



Sicherheitsdatenblatt vom 16/9/2024, Version 4

ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

- 1.1. Produktidentifikator
Kennzeichnung der Mischung:
Handelsname: TRATTAMENTO PELLE
Handelscode: 8212
- 1.2. Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird
Empfohlene Verwendung:
Reinigungsmittel für Innenausstattung aus Leder
Nicht empfohlene Verwendungen:
Empfohlene Verwendungen strikt einhalten.
- 1.3. Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt
Lieferant:
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
Sachkundigen Person verantwortlich vom Sicherheitsdatenblatt:
arexons@arexons.it
- 1.4. Notrufnummer
Arexons S.p.A.
Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306
Austrian emergency telephone number : Vergiftungsinformationszentrale (+43 1 406 43 43)
Giftnotruf Berlin: +49 30 30686700
Antigifcentrum Brussel: 80025500 (7 jours sur 7, 24 heures sur 24).

ABSCHNITT 2: Mögliche Gefahren

- 2.1. Einstufung des Stoffs oder Gemischs
Kriterien der EG Verordnung 1272/2008 (CLP):
Das Produkt wird gemäß CLP-Verordnung 1272/2008/EG nicht als gefährlich erachtet.
Für die menschlichen Gesundheit und die Umwelt gefährliche physisch-chemische Auswirkungen:
Keine weiteren Risiken
- 2.2. Kennzeichnungselemente
Das Produkt wird gemäß CLP-Verordnung 1272/2008/EG nicht als gefährlich erachtet.
Gefahrenpiktogramme:
Keine
Gefahrenhinweise:
Keine
Sicherheitshinweise:
Keine
Spezielle Vorschriften:
EUH208 Enthält 1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on. Kann allergische Reaktionen hervorrufen.
Besondere Regelungen gemäß Anhang XVII der REACH-Verordnung nachfolgenden Änderungen:
Keine

Verordnung (EG) Nr. 648/2004 (Detergenzien).
Produktinhaltsstoffe:
Polycarboxylate, Amphotere Tenside, Nichtionische Tenside < 5 %

Sicherheitsdatenblatt

TRATTAMENTO PELLE



Das Produkt enthält ebenfalls: Duftstoffe
 Konservierungsstoffe: Pyridin-2-thiol-1-oxid, Natriumsalz, Laurylamine Dipropylenediamine, 1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on, Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1)

2.3. Sonstige Gefahren

Keine PBT-, vPvB-Stoffe oder endokrine Disruptoren in Konzentrationen $\geq 0.1\%$:

Weitere Risiken:

Keine weiteren Risiken

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

3.1. Stoffe

N.A.

3.2. Gemische

Gefährliche Bestandteile gemäß der CLP-Verordnung und dazugehörige Einstufung:

Menge	Name	Identifikationsnummer	Klassifikation
$\geq 1\%$ - $< 2\%$	Ethandiol; 1,2-Ethandiol; Ethylenglycol	Index-Nummer: 603-027-00-1 CAS: 107-21-1 EC: 203-473-3 REACH No.: 01-2119456816-28	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.9/2 STOT RE 2 H373 (Nieren) (oral)
$\geq 0,5\%$ - $< 1\%$	Amines, C12-14(even numbered)-alkyldimethyl, N-oxides	EC: 931-292-6 REACH No.: 01-2119490061-47	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 4.1/A1 Aquatic Acute 1 H400 ⚠ 4.1/C2 Aquatic Chronic 2 H411
$\geq 0,01\%$ - $< 0,02\%$	1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on	Index-Nummer: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.1/2/Inhal Acute Tox. 2 H330 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.4.2/1A Skin Sens. 1A H317 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 4.1/A1 Aquatic Acute 1 H400 ⚠ 4.1/C1 Aquatic Chronic 1 H410 Spezifische Konzentrationsgrenzwerte: C $\geq 0,036\%$: Skin Sens. 1A H317 Schätzung Akuter Toxizität: ATE - Oral 450 mg/kg KG ATE - Einatmen (Stäube/Nebel) 0, 21 mg/l

ABSCHNITT 4: Erste-Hilfe-Maßnahmen

4.1. Beschreibung der Erste-Hilfe-Maßnahmen

Nach Hautkontakt:

Mit reichlich Wasser und Seife abwaschen.

Nach Augenkontakt:

Bei Berührung mit den Augen sofort gründlich mit Wasser abspülen und Arzt konsultieren.

Nach Verschlucken:



- Auf keinen Fall Erbrechen herbeiführen. SOFORT ARZT ZUZIEHEN.
Nach Einatmen:
Den Verletzten ins Freie bringen, ihn ausruhen lassen und warm halten.
4.2. Wichtigste akute und verzögert auftretende Symptome und Wirkungen
Keine
4.3. Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung
Behandlung:
Keine

ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- 5.1. Löschmittel
Geeignete Löschmittel:
Mit Kohlendioxid.
Mit Pulver.
Schaum
Wassernebel.
Löschmittel nicht empfohlen:
Keine direkten Wasserstrahlen benutzen
5.2. Besondere vom Stoff oder Gemisch ausgehende Gefahren
Die Explosions- bzw. Verbrennungsgase nicht einatmen.
Durch die Verbrennung entsteht ein dichter Rauch.
5.3. Hinweise für die Brandbekämpfung
Normale Brandbekämpfungskleidung, z. B. Pressluftatmer mit offenem Reislaufl (EN 137), flammhemmender Anzug (EN469), flammhemmende Handschuhe (EN 659) und Stiefel für Feuerwehrleute (HO A29 oder A30).

ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- 6.1. Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren
Die persönliche Schutzausrüstung tragen.
Die Personen an einen sicheren Ort bringen.
Die in Punkt 7 und 8 aufgeführten Schutzmaßnahmen beachten.
6.2. Umweltschutzmaßnahmen
Das Eindringen in den Boden/Unterboden verhindern. Das Abfließen in das Grundwasser oder in die Kanalisation verhindern.
Das kontaminierte Waschwasser auffangen und entsorgen.
Bei Austritt von Gas oder bei Eintritt in Wasserläufe, den Boden oder die Kanalisation die zuständigen Behörden informieren.
Geeignetes Material zum Auffangen: absorbierende oder organische Materialien, Sand
6.3. Methoden und Material für Rückhaltung und Reinigung
Reinigung:
Flammen und/oder Funken bei Leckagen und Abfallmaterial vermeiden. Nicht rauchen. Bei Verschütten
größerer Mengen eindämmen, aufnehmen und für die Entsorgung in geeignete Behälter schaufeln. Bei
kleineren Mengen mit saugfähigem Material eindämmen. Verschmutztes Material in geeignete Behälter
geben. Entsorgung von verschmutztem Material in Übereinstimmung mit den örtlichen oder landesweiten
Bestimmungen.
6.4. Verweis auf andere Abschnitte
Siehe auch die Abschnitte 8 und 13

ABSCHNITT 7: Handhabung und Lagerung

- 7.1. Schutzmaßnahmen zur sicheren Handhabung



Haut- und Augenkontakt sowie das Einatmen von Dämpfen vermeiden.
Für die empfohlenen Schutzausrüstungen wird auf Abschnitt 8 verwiesen.

Während der Arbeit nicht essen oder trinken.

7.2. Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten

Nur im Originalbehälter aufbewahren.

Lebensmittel, Getränke und Tiernahrung fern halten.

Kein spezifischer.

Angaben zu den Lagerräumen:

Ausreichende Belüftung der Räume.

7.3. Spezifische Endanwendungen

Kein besonderer Verwendungszweck

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

8.1. Zu überwachende Parameter

Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1

EU - TWA(8h): 52 mg/m³, 20 ppm - STEL: 104 mg/m³, 40 ppm - Anmerkungen: Skin

ACGIH - STEL: 10 mg/m³ - Anmerkungen: (I, H), A4 - URT irr

DNEL-Expositionsgrenzwerte

Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1

Arbeitnehmer Gewerbe: 35 mg/m³ - Verbraucher: 7 mg/m³ - Exposition: Mensch - Inhalation

Arbeitnehmer Gewerbe: 106 mg/kg - Verbraucher: 53 mg/kg - Exposition: Mensch - dermal

Amines, C12-14(even numbered)-alkyldimethyl, N-oxides

Arbeitnehmer Gewerbe: 6.2 mg/m³ - Verbraucher: 1.53 mg/m³ - Exposition: Mensch - Inhalation - Häufigkeit: Langfristig, systemische Auswirkungen

Arbeitnehmer Gewerbe: 11 mg/kg - Verbraucher: 5.5 mg/kg - Exposition: Mensch - dermal - Häufigkeit: Langfristig, lokale Auswirkungen

Verbraucher: 0.44 mg/kg - Exposition: Mensch - oral - Häufigkeit: Langfristig, systemische Auswirkungen

PNEC-Expositionsgrenzwerte

Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1

Ziel: Süßwasser - Wert: 10 mg/l

Ziel: Meerwasser - Wert: 1 mg/l

Ziel: Flußsediment - Wert: 37 mg/kg

Ziel: Boden (Landwirtschaft) - Wert: 1.53 mg/kg

Amines, C12-14(even numbered)-alkyldimethyl, N-oxides

Ziel: Süßwasser - Wert: 0.0335 mg/l

Ziel: Meerwasser - Wert: 0.00335 mg/l

Ziel: Flußsediment - Wert: 0.0335 mg/kg

Ziel: Meerwasser-Sedimente - Wert: 0.0335 mg/kg

Ziel: 09 - Wert: 24 mg/l

8.2. Begrenzung und Überwachung der Exposition

Augenschutz:

Brille mit seitlichem Schutz

Entspricht EN 166

Hautschutz:

Schutzkleidung

Handschutz:

Handschuhe aus Nitril oder Viton.

Gemäß EN 374.

Dicke: Manschette 0,10 mm; Handfläche 0,12 mm; Finger 0,145 mm

Atemschutz:

Bei normaler Verwendung nicht erforderlich.

