniai
Pavojingos sudedamosios dalys, numatytos CLP reglamente ir atitinkamoje klasifikacijoje:

Kiekis	Pavadinimas	Identifikacijos Nr.	Klasifikavimas
>= 15% - < 20%	propanas	Indekso numeris: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9 REACH Nr.: 01-2119486944-21	2.2/1A Flam. Gas 1A H220 2.5 Press. Gas H280
>= 7% - < 10%	ksilenas	Indekso numeris: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7 REACH Nr.: 01-2119488216-32	2.6/3 Flam. Liq. 3 H226 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332 3.2/2 Skin Irrit. 2 H315
>= 7% - < 10%	butanas	Indekso numeris: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7 REACH Nr.: 01-2119474691-32	2.5/C Press Gas (Comp.) H280 2.2/1A Flam. Gas 1A H220
>= 5% - < 7%	izobutanas	Indekso numeris: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2 REACH Nr.: 01-2119485395-27	2.2/1A Flam. Gas 1A H220 2.5/C Press Gas (Comp.) H280

>= 3% - < 5%	titano dioksidas [miltelių pavidalo, kurio sudėtyje yra ne mažiau kaip 1 % dalelių, kurių aerodinaminis skersmuo <= 10 µm]	Indekso numeris: CAS: EC: REACH Nr.:	022-006-00-2 13463-67-7 236-675-5 01-2119489379-17	3.6/2 Carc. 2 H351 (įkvėpimas) Konkrečios koncentracijos ribos: C >= 1%: EUH211
>= 2% - < 3%	acetonas; propan-2-onas; propanonas	Indekso numeris: CAS: EC: REACH Nr.:	606-001-00-8 67-64-1 200-662-2 01-2119471330-49	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 EUH066

4 SKIRSNIS. Pirmosios pagalbos priemonės

4.1. Pirmosios pagalbos priemonių aprašymas

Patekus ant odos:

Nuplauti dideliu kiekiu vandens su muilu.

Patekus į akis:

Patekus į akis, nedelsiant gerai praplauti vandeniu ir kreiptis į gydytoją.

Nurijus:

Jokiu būdu neskatinti vėmimo. NEDELSIANT KREIPTIS Į GYDYTOJĄ.

Įkvėpus:

Išnešti nukentėjusįjį į gryną orą; laikyti šiltai ir leisti jam ramiai pailsėti.

4.2. Svarbiausi simptomai ir poveikis (ūmus ir uždelstas)

Nėra

4.3. Nurodymas apie bet kokios neatidėliotinos medicinos pagalbos ir specialaus gydymo reikalingumą

Gydymas:

Simptominis gydymas. Jei pasireiškia poveikis ar negalavimas, pasitarkite su gydytoju.

5 SKIRSNIS. Priešgaisrinės priemonės

5.1. Gesinimo priemonės

Tinkamos gesinimo priemonės:

Su anglies dioksidu.

Su milteliais.

Gesinimo priemonės, kurios nėra rekomenduojamos:

5.2. Specialūs medžiagos ar mišinio keliami pavojai

Neįkvėpti sprogimo ir degimo dujų.

Degimas sukelia tirštus dūmus.

5.3. Patarimai gaisrininkams

Įprasta gaisro gesinimo apranga, pavyzdžiui, autonominis atvirosios apytakos suslėgtojo oro kvėpavimo aparatas (EN 137), ugniai atsparus kostiumas (EN 469), ugniai atsparios pirštinės (EN 659) ir ugniagesio batai (HO A29 arba A30).

Talpykles laikykite vėsias naudodami purškiamą vandenį.

Gaisro gesinimo vandenį surinkti atskirai. Jis neturi būti išleidžiamas į kanalizaciją.

6 SKIRSNIS. Avarijų likvidavimo priemonės

6.1. Asmens atsargumo priemonės, apsaugos priemonės ir skubios pagalbos procedūros

Neteikiantiems pagalbos darbuotojams:

Žr. 7 ir 8 punkte nurodytas apsaugos priemones.

Užtikrinti tinkamą ventiliaciją.
Pagalbos teikėjams:
Žr. 7 ir 8 punkte nurodytas apsaugos priemones.
Kumštinės pirštinės.
Pašalinti visus degius šaltinius.
Kitus asmenis nugabenti į saugią vietą.

6.2. Ekologinės atsargumo priemonės

Neleisti medžiagai patekti į dirvožemį / podirvį. Neleisti medžiagai pakliūti į vandens telkinius ar kanalizacijas.
Surinkti ir pašalinti užterštas nuoplovas.
Informuoti atsakingas institucijas, jei įvyktų dujų nutekėjimas ar jų patektų į vandens telkinius, dirvožemį ar podirvį.
Tinkamos sugeriančios medžiagos: įgeriančios medžiagos, organinės medžiagos, smėlis.

6.3. Izoliavimo ir valymo procedūros bei priemonės

Išvalymui:
Prie nuotėkio ir atliekų vietų venkite ugnies ir (arba) kibirkščių. Nerūkykite. Įvykus dideliam išsiliejimui
aptverkite pylimais, sugerkite ir sukaskite į tinkamas išmetimo talpyklas. Išsiliejusius nedidelius kiekius
surinkite absorbuojančiomis medžiagomis. Nešvarias medžiagas sudėkite į tinkamą talpyklą. Nešvarias
medžiagas išmeskite pagal vietinius ar nacionalinius reikalavimus.

6.4. Nuoroda į kitus skirsnius

Taip pat žr. 8 ir 13 skirsnius.

7 SKIRSNIS. Tvarkymas ir sandėliavimas

7.1. Su saugiu tvarkymu susijusios atsargumo priemonės

Vengti sąlyčio su oda ir akimis, neįkvėpti garų ir rūko pavidalo medžiagos.
Nenaudoti tuščių talpyklų, kol jos nėra išvalytos.
Prieš atliekant perkėlimo operacijas, patikrinti, ar talpyklose nėra jokių nesuderinamų medžiagų likučių.
Taip pat žr. 8 skirsnį apie rekomenduojamas apsaugos priemones.

Naudojant šį produktą, nevalgyti, negerti ir nerūkyti.

7.2. Saugaus sandėliavimo sąlygos, įskaitant visus nesuderinamumus

Laikykite indelius sandariai uždarytus, geriausia vėdinamoje aplinkoje, atokiau nuo karųąio ųaltiniū ir tiesioginės saulės ųviesos.
Nelaikykite ųios medžiagos ųalia maisto ir gėrimū.
Laikyti žemesnėje nei 20 °C temperatūroje. Laikyti atokiau nuo atviros ugnies ir karščio šaltinių.
Vengti tiesioginio saulės spindulių poveikio.
Laikyti atokiau nuo atviros ugnies, žiežirbų ir karšio šaltinių. Vengti tiesioginio saulės spindulių poveikio.
Laikyti atokiau nuo maisto, gėrimų ir gyvulių pašaro.
Ypatingų nurodymų nėra.
Nurodymai dėl patalpų:
Vėsios ir tinkamai vėdinamos.