Wärmerisiken:

Sicherheitsdatenblatt TRATTAMENTO PELLE



Keine
Kontrollen der Umweltexposition:
Keine
Geeignete technische Massnahmen:
Keine

ABSCHNITT 9: Physikalische und chemische Eigenschaften

9.1. Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

Eigenschaft	Wert	Methode:	Anmerkungen
Aggregatzustand:	flüssig	--	--
Farbe:	beige	--	--
Geruch:	charakteristisch	--	--
Schmelzpunkt/ Gefrierpunkt:	N.A.	--	--
Siedepunkt oder Siedebeginn und Siedebereich:	N.A.	--	--
Entzündbarkeit:	N.A.	--	--
Untere und obere Explosionsgrenze:	N.A.	--	--
Flammpunkt:	nicht brennbar	IP 170	--
Selbstentzündungstemperatur:	N.A.	--	--
Zerfalltemperatur:	N.A.	--	--
pH:	7.2	ASTM D1287	--
Kinematische Viskosität:	> 20,5 mm ² / sec (40 °C)	--	--
Wasserlöslichkeit:	löslich	--	--
Löslichkeit in Öl:	N.A.	--	--
Verteilungskoeffizient n- Oktanol/Wasser (log- Wert):	N.A.	--	--
Dampfdruck:	N.A.	--	--
Dichte und/oder relative Dichte:	0,98 g/cm ³	09	--
Relative Dampfdichte:	N.A.	--	--
Partikeleigenschaften:			
Teilchengröße:	N.A.	--	--



9.2. Sonstige Angaben

Keine weiteren relevanten Informationen

Viskosität: 60000 cP (48°C)

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ABSCHNITT 10: Stabilität und Reaktivität

10.1. Reaktivität

Stabil unter Normalbedingungen

10.2. Chemische Stabilität

Stabil bei normalen Raumtemperaturen, wenn wie empfohlen verwendet.

10.3. Möglichkeit gefährlicher Reaktionen

Kann unter Einwirkung von Dithiokarbamaten, Mercaptanen und weiteren organischen Sulfiden, elementaren Metallen (Alkali- und Erdalkalimetallen), Pulverlegierungen, Dämpfen, starken Reduktionsmitteln entflammbare Gase bilden.

Kann unter Einwirkung von anorganischen Fluoriden, halogenierten organischen Stoffen, Sulfiden, Nitrilen, Nitrilen, organischen Phosphaten, Phosphothioaten, Phosphodithioaten, starken Oxydationsmitteln giftige Gase bilden.

Kann sich unter Einwirkung von Dithiokarbamaten, elementaren Metallen (Alkali- und Erdalkalimetallen, Pulverlegierungen, Dämpfen, Platten oder Stangen), Nitrilen entzünden.

10.4. Zu vermeidende Bedingungen

Unter normalen Umständen stabil.

10.5. Unverträgliche Materialien

Keine spezifische.

10.6. Gefährliche Zersetzungsprodukte

Keine.

ABSCHNITT 11: Toxikologische Angaben

11.1. Angaben zu den Gefahrenklassen im Sinne der Verordnung (EG) Nr. 1272/2008

Toxikologische Informationen zum Produkt:

TRATTAMENTO PELLE ML. 200

a) akute Toxizität

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

b) Ätz-/Reizwirkung auf die Haut

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

c) schwere Augenschädigung/-reizung

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

d) Sensibilisierung der Atemwege/Haut

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

e) Keimzell-Mutagenität

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

f) Karzinogenität

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

g) Reproduktionstoxizität

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

h) spezifische Zielorgan-Toxizität bei einmaliger Exposition

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

i) spezifische Zielorgan-Toxizität bei wiederholter Exposition



Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

j) Aspirationsgefahr

Nicht klassifiziert

Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

Toxikologische Informationen zu den Hauptbestandteilen des Produkts:

Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1

a) akute Toxizität:

Test: LC50 - Weg: Oral - Spezies: Ratte 7712 mg/kg

Test: LC50 - Weg: Einatmen - Spezies: Ratte 2.5 mg/l - Laufzeit: 6h

Test: LD50 - Weg: Haut - Spezies: Maus 3500 mg/kg

Amines, C12-14(even numbered)-alkyldimethyl, N-oxides

a) akute Toxizität:

Test: LD50 - Weg: Oral - Spezies: Ratte 1064 mg/kg

g) Reproduktionstoxizität:

Test: NOEL - Weg: Oral 100 mg/kg - Quelle: OECD 422

Test: arx1 - Weg: Oral 25 mg/kg

i) spezifische Zielorgan-Toxizität bei wiederholter Exposition:

Test: NOAEL - Weg: Oral 88 mg/kg

1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on - CAS: 2634-33-5

a) akute Toxizität

ATE - Oral 450 mg/kg KG

ATE - Einatmen (Stäube/Nebel) 0,21 mg/l

Test: LD50 - Weg: Oral - Spezies: Ratte 1193 mg/kg

Test: LD50 - Weg: Haut - Spezies: Ratte 4115 mg/kg

b) Ätz-/Reizwirkung auf die Haut:

Test: Reizt die Haut Positiv

c) schwere Augenschädigung/-reizung:

Test: Ätzend für die Augen Positiv

d) Sensibilisierung der Atemwege/Haut:

Test: Sensibilisierung der Haut - Weg: Haut Positiv

11.2. Angaben über sonstige Gefahren

Endokrinschädliche Eigenschaften:

Keine endokrinen Disruptoren in Konzentrationen ≥ 0.1 %.

ABSCHNITT 12: Umweltbezogene Angaben

12.1. Toxizität

Im Einklang mit der GLP verwenden, nicht herumliegen lassen.

Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1

a) Akute aquatische Toxizität:

Endpunkt: LC50 - Spezies: Fische 49-72.86 GL - Dauer / h: 96

Endpunkt: EC50 - Spezies: Daphnia 100 mg/l - Dauer / h: 48

Endpunkt: LC50 - Spezies: Daphnia 74.448 GL - Dauer / h: 242

Endpunkt: EC0 - Spezies: Daphnia 100 mg/l - Dauer / h: 48

Endpunkt: CE4 - Spezies: Algen 10.94 GL - Dauer / h: 96

b) Chronische aquatische Toxizität:

Endpunkt: NOEC - Spezies: Fische 49 mg/l - Dauer / h: 504

Endpunkt: LC50 - Spezies: Fische 1.5 GL - Dauer / h: 504

Endpunkt: NOEC - Spezies: Daphnia 8.59-24 mg/l - Dauer / h: 168

Endpunkt: NOEC - Spezies: Algen 1000 mg/l - Dauer / h: 72

Amines, C12-14(even numbered)-alkyldimethyl, N-oxides

a) Akute aquatische Toxizität:

Endpunkt: LC50 - Spezies: Fische 2.67 mg/l

Endpunkt: EC50 - Spezies: Daphnia 3.1 mg/l

Endpunkt: CE6 - Spezies: Algen 0.19 mg/l

b) Chronische aquatische Toxizität:



- Endpunkt: NOEC - Spezies: Algen 0.067 mg/l
1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on - CAS: 2634-33-5
- a) Akute aquatische Toxizität:
Endpunkt: LC50 - Spezies: Fische 2.18 mg/l - Dauer / h: 96
Endpunkt: EC50 - Spezies: Daphnia 2.94 mg/l - Dauer / h: 48
Endpunkt: CE6 - Spezies: Algen 0.11 mg/l - Dauer / h: 72
- 12.2. Persistenz und Abbaubarkeit
Keine
Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1
Biologische Abbaubarkeit: Schnell abbaubar - Test: OECD TG 301 A - Dauer / h: .10gg - %: 90-10
Amines, C12-14(even numbered)-alkyldimethyl, N-oxides
Biologische Abbaubarkeit: Schnell abbaubar - Dauer / h: 28gg - %: 80
1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on - CAS: 2634-33-5
Biologische Abbaubarkeit: Schnell abbaubar - Test: BIOGDG06
- 12.3. Bioakkumulationspotenzial
Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1
Bioakkumulation: Nicht bioakkumulierbar
Amines, C12-14(even numbered)-alkyldimethyl, N-oxides
Test: log Pow 2.7
- 12.4. Mobilität im Boden
Ethandiol; 1,2-Ethandiol; Ethylenglycol - CAS: 107-21-1
Mobilität im Boden: Mobil
- 12.5. Ergebnisse der PBT- und vPvB-Beurteilung
vPvB-Stoffe: Keine - PBT-Stoffe: Keine
- 12.6. Endokrinschädliche Eigenschaften
Keine endokrinen Disruptoren in Konzentrationen ≥ 0.1 %.
- 12.7. Andere schädliche Wirkungen
Keine

ABSCHNITT 13: Hinweise zur Entsorgung

- 13.1. Verfahren der Abfallbehandlung
Nach Möglichkeit wiederverwerten. Entsprechend den geltenden örtlichen und nationalen Bestimmungen vorgehen.
- Zusatzinformationen zur Entsorgung:
"Gemäß guter Arbeitspraxis verwenden und eine Verbreitung in der Umwelt vermeiden.
Das Produkt nicht in die Kanalisation, Rohrgräben oder Wasserläufe entladen. Die geltenden gesetzlichen Bestimmungen zum Schutz von Wasser und Boden vor Verschmutzung beachten (it. Gesetzesdekret Nr. 152 vom 3.4.2006).
Das gebrauchte Produkt und die Behälter durch Übergabe an autorisierte Unternehmen gemäß den Bestimmungen des it. Gesetzesdekrets Nr. 152/2006 entsorgen (Konsolidiertes Umweltgesetz, das das Ronchi-Dekret ersetzt) in seiner geänderten Fassung.
Das gebrauchte Produkt ist als Sonderabfall zu betrachten, der gemäß der Richtlinie 2008/98/EG über Abfälle und ähnliches einzustufen ist. Wenn möglich, wiederverwerten. An autorisierte Entsorgungseinrichtungen senden oder unter kontrollierten Bedingungen verbrennen (152/2006 Art. 184).
Gemäß den geltenden örtlichen und nationalen Bestimmungen verfahren.
Die kontaminierten Verpackungen müssen weitmöglichst entleert werden. Nach der Reinigung muss das Produkt bei einer zugelassenen Stelle recycelt oder eliminiert werden."

ABSCHNITT 14: Angaben zum Transport



- 14.1. UN-Nummer oder ID-Nummer
Kein Gefahrgut im Sinne der Transportvorschriften.
- 14.2. Ordnungsgemäße UN-Versandbezeichnung
N.A.
- 14.3. Transportgefahrenklassen
N.A.
- 14.4. Verpackungsgruppe
N.A.
- 14.5. Umweltgefahren
ADR-Umweltbelastung: Nein
IMDG-Marine pollutant: Nein
- 14.6. Besondere Vorsichtsmaßnahmen für den Verwender
N.A.
- 14.7. Massengutbeförderung auf dem Seeweg gemäß IMO-Instrumenten
N.A.

ABSCHNITT 15: Rechtsvorschriften

15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch

RL 98/24/EG (Schutz von Gesundheit und Sicherheit der Arbeitnehmer vor der Gefährdung durch chemische Arbeitsstoffe bei der Arbeit)

RL 2000/39/EG (Arbeitsplatz-Richtgrenzwerte)

Verordnung (EG) Nr. 1907/2006 (REACH)

Verordnung (EG) Nr. 1272/2008 (CLP)

Verordnung (EG) Nr. 790/2009 (1. ATP CLP) und (EU) Nr. 758/2013

Verordnung (EU) Nr. 2020/878

Verordnung (EU) Nr. 286/2011 (2. ATP CLP)

Verordnung (EU) Nr. 618/2012 (3. ATP CLP)

Verordnung (EU) Nr. 487/2013 (4. ATP CLP)

Verordnung (EU) Nr. 944/2013 (5. ATP CLP)

Verordnung (EU) Nr. 605/2014 (6. ATP CLP)

Verordnung (EU) Nr. 2015/1221 (7. ATP CLP)

Verordnung (EU) Nr. 2016/918 (8. ATP CLP)

Verordnung (EU) Nr. 2016/1179 (9. ATP CLP)

Verordnung (EU) Nr. 2017/776 (10. ATP CLP)

Verordnung (EU) Nr. 2018/669 (11. ATP CLP)

Verordnung (EU) Nr. 2018/1480 (13. ATP CLP)

Verordnung (EU) Nr. 2019/521 (12. ATP CLP)

Verordnung (EU) Nr. 2020/217 (14. ATP CLP)

Verordnung (EU) Nr. 2020/1182 (15. ATP CLP)

Verordnung (EU) Nr. 2021/643 (16. ATP CLP)

Verordnung (EU) Nr. 2021/849 (17. ATP CLP)

Verordnung (EU) Nr. 2022/692 (18. ATP CLP)

Beschränkungen zum Produkt oder zu den Inhaltsstoffen gemäß Anhang XVII der Verordnung (EG) 1907/2006 (REACH) und nachfolgenden Änderungen:

Beschränkungen zum Produkt:

Keine Beschränkung.

Beschränkungen zu den Inhaltsstoffen gemäß:

Beschränkung 40

Beschränkung 57

Beschränkung 75

Flüchtige Organische Verbindung - FOV = 1.00 %

Flüchtige Organische Verbindung - FOV = 10.02 g/Kg

Flüchtige Organische Verbindung - FOV = 9.82 g/l

Wo möglich auf die folgenden Normen Bezug nehmen:

Richtlinie EU 2012/18 (Seveso III)

Sicherheitsdatenblatt

TRATTAMENTO PELLE



Verordnung (EG) Nr. 648/2004 (Detergenzien).
RL 2004/42/EG (FOV Richtlinie)

Anordnungen zu der Richtlinie EU 2012/18 (Seveso III):
Seveso III Kategorie gemäß dem Anhang 1, Teil 1
Keine

15.2. Stoffsicherheitsbeurteilung

Keine Stoffsicherheitsbeurteilung wurde durchgeführt für das Gemisch
Stoffe, für die eine Stoffsicherheitsbeurteilung durchgeführt worden ist:
Ethandiol; 1,2-Ethandiol; Ethylenglycol

ABSCHNITT 16: Sonstige Angaben

Text der verwendeten Sätze im Absatz 3:

H302 Gesundheitsschädlich bei Verschlucken.

H373 (Nieren) (oral) Kann bei Verschlucken die Organe (Nieren) schädigen bei längerer oder wiederholter Exposition.

H315 Verursacht Hautreizungen.

H318 Verursacht schwere Augenschäden.

H400 Sehr giftig für Wasserorganismen.

H411 Giftig für Wasserorganismen, mit langfristiger Wirkung.

H330 Lebensgefahr bei Einatmen.

H317 Kann allergische Hautreaktionen verursachen.

H410 Sehr giftig für Wasserorganismen mit langfristiger Wirkung.

Gefahrenklasse und Gefahrenkategorie	Code	Beschreibung
Acute Tox. 2	3.1/2/Inhal	Akute Toxizität (inhalativ), Kategorie 2
Acute Tox. 4	3.1/4/Oral	Akute Toxizität (oral), Kategorie 4
Skin Irrit. 2	3.2/2	Reizung der Haut, Kategorie 2
Eye Dam. 1	3.3/1	Schwere Augenschädigung, Kategorie 1
Skin Sens. 1A	3.4.2/1A	Sensibilisierung der Haut, Kategorie 1A
STOT RE 2	3.9/2	Spezifische Zielorgan-Toxizität (wiederholte Exposition), Kategorie 2
Aquatic Acute 1	4.1/A1	Akut gewässergefährdend, Kategorie 1
Aquatic Chronic 1	4.1/C1	Chronisch (langfristig) gewässergefährdend, Kategorie 1
Aquatic Chronic 2	4.1/C2	Chronisch (langfristig) gewässergefährdend, Kategorie 2

Modifikation der Paragraphen seit der letzten Revision:

ABSCHNITT 9: Physikalische und chemische Eigenschaften

Diese Unterlagen wurden von einem Fachmann mit entsprechender Ausbildung abgefasst.

Hauptsächliche Literatur:

ECDIN - Daten- und Informationsnetz über umweltrelevante Chemikalien - Vereinigtes

Sicherheitsdatenblatt

TRATTAMENTO PELLE



Forschungszentrum, Kommission der Europäischen Gemeinschaft
SAX's GEFÄHRliche EIGENSCHAFTEN VON INDUSTRIELLEN SUBSTANZEN - Achte
Auflage - Van Nostrand Reinold

Die vorstehenden Angaben stützen sich auf den heutigen Stand unserer Kenntnisse. Sie gelten nur für das angegebene Produkt und stellen keine Zusicherung von Eigenschaften dar.