7.3. Konkretus galutinio naudojimo būdas (-ai)

Nėra ypatingų nurodymų

8 SKIRSNIS. Poveikio kontrolė / asmens apsauga

8.1. Kontrolės parametrai

propanas - CAS: 74-98-6
ACGIH - Pastabos: (D, EX) - Asphyxia
20101.14 - TWA: 1000 ppm
ksilenas - CAS: 1330-20-7
EU - TWA(8 val.): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Pastabos: Skin
ACGIH - TWA(8 val.): 20 ppm - Pastabos: A4, BEI - URT and eye irr; hematologic eff;

CNS impair
butanas - CAS: 106-97-8
ACGIH - STEL: 1000 ppm - Pastabos: (EX) - CNS impair
VLE trumpas - 1000 ppm
izobutanas - CAS: 75-28-5
ACGIH - STEL: 1000 ppm - Pastabos: (EX) - CNS impair
20101.14 - STEL: 1000 ppm
VLE trumpas - 1000 ppm
titano dioksidas [miltelių pavidalo, kurio sudėtyje yra ne mažiau kaip 1 % dalelių, kurių aerodinaminis skersmuo <= 10 µm] - CAS: 13463-67-7
ACGIH - TWA(8 val.): 0.2 mg/m3 - Pastabos: Nanoscale particles; (R); A3 - LRT irr, pneumoconiosis
ACGIH - TWA(8 val.): 2.5 mg/m3 - Pastabos: Finescale particles; (R); A3 - LRT irr, pneumoconiosis
acetonas; propan-2-onas; propanonas - CAS: 67-64-1
EU - TWA(8 val.): 1210 mg/m3, 500 ppm
ACGIH - TWA(8 val.): 250 ppm - STEL: 500 ppm - Pastabos: A4, BEI - URT and eye irr, CNS impair

DNEL poveikio ribinės vertės
Netaikoma
PNEC poveikio ribinės vertės
Netaikoma
8.2. Poveikio kontrolės priemonės
Akių apsauga:
Apsauginiai akiniai
Atitinka EN 166
Odos apsauga:
Apsauginiai drabužiai nuo cheminių medžiagų poveikio.
Apsauginė avalynė.
Rankų apsauga:
Nitrilo arba Viton pirštinės.
Atitinka EN 374.
Storis: Rankogalis 0,10 mm; delnas 0,12 mm; pirštai 0,145 mm
Pirštines reikia rinktis atsižvelgiant į konkretų naudojimo būdą ir medžiagos prasiskverbimo laiką. Prasiskverbimo laikas priklauso nuo pirštinės tipo, storio ir cheminės medžiagos tipo. Norėdami nustatyti tinkamą prasiskverbimo laiką, kreipkitės į pirštinių tiekėją. Pastebėję nusidėvėjimo ar užteršimo požymių, nedelsdami pakeiskite pirštines.
Kvėpavimo takų apsauga:
Organinių garų filtras. A tipo. (EN14387)
Šilumos pavojus:
Nėra
Poveikio aplinkai kontrolė:
Nėra
Atitinkamos techninio valdymo priemonės:
Nėra

9 SKIRSNIS. Fizikinės ir cheminės savybės

9.1. Informacija apie pagrindines fizikines ir chemines savybes

Savybės	Vertė	Metodai:	Pastabos
Fizinė būsena:	Skystis	--	--
Spalva:	Netaikoma	--	--
Kvapas:	charakteristika solvente	--	--

Lydymosi ir stingimo temperatūra:	Netaikoma	--	--
Virimo temperatūra arba pradinė virimo temperatūra ir virimo temperatūros intervalas:	Netaikoma	--	--
Degumas:	Netaikoma	--	--
Viršutinė ir apatinė sprogumo ribos:	Netaikoma	--	--
Pliūpsnio temperatūra:	< 0°C	Internal method	--
Savaiminio užsidegimo temperatūra:	Netaikoma	--	--
Skilimo temperatūra:	Netaikoma	--	--
pH:	Netaikoma	--	--
Kinematinė klampa:	Netaikoma	--	--
Tirpumas vandenyje:	Netaikoma	--	--
Tirpumas naftoje:	tirpus	--	--
Pasiskirstymo koeficientas n-oktanolis / vanduo (logaritminė vertė):	Netaikoma	--	--
Garų slėgis:	4 bar (20°C); 8 bar (50°C)	Internal method	--
Tankis ir (arba) santykinis tankis:	0.75 - 0.80 g/ml	Internal method	--
Santykinis garų tankis:	Netaikoma	--	--
Dalelių savybės:			
Dalelių dydis:	Netaikoma	--	--

9.2. Kita informacija

Daugiau svarbios informacijos nėra

10 SKIRSNIS. Stabilumas ir reaktyvumas

10.1. Reaktyvumas

Normaliomis sąlygomis yra stabilus.

10.2. Cheminis stabilumas

Stabilus esant normaliai aplinkos temperatśrai ir, jei naudojama kaip rekomenduojama.

10.3. Pavojingų reakcijų galimybė

Nėra

10.4. Vengtinos sąlygos

Stabilus normaliomis sąlygomis.

10.5. Nesuderinamos medžiagos

10.6. Pavojingi skilimo produktai
Nėra.

11 SKIRSNIS. Toksikologinė informacija

11.1. Informacija apie pavojų klases, kaip apibrėžta Reglamente (EB) Nr. 1272/2008
Toksikologinė informacija apie produktą:
SMALTO ACRILICO FONDO ANTIRUGGINE GRIGIO SPRAY ML 400
a) ūmus toksiškumas
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
b) odos ėsdinimas ir (arba) dirginimas
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
c) didelis kenksmingumas akims ir (arba) akių dirginimas
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
d) kvėpavimo takų arba odos jautrinimas
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
e) mutageninis poveikis lytinėms ląstelėms
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
f) kancerogeniškumas
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
g) toksiškumas reprodukcijai
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
h) STOT (vienkartinis poveikis)
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
i) STOT (kartotinis poveikis)
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
j) aspiracijos pavojus
Neklasifikuota
Remiantis turimais duomenimis neatitinka klasifikavimo kriterijų.
Toksikologinė informacija apie pagrindines produktą sudarančias chemines medžiagas:
ksilenas - CAS: 1330-20-7
a) ūmus toksiškumas:
Testas: LD50 - Kelias: Burnos - Rūšys: Žiurkė 5000 mg/kg
acetonas; propan-2-onas; propanonas - CAS: 67-64-1
a) ūmus toksiškumas:
Testas: LD50 - Kelias: Burnos - Rūšys: Triušis 5300 mg/kg

11.2. Informacija apie kitus pavojus
Endokrininės sistemos ardomosios savybės:
Endokrininę sistemą ardančios medžiagos neaptinkamos, kai koncentracija >= 0,1 %

12 SKIRSNIS. Ekologinė informacija

12.1. Toksiškumas
Naudoti laikantis tinkamos darbo praktikos, saugojant produktą nuo patekimo į aplinką.

Netaikoma

12.2. Patvarumas ir skaidumas
Nėra
Netaikoma
12.3. Bioakumuliacijos potencialas
Netaikoma
12.4. Judumas dirvožemyje
Netaikoma
12.5. PBT ir vPvB vertinimo rezultatai
vPvB medžiagos: Nėra - PBT medžiagos: Nėra
12.6. Endokrininės sistemos ardomosios savybės
Endokrininę sistemą ardančios medžiagos neaptinkamos, kai koncentracija >= 0,1 %
12.7. Kitas nepageidaujamas poveikis
Nėra

13 SKIRSNIS. Atliekų tvarkymas

13.1. Atliekų apdorojimo metodai
Kiek įmanoma surinkti. Šalinti tik leistinose surinkimo vietose arba utilizuoti priežiūros sąlygomis. Veikti laikantis galiojančių vietos ir nacionalinių įstatymų.
Papildoma informacija apie šalinimą:
Pažangus gaminys turi būti laikomas specialiomis atliekomis, klasifikuojamomis pagal direktyvą Nr. 2008/98/EB dėl atliekų ir su jomis susijusių klausimų. Jei įmanoma, surinkite. Išsiųskite į įgaliotas utilizavimo arba deginimo kontroliuojamomis sąlygomis įmones. Pakuotę galima atiduoti į rūšiuojamajam surinkimui, jei ji ištuštinta, peržiūrint savo savivaldybės taisykles. Priešingu atveju, visada būtina nuvežti į įgaliotą centrą arba kiekvienos atitinkamos savivaldybės ekologinę salą.

14 SKIRSNIS. Informacija apie vežimą

14.1. JT numeris ar ID numeris

ADR JT numeris:	1950
IATA JT numeris:	1950
IMDG JT numeris:	1950

14.2. JT tinkamas krovinio pavadinimas

ADR krovinio pavadinimas:	AEROZOLIAI, liepsnūs
IATA krovinio pavadinimas:	AEROZOLIAI, liepsnūs
IMDG krovinio pavadinimas:	AEROZOLIAI, liepsnūs

14.3. Vežimo pavojingumo klasė (-s)

AD klasė:	2
ADR pavojaus identifikacinis numeris:	-
IATA klasė:	2
IATA etiketė:	2.1
IMDG klasė:	2

14.4. Pakuotės grupė

ADR pakavimo grupė:	-
IATA pakavimo grupė:	-
IMDG pakavimo grupė:	-

14.5. Pavojus aplinkai

ADR aplinkos teršalas:	Ne
IMDG jūrų teršalas:	No
IMDG EmS:	F-D, S-U

14.6. Specialios atsargumo priemonės naudotojams

ADR Susiję pavojai:	See SP63
ADR S.P.:	190 327 344 625
ADR-Transporto kategorija (Apribojim o judėti tuneliu kodas):	2 (D)
IATA keleivinis lėktuvas:	203
IATA Susiję pavojai:	See SP63
IATA krovininis lėktuvas:	203
IATA S.P.:	A145 A167 A802
IATA ERG:	10L
IMDG Susiję pavojai:	See SP63
IMDG-Stowage and handling:	SW1 SW22
IMDG-Segregation:	SG69

14.7. Nesupakuotų krovinių vežimas jūrų transportu pagal IMO priemones

Netaikoma
Limited Quantity: 1 L
Exempted Quantity: E0

15 SKIRSNIS. Informacija apie reglamentavimą

15.1. Su konkrečia medžiaga ar mišiniu susiję saugos, sveikatos ir aplinkos teisės aktai

98/24/EB direktyva (dėl darbuotojų saugos ir sveikatos apsaugos nuo rizikos, susijusios su cheminiais veiksniais darbe)
2000/39/EB direktyva (dėl profesinio poveikio ribinių verčių)
Reglamentas (EB) Nr. 1907/2006 (REACH)
Reglamentas (EB) Nr. 1272/2008 (dėl cheminių medžiagų ir mišinių klasifikavimo, ženklinimo ir pakavimo)
Reglamentas (EB) Nr. 790/2009 (ATP 1 CLP) ir (ES) Nr. 758/2013
Reglamentas (ES) Nr. 2020/878
Reglamentas (ES) Nr. 286/2011 (ATP 2 CLP)
Reglamentas (ES) Nr. 618/2012 (ATP 3 CLP)
Reglamentas (ES) Nr. 487/2013 (ATP 4 CLP)
Reglamentas (ES) Nr. 944/2013 (ATP 5 CLP)
Reglamentas (ES) Nr. 605/2014 (ATP 6 CLP)
Reglamentas (ES) Nr. 2015/1221 (ATP 7 CLP)
Reglamentas (ES) Nr. 2016/918 (ATP 8 CLP)
Reglamentas (ES) Nr. 2016/1179 (ATP 9 CLP)
Reglamentas (ES) Nr. 2017/776 (ATP 10 CLP)
Reglamentas (ES) Nr. 2018/669 (ATP 11 CLP)
Reglamentas (ES) Nr. 2018/1480 (ATP 13 CLP)
Reglamentas (ES) Nr. 2019/521 (ATP 12 CLP)
Reglamentas (ES) Nr. 2020/217 (ATP 14 CLP)
Reglamentas (ES) Nr. 2020/1182 (ATP 15 CLP)
Reglamentas (ES) Nr. 2021/643 (ATP 16 CLP)
Reglamentas (ES) Nr. 2021/849 (ATP 17 CLP)
Reglamentas (ES) Nr. 2022/692 (ATP 18 CLP)
Reglamentas (ES) Nr. 2023/707
Reglamentas (ES) Nr. 2023/1434 (ATP 19 CLP)
Reglamentas (ES) Nr. 2023/1435 (ATP 20 CLP)
Reglamentas (ES) Nr. 2024/197 (ATP 21 CLP)

Apribojimai dėl produkto ar medžiagos pagal Reglamento (EB) 1907/2006 (REACH) XVII priedą ir tolesnes pataisas:

Su gaminiu susiję apribojimai:
3 apribojimas
40 apribojimas
Su naudojamomis medžiagomis susiję apribojimai:
75 apribojimas

Lakieji organiniai junginiai – LOJ = 70.90 %

Lakieji organiniai junginiai – LOJ = 709.00 g/Kg
Lakieji organiniai junginiai – LOJ = 531.75 g/l
Ten, kur tai yra taikoma, daromos nuorodos į šiuos normatyvinius aktus:
Direktyva 2012/18/ES („Seveso III“)
Reglamentas (EB) Nr.648/2004 (dėl ploviklių).
2004/42/EB direktyva (lakiųjų organinių junginių)

Nuostatos, susijusios su ES direktyva 2012/18 („Seveso III“):
„Seveso“ III kategorija pagal 1 priedo 1 dalį
Gaminys priklauso kategorijai: P3a

15.2. Cheminės saugos vertinimas
Cheminės saugos vertinimas nebuvo atliktas mišinio.
Medžiagos, kurių buvo atliktas cheminės saugos vertinimas:
ksilenas

16 SKIRSNIS. Kita informacija

Išsami informacija apie visas 3 skyriuje naudojamas frazes:
H220 Ypač degios dujos.
H280 Turi slėgio veikiamų dujų, kaitinant gali sprogti.
H226 Degūs skystis ir garai.
H312 Kenksminga susilietus su oda.
H332 Kenksminga įkvėpus.
H315 Dirgina odą.
H351 (įkvėpimas) Įtariama, kad įkvėptas gali sukelti vėžį.
EUH211 Atsargiai! Purškiant gali susidaryti pavojingų įkvepiamų lašelių. Neįkvėpti rūko ar aerozolio.
H225 Labai degūs skystis ir garai.
H319 Sukelia smarkų akių dirginimą.
H336 Gali sukelti mieguistumą arba galvos svaigimą.
EUH066 Pakartotinis poveikis gali sukelti odos džiūvimą arba skilinėjimą.

Pavojaus klasė ir pavojaus kategorija	**Kodas**	**Aprašymas**
Flam. Gas 1A	2.2/1A	Degiosios dujos, kategorija 1A
Aerosols 1	2.3/1	Aerozoliai, kategorija 1
Press. Gas	2.5	Slėgio veikiamos dujos
Press Gas (Comp.)	2.5/C	Slėgio veikiamos dujos (Suslėgtosios dujos)
Flam. Liq. 2	2.6/2	Degieji skysčiai, kategorija 2
Flam. Liq. 3	2.6/3	Degieji skysčiai, kategorija 3
Acute Tox. 4	3.1/4/Dermal	Ūmus toksiškumas (per odą), kategorija 4
Acute Tox. 4	3.1/4/Inhal	Ūmus toksiškumas (įkvėpus), kategorija 4
Skin Irrit. 2	3.2/2	Odos dirginimas, kategorija 2
Eye Irrit. 2	3.3/2	Akių dirginimas, kategorija 2
Carc. 2	3.6/2	Kancerogeniškumas, Kategorija 2
STOT SE 3	3.8/3	Specifinis toksiškumas konkrečiam organui

		(vienkartinis poveikis), Kategorija 3

Po ankstesnės peržiūros pakeisti paragrafai:

1 SKIRSNIS. Medžiagos arba mišinio ir bendrovės arba įmonės identifikavimas
3 SKIRSNIS. Sudėtis arba informacija apie sudedamąsias dalis
4 SKIRSNIS. Pirmosios pagalbos priemonės
5 SKIRSNIS. Priešgaisrinės priemonės
6 SKIRSNIS. Avarijų likvidavimo priemonės
7 SKIRSNIS. Tvarkymas ir sandėliavimas
8 SKIRSNIS. Poveikio kontrolė / asmens apsauga
9 SKIRSNIS. Fizikinės ir cheminės savybės
10 SKIRSNIS. Stabilumas ir reaktyvumas
13 SKIRSNIS. Atliekų tvarkymas
15 SKIRSNIS. Informacija apie reglamentavimą
16 SKIRSNIS. Kita informacija

Taikyta klasifikacija ir naudotos procedūros nustatant mišinių klasifikaciją pagal Reglamentą (EB) 1272/2008 [CLP reglamentas]:

Klasifikacija pagal Reglamentą (EB) Nr. 1272/2008	**Klasifikavimo procedūra**
Aerosols 1, H222, H229	Remiantis bandymų duomenimis

Šį dokumentą parengė tinkamai apmokytas kompetentingas asmuo.
Pagrindiniai bibliografiniai šaltiniai:
ECDIN – Aplinkosaugos cheminių medžiagų informacijos tinklas – Jungtinis tyrimų centras, Europos Bendrijų Komisija
SAX PRAMONINIŲ MEDŽIAGŲ PAVOJINGOS SAVYBĖS – aštuntasis leidimas – Van Nostrand Reinold
Pateikiami duomenys paremti mūsų žiniomis apie pateiktas medžiagas. Jie taikomi tik nurodytam produktui ir nėra kokių nors konkrečių savybių garantija.
Naudotojas turi įsitikinti visišku savybės tinkamumu, remdamasis informacija, susijusia su specifiniu medžiagos naudojimu.
Šis SDL anuliuoja ir pakeičia visus ankstesnius leidimus.

ADR: Europos sutartis dėl pavojingų krovinių tarptautinių vežimų keliais.
ATE: Apskaičiuotas ūmus toksiškumas
ATEmix: Ūmaus toksiškumo įverčiai (Mišiniai)
CAS: Cheminių medžiagų santrumpų tarnyba (Amerikos chemikų draugijos skyrius).
CLP: Klasifikavimas, ženklinimas, pakavimas
DNEL: Išvestinė ribinė poveikio nesukelianti vertė.
EINECS: Europos esamų komercinių cheminių medžiagų sąrašas
GefStoffVO: Potvarkis dėl pavojingų medžiagų (Vokietija).
GHS: Pasaulinė klasifikavimo sistema ir cheminių medžiagų ženklinimas.
IATA: Tarptautinė oro transporto asociacija.
IATA-DGR: "Tarptautinės oro transporto asociacijos" (IATA) pavojingų krovinių taisyklės.
ICAO: Tarptautinė civilinės aviacijos organizacija.
ICAO-TI: "Tarptautinės civilinės aviacijos organizacijos" (ICAO) techninės instrukcijos
IMDG: Tarptautinis jūra gabenamų pavojingų krovinių kodeksas
INCI: Tarptautinė kosmetikos ingredientų nomenklatūra
KSt: Sprogimo koeficientas.

LC50:	Mirtina koncentracija, 50 proc. bandymo atvejų.
LD50:	Mirtina dozė, 50 proc. bandymo atvejų.
NA:	Netaikomas
PNEC:	Numatyta poveikio nesukelianti koncentracija
RID:	Tarptautinio krovinių gabenimo geležinkeliais reglamentas
STEL:	Trumpalaikio poveikio ribinė vertė.
STOT:	Toksiškumas konkrečiam organui.
TLV:	Neviršytina ribinė vertė.
TWA:	Laiko svorinio vidurkio
WGK:	Vokietijos pavojingumo vandeniui klasė.

Exposure Scenario, 03/03/2020

Substance identity	
Chemical name	xilene
CAS No.	1330-20-7
EINECS No.	215-535-7

Table of contents

1. **ES 1** Use at industrial site; Coatings and paints, thinners, paint removers (PC9a)
2. **ES 2** Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)
3. **ES 3** Consumer use; Coatings and paints, thinners, paint removers (PC9a)

1. ES 1 Use at industrial site; Coatings and paints, thinners, paint removers (PC9a)

1.1 TITLE SECTION

Exposure Scenario name	Use in coatings
Date - Version	03/03/2020 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC4
Worker Contributing Scenario	
CS2 Film formation - air drying	PROC4
CS3 Preparation of material for application	PROC5
CS4 Spraying	PROC7
CS5 Hand held spraying	PROC7
CS6 Material transfers	PROC9
CS7 Roller, spreader, flow application	PROC10
CS8 Dipping, immersion and pouring	PROC13

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 5000 t(onnes)/year

Maximum allowable site tonnage (MSafe): 17000 kg/day

Critical compartment for Msafe: soil

Release type: Continuous release

Emission days: 300 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 90 %
Prevent discharge of undissolved substance to or recover from onsite wastewater.	

Conditions and measures related to sewage treatment plant

STP type:
Onsite Sewage Treatment Plant
Water - minimum efficiency of: = 93.6 %
STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
External treatment and disposal of waste should comply with applicable local and/or national regulations.
External recovery and recycling of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
For further specification, refer to section 8 of the SDS.

1.2. CS2: Worker Contributing Scenario: Film formation - air drying (PROC4)

Process Categories	Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health
Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS3: Worker Contributing Scenario: Preparation of material for application (PROC5)

Process Categories	Mixing or blending in batch processes (PROC5)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health

Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS4: Worker Contributing Scenario: Spraying (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Carry out in a vented booth provided with laminar airflow.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health

Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS5: Worker Contributing Scenario: Hand held spraying (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.
Wear a respirator conforming to EN140.

Additional conditions human health

Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS6: Worker Contributing Scenario: Material transfers (PROC9)

Process Categories	Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Handle substance within a predominantly closed system provided with extract ventilation.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health
Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS7: Worker Contributing Scenario: Roller, spreader, flow application (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.

Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health

Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases. Clear spills immediately.

1.2. CS8: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.

Additional conditions human health

Assumes a good basic standard of occupational hygiene is implemented.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Ensure control measures are regularly inspected and maintained. Site should have a spill plan to ensure that adequate safeguards are in

place to minimize the impact of episodic releases. Clear spills immediately.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC4)

Release route	Release rate	Release estimation method
Air	9.8 %	N/A
Water	0.7 %	N/A
soil	0 %	N/A

1.3. CS2: Worker Contributing Scenario: Film formation - air drying (PROC4)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS3: Worker Contributing Scenario: Preparation of material for application (PROC5)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS4: Worker Contributing Scenario: Spraying (PROC7)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS5: Worker Contributing Scenario: Hand held spraying (PROC7)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS6: Worker Contributing Scenario: Material transfers (PROC9)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS7: Worker Contributing Scenario: Roller, spreader, flow application (PROC10)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.3. CS8: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

2. ES 2 Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

2.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	03/03/2020 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC8a
Worker Contributing Scenario	
CS2 Preparation of material for application	PROC5
CS3 Roller, spreader, flow application	PROC10
CS4 Hand held spraying	PROC11
CS5 Dipping, immersion and pouring	PROC13

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 10 t(onnes)/year

Maximum allowable site tonnage (MSafe): 27.4 kg/day

Critical compartment for Msafe: freshwater sediment

Release type: Continuous release

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Prevent discharge of undissolved substance to or recover from onsite wastewater.
Do not apply industrial sludge to natural soils.

Conditions and measures related to sewage treatment plant

STP type:

Onsite Sewage Treatment Plant
Water - minimum efficiency of: = 93.6 %

STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

External recovery and recycling of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Ensure control measures are regularly inspected and maintained. For further specification, refer to section 8 of the SDS.