Es obliegt dem Anwender die Zuständigkeit und die Vollständigkeit dieser Angaben für seine spezifische Anwendung zu kontrollieren.

Dieses Datenblatt ersetzt alle früheren Ausgaben.

ADR:	Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße
ATE:	Schätzung Akuter Toxizität
ATEGemisch:	Schätzwert der akuten Toxizität (Gemische)
CAS:	Chemical Abstracts Service (Abteilung der American Chemical Society)
CLP:	Einstufung, Verpackung und Kennzeichnung
DNEL:	Abgeleitetes Null-Effekt-Niveau (DNEL)
EINECS:	Europäisches Verzeichnis der auf dem Markt vorhandenen chemischen Stoffe
GefStoffVO:	Gefahrstoffverordnung
GHS:	Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien
IATA:	Internationale Flug-Transport-Vereinigung (IATA)
IATA-DGR:	Vorschriften über die Beförderung gefährlicher Güter der Internationalen Flug-Transport-Vereinigung (IATA)
ICAO:	Internationale Zivilluftfahrtorganisation (ICAO)
ICAO-TI:	Technische Anleitungen der Internationalen Zivilluftfahrtorganisation (ICAO)
IMDG:	Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffsverkehr (IMDG-Code)
INCI:	Internationale Nomenklatur für kosmetische Inhaltsstoffe (INCI)
KSt:	Explosions-Koeffizient
LC50:	Letale Konzentration für 50 Prozent der Testpopulation
LD50:	Letale Dosis für 50 Prozent der Testpopulation
NA:	Nicht anwendbar
PNEC:	Abgeschätzte Nicht-Effekt-Konzentration (PNEC-Wert)
RID:	Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr
STEL:	Grenzwert für Kurzzeiteexposition
STOT:	Zielorgan-Toxizität
TLV:	Arbeitsplatzgrenzwert
TWA:	Zeit gemittelte
WGK:	Wassergefährdungsklasse

Exposure Scenario, 19/07/2019

Substance identity	
Chemical name	ETHYLENE GLYCOL
CAS No.	107-21-1
EINECS No.	203-473-3

Table of contents

1. **ES 1** Use at industrial site
2. **ES 2** Widespread use by professional workers
3. **ES 3** Widespread use by professional workers
4. **ES 4** Consumer use; Various products (PC9a, PC1, PC4, PC8, PC15)

1. ES 1 Use at industrial site	
1.1 TITLE SECTION	
Exposure Scenario name	Use in cleaning agents
Date - Version	18/07/2019 - 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	PROC8b
CS7 Industrial	PROC7
CS8 Industrial	PROC8a
CS9 Industrial	PROC10
CS10 Industrial	PROC13
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)
Product (article) characteristics	
Physical form of product:	Liquid
Vapour pressure:	0.123 hPa
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	
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
Frequency:	Use frequency 240 days per year
Conditions and measures related to personal protection, hygiene and health evaluation	
Personal protection	

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use

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

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use

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

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use

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

Process Categories

Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

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

Frequency:

Use frequency 240 days per year

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

Personal protection Wear suitable gloves tested to EN374.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	
1.2. CS6: Worker Contributing Scenario: Industrial (PROC8b)	
Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Use frequency 240 days per year	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	
1.2. CS7: Worker Contributing Scenario: Industrial (PROC7)	
Process Categories	Industrial spraying (PROC7)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Amounts used: Amount per use 1 L/min	
Duration: Covers daily exposures up to 8 hours	
Frequency: Use frequency 5 days per week	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection	
Wear suitable gloves tested to EN374.	Derma - minimum efficiency of: 90 %
<i>Other conditions affecting worker exposure</i>	
Indoor use	
Room size: Covers use in room size of > 1000 m ³	
1.2. CS8: Worker Contributing Scenario: Industrial (PROC8a)	
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
<i>Product (article) characteristics</i>	
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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use

Ventilation rate: > 90 %

1.2. CS9: Worker Contributing Scenario: Industrial (PROC10)

Process Categories

Roller application or brushing (PROC10)

Product (article) characteristics

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Other conditions affecting worker exposure

Indoor use

1.2. CS10: Worker Contributing Scenario: Industrial (PROC13)

Process Categories

Treatment of articles by dipping and pouring (PROC13)

Product (article) characteristics

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Other conditions affecting worker exposure

Indoor use

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	N/A	EASY TRA v2.0	0.001
inhalative, local, long-term	N/A	EASY TRA v2.0	0.001
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.003
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.004

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	N/A	EASY TRA v2.0	0.07
inhalative, local, long-term	N/A	EASY TRA v2.0	0.07
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.01
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.08

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	N/A	EASY TRA v2.0	0.22
inhalative, local, long-term	N/A	EASY TRA v2.0	0.22
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.003
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.223

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	N/A	EASY TRA v2.0	0.37
inhalative, local, long-term	N/A	EASY TRA v2.0	0.37
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.06
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.43

1.3. CS6: Worker Contributing Scenario: Industrial (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	EASY TRA v2.0	0.37

inhalative, local, long-term	N/A	EASY TRA v2.0	0.37
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.06
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.43