2.2. CS2: Worker Contributing Scenario: Preparation of material for application (PROC5)

Process Categories	Mixing or blending in batch processes (PROC5)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Use in contained systems
Avoid carrying out activities involving exposure for more than 1 hour per day.
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.
Provide employee with skin care programmes.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Ensure control measures are regularly inspected and maintained. For further specification, refer to section 8 of the SDS. Clear spills immediately.

2.2. CS3: Worker Contributing Scenario: Roller, spreader, flow application (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.
Provide employee with skin care programmes.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Indoor use
Professional use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure control measures are regularly inspected and maintained. For further specification, refer to section 8 of the SDS. Clear spills immediately.

2.2. CS4: Worker Contributing Scenario: Hand held spraying (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Avoid carrying out activities involving exposure for more than 4 hours per day.
Carry out in a vented booth provided with laminar airflow.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.
Provide employee with skin care programmes.
Wear a full face respirator conforming to EN136.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use

Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure control measures are regularly inspected and maintained. For further specification, refer to section 8 of the SDS. Clear spills immediately.

2.2. CS5: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Avoid carrying out activities involving exposure for more than 4 hours per day.
Carry out in a vented booth provided with laminar airflow.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Wear suitable face shield.
Wear an impervious suit.
For further specification, refer to section 8 of the SDS.
Provide employee with skin care programmes.
Wear a full face respirator conforming to EN136.

Other conditions affecting worker exposure

Covers indoor and outdoor use
Professional use
Temperature: Assumes process temperature up to .... 40°C

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure control measures are regularly inspected and maintained. For further specification, refer to section 8 of the SDS. Clear spills immediately.

2.3 Exposure estimation and reference to its source

2.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Release route	Release rate	Release estimation method
Air	98 %	N/A
Water	1 %	N/A
soil	1 %	N/A

Additional information on exposure estimation:

Common practices vary across sites thus conservative process release estimates used.

2.3. CS2: Worker Contributing Scenario: Preparation of material for application (PROC5)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

2.3. CS3: Worker Contributing Scenario: Roller, spreader, flow application (PROC10)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

2.3. CS4: Worker Contributing Scenario: Hand held spraying (PROC11)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

2.3. CS5: Worker Contributing Scenario: Dipping, immersion and pouring (PROC13)

Additional information on exposure estimation:

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

3. ES 3 Consumer use; Coatings and paints, thinners, paint removers (PC9a)

3.1 TITLE SECTION

Exposure Scenario name	Consumer application of coatings
Date - Version	03/03/2020 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC8a
Consumer Contributing Scenario	
CS2 Solvent rich, high solid, water borne paint	PC9a - PC9a_2, PC15_2
CS3 Aerosol spray can	PC9a - PC9a_3, PC15_3
CS4 Removers (paint-, glue-, wall paper-, sealant-remover)	PC9a

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 10 t(onnes)/year

Maximum allowable site tonnage (MSafe): 27.4 kg/day

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.
External recovery and recycling of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 2000 m³/day

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Sludge is disposed or recovered.

Additional conditions human health

Solvent-based process	Water - minimum efficiency of: 93.6 %

3.2. CS2: Consumer Contributing Scenario: Solvent rich, high solid, water borne paint (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)
Product (Sub-)Categories	Solvent rich, high solid, water borne paint (PC9a_2, PC15_2)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
> 10 Pa

Concentration of substance in product:
Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:
For each use event, covers use amounts up to .... 0.744 kg

Duration:
Exposure duration 2.2 h

Frequency:
Use frequency 6 days per year

Other conditions affecting consumers exposure

Covers indoor and outdoor use
Room size: Assumes a room volume of maximum [m3]: ... 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS3: Consumer Contributing Scenario: Aerosol spray can (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)
Product (Sub-)Categories	Aerosol spray can (PC9a_3, PC15_3)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
> 10 Pa

Concentration of substance in product:
Covers concentrations up to 21 %

Amount used, frequency and duration of use/exposure

Amounts used:
For each use event, covers use amounts up to .... 0.215 kg

Duration:
Exposure duration 0.33 h

Frequency:
Use frequency 2 days per year

Other conditions affecting consumers exposure

Covers indoor and outdoor use
Room size: Assumes a room volume of maximum [m3]: ... 20 m³

Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS4: Consumer Contributing Scenario: Removers (paint-, glue-, wall paper-, sealant-remover) (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
> 10 Pa

Concentration of substance in product:
Covers concentrations up to 3 %

Amount used, frequency and duration of use/exposure

Amounts used:
For each use event, covers use amounts up to .... 0.491 kg

Duration:
Exposure duration 2 h

Frequency:
Use frequency 3 days per year

Other conditions affecting consumers exposure

Covers indoor and outdoor use
Room size: Assumes a room volume of maximum [m3]: ... 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.3 Exposure estimation and reference to its source

3.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a)

Release route	Release rate	Release estimation method
Air	98.5 %	N/A
Water	1 %	N/A
soil	0.5 %	N/A

3.2. CS2: Consumer Contributing Scenario: Solvent rich, high solid, water borne paint (PC9a)

Additional information on exposure estimation:
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

3.2. CS3: Consumer Contributing Scenario: Aerosol spray can (PC9a)

Additional information on exposure estimation:
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

3.2. CS4: Consumer Contributing Scenario: Removers (paint-, glue-, wall paper-, sealant-remover) (PC9a)

Additional information on exposure estimation:
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario, 28/08/2019

Substance identity	
Chemical name	2-PROPANONE
CAS No.	67-64-1
EINECS No.	200-662-2

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5. **ES 5** Widespread use by professional workers
6. **ES 6** Consumer use; Various products (PC9b, PC9a, PC3, PC4, PC24)

1. ES 1 Use at industrial site

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario	
CS1 Covered by	ERC4

Worker Contributing Scenario	
CS2 Industrial	PROC1
CS3 Industrial	PROC2
CS4 Industrial	PROC3
CS5 Industrial	PROC4
CS6 Industrial	PROC5
CS7 Industrial	PROC7
CS8 Industrial	PROC8a
CS9 Industrial	PROC8b
CS10 Industrial	PROC9
CS11 Industrial	PROC10
CS12 Industrial	PROC13
CS13 Industrial	PROC15
CS14 Industrial	PROC19

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 90 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

1.2. CS2: Worker Contributing Scenario: Industrial (PROC1)	
Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS3: Worker Contributing Scenario: Industrial (PROC2)	
Process Categories	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS4: Worker Contributing Scenario: Industrial (PROC3)	
Process Categories	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS5: Worker Contributing Scenario: Industrial (PROC4)

Process Categories	Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS6: Worker Contributing Scenario: Industrial (PROC5)

Process Categories	Mixing or blending in batch processes (PROC5)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS7: Worker Contributing Scenario: Industrial (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operation is undertaken outdoors.
For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.
Respiratory protection in accordance with EN141

1.2. CS8: Worker Contributing Scenario: Industrial (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS9: Worker Contributing Scenario: Industrial (PROC8b)

Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS10: Worker Contributing Scenario: Industrial (PROC9)

Process Categories	Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS11: Worker Contributing Scenario: Industrial (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS12: Worker Contributing Scenario: Industrial (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS13: Worker Contributing Scenario: Industrial (PROC15)

Process Categories	Use as laboratory reagent (PROC15)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.2. CS14: Worker Contributing Scenario: Industrial (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

1.3 Exposure estimation and reference to its source

1.3. CS2: Worker Contributing Scenario: Industrial (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.01 ppm	EASY TRA v2.0	2E-05
dermal, systemic, long-term	0.34 mg/kg bw/day	EASY TRA v2.0	0.002

1.3. CS3: Worker Contributing Scenario: Industrial (PROC2)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	50 ppm	EASY TRA v2.0	0.1
dermal, systemic, long-term	1.37 mg/kg bw/day	EASY TRA v2.0	0.01