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	N/A	EASY TRA v2.0	0.28
inhalative, local, long-term	N/A	EASY TRA v2.0	0.28
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.52
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.8

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	N/A	EASY TRA v2.0	0.37
inhalative, local, long-term	N/A	EASY TRA v2.0	0.37
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.06
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.43

1.3. CS9: Worker Contributing Scenario: Industrial (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	EASY TRA v2.0	0.74
inhalative, local, long-term	N/A	EASY TRA v2.0	0.74
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.03
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.77

1.3. CS10: Worker Contributing Scenario: Industrial (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	EASY TRA v2.0	0.74
inhalative, local, long-term	N/A	EASY TRA v2.0	0.74
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.01

combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.75
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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	Use in cleaning agents
Date - Version	19/07/2019 - 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	ERC8a - ERC8d
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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
CS6 General use from professional operators	PROC8b
CS7 General use from professional operators	PROC8a
CS8 General use from professional operators	PROC10
CS9 General use from professional operators	PROC11
CS10 General use from professional operators	PROC13

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

0.123 hPa

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)
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Product (article) characteristics

Physical form of product:

Liquid

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	
Frequency: Use frequency 240 days per year	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374. Use suitable eye protection.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	
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)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Use frequency 240 days per year	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374. Use suitable eye protection.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	
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)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Use frequency 240 days per year	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374. Use suitable eye protection.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	

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

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

Physical form of product:

Liquid

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Other conditions affecting worker exposure

Indoor use

2.2. CS6: Worker Contributing Scenario: General use from professional operators (PROC8b)

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

Physical form of product:

Liquid

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

Frequency:

Use frequency 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Other conditions affecting worker exposure

Indoor use

2.2. CS7: Worker Contributing Scenario: General use from professional operators (PROC8a)

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

Physical form of product:

Liquid

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

Frequency:

Use frequency 240 days per year

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

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Other conditions affecting worker exposure

Indoor use

Ventilation rate: 80 %**2.2. CS8: Worker Contributing Scenario: General use from professional operators (PROC10)****Process Categories**

Roller application or brushing (PROC10)

*Product (article) characteristics***Physical form of product:**

Liquid

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

Frequency:

Use frequency 240 days per year

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

Wear suitable gloves tested to EN374.

Use suitable eye protection.

Wear suitable respiratory protection.

Inhalation - minimum efficiency of: 80 %

Other conditions affecting worker exposure

Indoor use

Ventilation rate: 80 %**2.2. CS9: Worker Contributing Scenario: General use from professional operators (PROC11)****Process Categories**

Non industrial spraying (PROC11)

*Product (article) characteristics***Physical form of product:**

Liquid

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 0.05 L/min

Duration:

Exposure duration 180 min

Frequency:

Use frequency < 5 days per week

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. Use suitable eye protection.	Inhalation - minimum efficiency of: 90 %
Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 80 %

Other conditions affecting worker exposure

Indoor use

Room size: Covers use in room size of > 100 m³

Ventilation rate: 80 %

2.2. CS10: Worker Contributing Scenario: General use from professional operators (PROC13)

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

Physical form of product:

Liquid

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

Frequency:

Use frequency < 240 days per year

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

Personal protection

Wear suitable gloves tested to EN374. Use suitable eye protection.	Inhalation - minimum efficiency of: 90 %
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Other conditions affecting worker exposure

Indoor use

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)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.001
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.001
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.003

dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.004
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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)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.37
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.37
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.01
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.38

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)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.22
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.22
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.003
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.223

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.74
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.74
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.006
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.8

2.3. CS6: Worker Contributing Scenario: General use from professional operators (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.74
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.74
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.06
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.8

2.3. CS7: Worker Contributing Scenario: General use from professional operators (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.37
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.37
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.13
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.5

2.3. CS8: 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	N/A	ECETOC TRA worker v2.0	0.37
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.37
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.3
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.4

2.3. CS9: 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	N/A	ECETOC TRA worker v2.0	0.4
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.4
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.51
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.91

2.3. CS10: Worker Contributing Scenario: General use from professional operators (PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.74
dermal, local, long-term	N/A	ECETOC TRA worker v2.0	0.74
inhalative, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.01
dermal, systemic, long-term	N/A	ECETOC TRA worker v2.0	0.75

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 Widespread use by professional workers

3.1 TITLE SECTION

Exposure Scenario name	Use in antifreeze products
Date - Version	19/07/2019 - 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	ERC8d
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Worker Contributing Scenario

CS2 General use from professional operators	PROC1
CS3 General use from professional operators	PROC2
CS4 General use from professional operators	PROC8a
CS5 General use from professional operators	PROC8b
CS6 General use from professional operators	PROC11

3.2 Conditions of use affecting exposure

3.2. 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)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

0.123 hPa

3.2. 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)
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Product (article) characteristics

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

Frequency:

Covers exposure up to 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Use in contained systems

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

Personal protection

Wear suitable gloves tested to EN374.