1.3. CS4: Worker Contributing Scenario: Industrial (PROC3)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	EASY TRA v2.0	0.2
dermal, systemic, long-term	0.34 mg/kg bw/day	EASY TRA v2.0	0.002

1.3. CS5: Worker Contributing Scenario: Industrial (PROC4)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	EASY TRA v2.0	0.2
dermal, systemic, long-term	6.86 mg/kg bw/day	EASY TRA v2.0	0.04

1.3. CS6: Worker Contributing Scenario: Industrial (PROC5)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	EASY TRA v2.0	0.07

1.3. CS7: Worker Contributing Scenario: Industrial (PROC7)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	25 ppm	EASY TRA v2.0	0.05
dermal, systemic, long-term	42.86 mg/kg bw/day	EASY TRA v2.0	0.23
inhalative, systemic, long-term	350 ppm	EASY TRA v2.0	0.7
inhalative, systemic, long-term	50 ppm	EASY TRA v2.0	0.1
dermal, systemic, long-term	2.14 mg/kg bw/day	EASY TRA v2.0	0.01

1.3. CS8: Worker Contributing Scenario: Industrial (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	EASY TRA v2.0	0.07

1.3. CS9: Worker Contributing Scenario: Industrial (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	150 ppm	EASY TRA v2.0	0.3
dermal, systemic, long-term	6.86 mg/kg bw/day	EASY TRA v2.0	0.037

1.3. CS10: Worker Contributing Scenario: Industrial (PROC9)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	200 ppm	EASY TRA v2.0	0.4
dermal, systemic, long-term	6.86 mg/kg bw/day	EASY TRA v2.0	0.04

1.3. CS11: Worker Contributing Scenario: Industrial (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	27.43 mg/kg bw/day	EASY TRA v2.0	0.15

1.3. CS12: Worker Contributing Scenario: Industrial (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	EASY TRA v2.0	0.07

1.3. CS13: Worker Contributing Scenario: Industrial (PROC15)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	50 ppm	EASY TRA v2.0	0.1
dermal, systemic, long-term	0.34 mg/kg bw/day	EASY TRA v2.0	0

1.3. CS14: Worker Contributing Scenario: Industrial (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	28.29 mg/kg bw/day	EASY TRA v2.0	0.15

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

2. ES 2 Widespread use by professional workers

2.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario	
CS1 Covered by	ERC6d - ERC8a - ERC8c - ERC8f

Worker Contributing Scenario	
CS2 General use from professional operators	PROC1
CS3 General use from professional operators	PROC2
CS4 General use from professional operators	PROC3
CS5 General use from professional operators	PROC4 - PROC8b - PROC9
CS6 General use from professional operators	PROC5 - PROC8a
CS7 General use from professional operators	PROC10
CS8 General use from professional operators	PROC11
CS9 General use from professional operators	PROC13
CS10 General use from professional operators	PROC19

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Covered by (ERC6d, ERC8a, ERC8c, ERC8f)

Environmental release categories	Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article) - Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC6d, ERC8a, ERC8c, ERC8f)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 90 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

2.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC1)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS3: Worker Contributing Scenario: General use from professional operators (PROC2)

Process Categories	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS4: Worker Contributing Scenario: General use from professional operators (PROC3)

Process Categories	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS5: Worker Contributing Scenario: General use from professional operators (PROC4, PROC8b, PROC9)

Process Categories	Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC4, PROC8b, PROC9)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS6: Worker Contributing Scenario: General use from professional operators (PROC5, PROC8a)

Process Categories	Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC5, PROC8a)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operation is undertaken outdoors.
Avoid carrying out activities involving exposure for more than 4 hours per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.
Avoid carrying out activities involving exposure for more than 4 hours per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS8: Worker Contributing Scenario: General use from professional operators (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operation is undertaken outdoors.
Avoid carrying out activities involving exposure for more than 4 hours per day.
Limit the substance content in the product to 25 %.
Avoid carrying out activities involving exposure for more than 1 hour per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

2.2. CS9: Worker Contributing Scenario: General use from professional operators (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.2. CS10: Worker Contributing Scenario: General use from professional operators (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Ensure operation is undertaken outdoors.
Avoid carrying out activities involving exposure for more than 1 hour per day.
Limit the substance content in the product to 25 %.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

2.3 Exposure estimation and reference to its source

2.3. CS2: Worker Contributing Scenario: General use from professional operators (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.01 ppm	EASY TRA v2.0	2E-05
dermal, systemic, long-term	0.34 mg/kg bw/day	EASY TRA v2.0	0.002

2.3. CS3: Worker Contributing Scenario: General use from professional operators (PROC2)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	50 ppm	EASY TRA v2.0	0.1
dermal, systemic, long-term	1.37 mg/kg bw/day	EASY TRA v2.0	0.01

2.3. CS4: Worker Contributing Scenario: General use from professional operators (PROC3)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	EASY TRA v2.0	0.2
dermal, systemic, long-term	0.34 mg/kg bw/day	EASY TRA v2.0	0.002

2.3. CS5: Worker Contributing Scenario: General use from professional operators (PROC4, PROC8b, PROC9)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	6.86 mg/kg bw/day	EASY TRA v2.0	0.04

2.3. CS6: Worker Contributing Scenario: General use from professional operators (PROC5, PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	350 ppm	EASY TRA v2.0	0.7
dermal, systemic, long-term	13.71 mg/kg bw/day	EASY TRA v2.0	0.07
inhalative, systemic, long-term	300 ppm	EASY TRA v2.0	0.6
dermal, systemic, long-term	1.37 mg/kg bw/day	EASY TRA v2.0	0.007

2.3. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	1.37 mg/kg bw/day	EASY TRA v2.0	0.007

2.3. CS8: Worker Contributing Scenario: General use from professional operators (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	2.14 mg/kg bw/day	EASY TRA v2.0	0.01
inhalative, systemic, long-term	200 ppm	EASY TRA v2.0	0.4
dermal, systemic, long-term	64.28 mg/kg bw/day	EASY TRA v2.0	0.35
inhalative, systemic, long-term	252 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	107.14 mg/kg bw/day	EASY TRA v2.0	0.58

2.3. CS9: Worker Contributing Scenario: General use from professional operators (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	EASY TRA v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	EASY TRA v2.0	0.07

2.3. CS10: Worker Contributing Scenario: General use from professional operators (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	300 ppm	EASY TRA v2.0	0.6
dermal, systemic, long-term	16.97 mg/kg bw/day	EASY TRA v2.0	0.09

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

3. ES 3 Consumer use; Various products (PC9b, PC9a, PC1, PC4, PC15)

3.1 TITLE SECTION

Exposure Scenario name	Consumer application of coatings
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Anti-freeze and de-icing products (PC4) - Non-metal surface treatment products (PC15) - Lubricants, greases, release products (PC24)

Environment Contributing Scenario	
CS1 Covered by	ERC8a - ERC8c - ERC8d - ERC8f

Consumer Contributing Scenario	
CS2 Consumer	PC1
CS3 Consumer	PC1
CS4 Consumer	PC1
CS5 Consumer	PC4
CS6 Consumer	PC4
CS7 Consumer	PC4
CS8 Consumer	PC9a
CS9 Consumer	PC9a
CS10 Consumer	PC9a - PC15
CS11 Consumer	PC9a - PC15
CS12 Consumer	PC9b
CS13 Consumer	PC9b
CS14 Consumer	PC9b
CS15 Consumer	PC24
CS16 Consumer	PC31
CS17 Consumer	PC31

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8c, ERC8d, ERC8f)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use leading to inclusion into/onto article (indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8a, ERC8c, ERC8d, ERC8f)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

3.2. CS2: Consumer Contributing Scenario: Consumer (PC1)

Product Categories	Adhesives, sealants (PC1)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 9 g

Duration:

Exposure duration 4 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS3: Consumer Contributing Scenario: Consumer (PC1)

Product Categories	Adhesives, sealants (PC1)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 6390 g

Duration:

Exposure duration 6 h

Frequency:

Covers exposure up to 1 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS4: Consumer Contributing Scenario: Consumer (PC1)

Product Categories	Adhesives, sealants (PC1)

Product (article) characteristics

Physical form of product:
Aerosol

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 85.05 g

Duration:
Exposure duration 4 h

Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS5: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.5 g

Duration:
Exposure duration 0.02 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

3.2. CS6: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2000 g

Duration:
Exposure duration 0.17 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

3.2. CS7: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 4 g

Duration:
Exposure duration 0.25 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

3.2. CS8: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 1.5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2760 g

Duration:
Exposure duration 2.2 h
Frequency:
Covers exposure up to 4 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS9: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 27.5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 744 g

Duration:
Exposure duration 2.2 h
Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS10: Consumer Contributing Scenario: Consumer (PC9a, PC15)

Product Categories	Coatings and paints, thinners, paint removers - Non-metal surface treatment products (PC9a, PC15)

Product (article) characteristics

Physical form of product:
Aerosol

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 215 g

Duration:
Exposure duration 0.33 h
Frequency:
Covers exposure up to 2 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

3.2. CS11: Consumer Contributing Scenario: Consumer (PC9a, PC15)

Product Categories	Coatings and paints, thinners, paint removers - Non-metal surface treatment products (PC9a, PC15)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 491 g

Duration:
Exposure duration 2 h

Frequency:
Covers exposure up to 3 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

3.2. CS12: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 27.5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 85 g

Duration:
Exposure duration 4 h

Frequency:
Covers exposure up to 12 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS13: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 13800 g

Duration:
Exposure duration 2 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS14: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 1.35 g

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS15: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Physical form of product:
Aerosol

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 73 g

Duration:
Exposure duration 0.17 h
Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS16: Consumer Contributing Scenario: Consumer (PC31)

Product Categories	Polishes and wax blends (PC31)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 142 g

Duration:
Exposure duration 1.23 h
Frequency:
Covers exposure up to 29 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.2. CS17: Consumer Contributing Scenario: Consumer (PC31)

Product Categories	Polishes and wax blends (PC31)

Product (article) characteristics

Physical form of product:
Aerosol

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 35 g

Duration:
Exposure duration 0.33 h
Frequency:
Covers exposure up to 8 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

3.3 Exposure estimation and reference to its source

N/A

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

4. ES 4 Use at industrial site

4.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario	
CS1 Covered by	ERC4
Worker Contributing Scenario	
CS2 Industrial	PROC1
CS3 Industrial	PROC2
CS4 Industrial	PROC3
CS5 Industrial	PROC4
CS6 Industrial	PROC5 - PROC8a
CS7 Industrial	PROC7
CS8 Industrial	PROC8b
CS9 Industrial	PROC9
CS10 Industrial	PROC10
CS11 Industrial	PROC13
CS12 Industrial	PROC19

4.2 Conditions of use affecting exposure

4.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 90 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

4.2. CS2: Worker Contributing Scenario: Industrial (PROC1)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS3: Worker Contributing Scenario: Industrial (PROC2)

Process Categories	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS4: Worker Contributing Scenario: Industrial (PROC3)

Process Categories	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS5: Worker Contributing Scenario: Industrial (PROC4)

Process Categories	Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS6: Worker Contributing Scenario: Industrial (PROC5, PROC8a)

Process Categories	Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC5, PROC8a)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS7: Worker Contributing Scenario: Industrial (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.
Fill containers/cans at dedicated fill points supplied with local extract ventilation.
Use of an integrated local exhaust ventilation is required.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

4.2. CS8: Worker Contributing Scenario: Industrial (PROC8b)

Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS9: Worker Contributing Scenario: Industrial (PROC9)

Process Categories	Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS10: Worker Contributing Scenario: Industrial (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS11: Worker Contributing Scenario: Industrial (PROC13)

Process Categories	Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.2. CS12: Worker Contributing Scenario: Industrial (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

4.3 Exposure estimation and reference to its source

4.3. CS2: Worker Contributing Scenario: Industrial (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.01 ppm	ECETOC TRA worker v2.0	2E-05
dermal, systemic, long-term	0.34 mg/kg bw/day	ECETOC TRA worker v2.0	0.002

4.3. CS3: Worker Contributing Scenario: Industrial (PROC2)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	50 ppm	ECETOC TRA worker v2.0	0.1
dermal, systemic, long-term	1.37 mg/kg bw/day	ECETOC TRA worker v2.0	0.01

4.3. CS4: Worker Contributing Scenario: Industrial (PROC3)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	ECETOC TRA worker v2.0	0.2
dermal, systemic, long-term	0.34 mg/kg bw/day	ECETOC TRA worker v2.0	0.002

4.3. CS5: Worker Contributing Scenario: Industrial (PROC4)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	ECETOC TRA worker v2.0	0.2

dermal, systemic, long-term	6.86 mg/kg bw/day	ECETOC TRA worker v2.0	0.04

4.3. CS6: Worker Contributing Scenario: Industrial (PROC5, PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	ECETOC TRA worker v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	ECETOC TRA worker v2.0	0.07

4.3. CS7: Worker Contributing Scenario: Industrial (PROC7)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	350 ppm	ECETOC TRA worker v2.0	0.7
dermal, systemic, long-term	2.14 mg/kg bw/day	ECETOC TRA worker v2.0	0.01

4.3. CS8: Worker Contributing Scenario: Industrial (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	150 ppm	ECETOC TRA worker v2.0	0.3
dermal, systemic, long-term	6.86 mg/kg bw/day	ECETOC TRA worker v2.0	0.037

4.3. CS9: Worker Contributing Scenario: Industrial (PROC9)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	200 ppm	ECETOC TRA worker v2.0	0.4
dermal, systemic, long-term	6.86 mg/kg bw/day	ECETOC TRA worker v2.0	0.04

4.3. CS10: Worker Contributing Scenario: Industrial (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	ECETOC TRA worker v2.0	0.5
dermal, systemic, long-term	27.43 mg/kg bw/day	ECETOC TRA worker v2.0	0.15

4.3. CS11: Worker Contributing Scenario: Industrial (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative, systemic, long-term	250 ppm	ECETOC TRA worker v2.0	0.5
dermal, systemic, long-term	13.71 mg/kg bw/day	ECETOC TRA worker v2.0	0.074

4.3. CS12: Worker Contributing Scenario: Industrial (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	ECETOC TRA worker v2.0	0.5
dermal, systemic, long-term	28.29 mg/kg bw/day	ECETOC TRA worker v2.0	0.15

4.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

5. ES 5 Widespread use by professional workers

5.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses

Environment Contributing Scenario

CS1 Covered by	ERC8d

Worker Contributing Scenario

CS2 General use from professional operators	PROC1
CS3 General use from professional operators	PROC2
CS4 General use from professional operators	PROC3
CS5 General use from professional operators	PROC4 - PROC8b - PROC9
CS6 General use from professional operators	PROC5 - PROC8a
CS7 General use from professional operators	PROC10
CS8 General use from professional operators	PROC11
CS9 General use from professional operators	PROC19

5.2 Conditions of use affecting exposure

5.2. CS1: Environment Contributing Scenario: Covered by (ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 90 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

5.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC1)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS3: Worker Contributing Scenario: General use from professional operators (PROC2)

Process Categories	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS4: Worker Contributing Scenario: General use from professional operators (PROC3)

Process Categories	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS5: Worker Contributing Scenario: General use from professional operators (PROC4, PROC8b, PROC9)	
Process Categories	Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC4, PROC8b, PROC9)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS6: Worker Contributing Scenario: General use from professional operators (PROC5, PROC8a)	
Process Categories	Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC5, PROC8a)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Avoid carrying out activities involving exposure for more than 4 hours per day.
Ensure operation is undertaken outdoors.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)	
Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Limit the substance content in the product to 25 %.
Avoid carrying out activities involving exposure for more than 4 hours per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

5.2. CS8: Worker Contributing Scenario: General use from professional operators (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Avoid carrying out activities involving exposure for more than 1 hour per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

5.2. CS9: Worker Contributing Scenario: General use from professional operators (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 kPa at STP

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Handle substance within a closed system.
Avoid carrying out activities involving exposure for more than 1 hour per day.
Limit the substance content in the product to 25 %.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection
Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.

Wear a respirator conforming to EN140.

5.3 Exposure estimation and reference to its source

5.3. CS2: Worker Contributing Scenario: General use from professional operators (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.01 ppm	ECETOC TRA worker v2.0	2E-05
dermal, systemic, long-term	0.34 mg/kg bw/day	ECETOC TRA worker v2.0	0.002

5.3. CS3: Worker Contributing Scenario: General use from professional operators (PROC2)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	50 ppm	ECETOC TRA worker v2.0	0.1
dermal, systemic, long-term	1.37 mg/kg bw/day	ECETOC TRA worker v2.0	0.01

5.3. CS4: Worker Contributing Scenario: General use from professional operators (PROC3)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	ECETOC TRA worker v2.0	0.2
dermal, systemic, long-term	0.34 mg/kg bw/day	ECETOC TRA worker v2.0	0.002

5.3. CS5: Worker Contributing Scenario: General use from professional operators (PROC4, PROC8b, PROC9)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	250 ppm	ECETOC TRA worker v2.0	0.5
dermal, systemic, long-term	6.86 mg/kg bw/day	ECETOC TRA worker v2.0	0.04

5.3. CS6: Worker Contributing Scenario: General use from professional operators (PROC5, PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	100 ppm	ECETOC TRA worker v2.0	0.2
dermal, systemic, long-term	13.71 mg/kg bw/day	ECETOC TRA worker v2.0	0.07

5.3. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

inhalative, systemic, long-term	100 ppm	ECETOC TRA worker v2.0	0.2
dermal, systemic, long-term	27.43 mg/kg bw/day	ECETOC TRA worker v2.0	0.15

5.3. CS8: Worker Contributing Scenario: General use from professional operators (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	300 ppm	ECETOC TRA worker v2.0	0.6
dermal, systemic, long-term	107.14 mg/kg bw/day	ECETOC TRA worker v2.0	0.58

5.3. CS9: Worker Contributing Scenario: General use from professional operators (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	300 ppm	ECETOC TRA worker v2.0	0.6
dermal, systemic, long-term	16.97 mg/kg bw/day	ECETOC TRA worker v2.0	0.09

5.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

6. ES 6 Consumer use; Various products (PC9b, PC9a, PC3, PC4, PC24)

6.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	28/08/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Air care products (PC3) - Anti-freeze and de-icing products (PC4) - Lubricants, greases, release products (PC24) - Polymer preparations and compounds (PC32) - Washing and cleaning products (PC35) - Welding and soldering products, flux products (PC38)

Environment Contributing Scenario	
CS1 Covered by	ERC8d

Consumer Contributing Scenario	
CS2 Consumer	PC3
CS3 Consumer	PC3
CS4 Consumer	PC4
CS5 Consumer	PC4
CS6 Consumer	PC4
CS7 Consumer	PC9a
CS8 Consumer	PC9a
CS9 Consumer	PC9a
CS10 Consumer	PC9a
CS11 Consumer	PC9b
CS12 Consumer	PC9b
CS13 Consumer	PC9b
CS14 Consumer	PC9c
CS15 Consumer	PC24
CS16 Consumer	PC24
CS17 Consumer	PC24
CS18 Consumer	PC35
CS19 Consumer	PC35
CS20 Consumer	PC38

6.2 Conditions of use affecting exposure

6.2. CS1: Environment Contributing Scenario: Covered by (ERC8d)

Environmental release	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

categories	(ERC8d)

Amount used, frequency and duration of use (or from service life)

Release type: Continuous release

Emission days: 360 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

6.2. CS2: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Physical form of product:

Aerosol

Concentration of substance in product:

Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 0.1 g

Duration:

Exposure duration 0.25 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m^3

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health

Covers skin contact area up to 6600 cm^2

6.2. CS3: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 0.48 g

Duration:

Exposure duration 8 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health

Covers skin contact area up to 35.7 cm²

6.2. CS4: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 0.5 g

Duration:

Exposure duration 0.02 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

6.2. CS5: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 2400 g

Duration:

Exposure duration 0.17 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

Additional conditions human health

Covers skin contact area up to 428 cm²

6.2. CS6: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 4 g

Duration:
Exposure duration 0.25 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m³) under typical ventilation.

Additional conditions human health
Covers skin contact area up to 214.4 cm²

6.2. CS7: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 1.5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2760 g

Duration:
Exposure duration 2.2 h

Frequency:
Covers exposure up to 4 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 428.75 cm²

6.2. CS8: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 27.5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 744 g

Duration:
Exposure duration 2.2 h

Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m^3
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 428.75 cm^2

6.2. CS9: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Aerosol

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 215 g

Duration:
Exposure duration 0.33 min

Frequency:
Covers exposure up to 2 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m^3) under typical ventilation.

Additional conditions human health
Covers skin contact area up to 6600 cm^2

6.2. CS10: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 491 g

Duration:
Exposure duration 2 h

Frequency:
Covers exposure up to 3 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 857.5 cm²

6.2. CS11: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 85 g

Duration:
Exposure duration 4 h

Frequency:
Covers exposure up to 12 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 35.73 cm²

6.2. CS12: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 2 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 13800 g

Duration:
Exposure duration 2 h

Frequency:
Covers exposure up to 12 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 857.5 cm²

6.2. CS13: Consumer Contributing Scenario: Consumer (PC9b)

Product Categories	Fillers, putties, plasters, modelling clay (PC9b)

Product (article) characteristics

Physical form of product:
Solid in solution

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 1 g

Duration:
Exposure duration 8 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 254.4 cm²

6.2. CS14: Consumer Contributing Scenario: Consumer

Product (Sub-)Categories	Finger paints (PC9c)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 1.35 g

Duration:
Exposure duration 8 h

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m^3
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 254.4 cm^2
Avoid using at a product concentration greater than .... 5 %

6.2. CS15: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2200 g

Duration:
Exposure duration 0.17 h

Frequency:
Covers exposure up to 4 days per year

Other conditions affecting consumers exposure

Room size: Covers use in a one car garage (>34 m^3) under typical ventilation.

Additional conditions human health
Covers skin contact area up to 468 cm^2

6.2. CS16: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:
Covers concentrations up to 20 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 34 g

Duration:
Exposure duration 8 h

Frequency:
Covers exposure up to 10 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 468 cm²

6.2. CS17: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Physical form of product:
Aerosol

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 73 g

Duration:
Exposure duration 0.17 h

Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health
Covers skin contact area up to 428.75 cm²

6.2. CS18: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
240 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 5 %.

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 15 g

Duration:

Exposure duration 0.5 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health

Covers skin contact area up to 857.5 cm²

6.2. CS19: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 5 %.

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 27 g

Duration:

Exposure duration 0.33 h

Frequency:

Covers exposure up to 128 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health

Covers skin contact area up to 857.5 cm²

6.2. CS20: Consumer Contributing Scenario: Consumer (PC38)

Product Categories	Welding and soldering products, flux products (PC38)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

240 hPa

Concentration of substance in product:

Covers concentrations up to 20 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 12 g

Duration:

Exposure duration 1 h

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

Additional conditions human health

Covers skin contact area up to 6600 cm²

6.3 Exposure estimation and reference to its source

N/A

6.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.