<i>Other conditions affecting worker exposure</i>	
Indoor use	
3.2. 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)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Covers exposure up to 240 days per year	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Use in contained systems	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374.	
<i>Other conditions affecting worker exposure</i>	
Indoor use	
3.2. CS4: Worker Contributing Scenario: General use from professional operators (PROC8a)	
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Covers exposure up to 240 days per year	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Use in contained systems	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection	
Wear suitable gloves tested to EN374.	
Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 80 %
<i>Other conditions affecting worker exposure</i>	
Indoor use	
Ventilation rate: 80 %	
3.2. CS5: Worker Contributing Scenario: General use from professional operators (PROC8b)	
Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Product (article) characteristics

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

Frequency:

Covers exposure up to 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Use in contained systems

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Indoor use

3.2. CS6: Worker Contributing Scenario: General use from professional operators (PROC11)

Process Categories

Non industrial spraying (PROC11)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration 180 min

Frequency:

Covers exposure up to 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Use in contained systems

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

Personal protection

Wear suitable gloves tested to EN374.

Dermal - minimum efficiency of: 90 %

Other conditions affecting worker exposure

Indoor use

Room size: Covers use in room size of > 100 m³

3.3 Exposure estimation and reference to its source

3.3. 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	N/A	EASY TRA v2.0	0.001
inhalative, local, long-term	N/A	EASY TRA v2.0	0.001
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.003

combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.004
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3.3. 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	N/A	EASY TRA v2.0	0.37
inhalative, local, long-term	N/A	EASY TRA v2.0	0.37
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.01
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.38

3.3. CS4: Worker Contributing Scenario: General use from professional operators (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	EASY TRA v2.0	0.37
inhalative, local, long-term	N/A	EASY TRA v2.0	0.37
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.13
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.5

3.3. CS5: Worker Contributing Scenario: General use from professional operators (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	EASY TRA v2.0	0.74
inhalative, local, long-term	N/A	EASY TRA v2.0	0.74
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.06
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.8

3.3. CS6: 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	N/A	EASY TRA v2.0	0.4
inhalative, local, long-term	N/A	EASY TRA v2.0	0.4
dermal, systemic, long-term	N/A	EASY TRA v2.0	0.51
combined routes, systemic, long-term	N/A	EASY TRA v2.0	0.91

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 Consumer use; Various products (PC9a, PC1, PC4, PC8, PC15)

4.1 TITLE SECTION

Exposure Scenario name	Consumer goods
Date - Version	19/07/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Anti-freeze and de-icing products (PC4) - Biocidal products (PC8) - Non-metal surface treatment products (PC15) - Heat transfer fluids (PC16) - Hydraulic fluids (PC17) - Ink and toners (PC18) - Leather treatment products (PC23) - Polishes and wax blends (PC31) - Polymer preparations and compounds (PC32) - Textile dyes and impregnating products (PC34) - Washing and cleaning products (PC35)

Environment Contributing Scenario

CS1 Covered by	ERC8a - ERC8c - ERC8d - ERC8f - ERC9a - ERC9b
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Consumer Contributing Scenario

CS2 Consumer	PC1
CS3 Consumer	PC4 - PC16 - PC17 - PC4_1
CS4 Consumer	PC4 - PC4_2
CS5 Consumer	PC9a - PC15 - PC9a_2, PC15_2
CS6 Consumer	PC8
CS7 Consumer	PC18
CS8 Consumer	PC31
CS9 Consumer	PC32
CS10 Consumer	PC35 - PC8_2, PC35_2
CS11 Consumer	PC35 - PC8_3, PC35_3
CS12 Consumer	PC15 - PC23 - PC34 - PC9a_1, PC15_1

4.2 Conditions of use affecting exposure

4.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8c, ERC8d, ERC8f, ERC9a, ERC9b)

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) - Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC8a, ERC8c, ERC8d, ERC8f, ERC9a, ERC9b)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

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

Product Categories	Adhesives, sealants (PC1)
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<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers concentrations up to 0.75 %	
4.2. CS3: Consumer Contributing Scenario: Consumer (PC4, PC16, PC17)	
Product Categories	Anti-freeze and de-icing products - Heat transfer fluids - Hydraulic fluids (PC4, PC16, PC17)
Product (Sub-)Categories	Washing car window (PC4_1)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers concentrations up to 45 %	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Exposure duration < 15 min	
4.2. CS4: Consumer Contributing Scenario: Consumer (PC4)	
Product Categories	Anti-freeze and de-icing products (PC4)
Product (Sub-)Categories	Pouring into radiator (PC4_2)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
4.2. CS5: Consumer Contributing Scenario: Consumer (PC9a, PC15)	
Product Categories	Coatings and paints, thinners, paint removers - Non-metal surface treatment products (PC9a, PC15)
Product (Sub-)Categories	Solvent rich, high solid, water borne paint (PC9a_2, PC15_2)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers concentrations up to 10 %	
4.2. CS6: Consumer Contributing Scenario: Consumer (PC8)	
Product Categories	Biocidal products (PC8)
4.2. CS7: Consumer Contributing Scenario: Consumer (PC18)	
Product Categories	Ink and toners (PC18)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 5 %.	
4.2. CS8: Consumer Contributing Scenario: Consumer (PC31)	
Product Categories	Polishes and wax blends (PC31)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers concentrations up to 10 %	
4.2. CS9: Consumer Contributing Scenario: Consumer (PC32)	
Product Categories	Polymer preparations and compounds (PC32)
<i>Product (article) characteristics</i>	
Concentration of substance in product: Covers percentage substance in the product up to 5 %.	
4.2. CS10: Consumer Contributing Scenario: Consumer (PC35)	

Product Categories	Washing and cleaning products (PC35)
Product (Sub-)Categories	Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) (PC8_2, PC35_2)

Product (article) characteristics

Concentration of substance in product:

Covers concentrations up to 20 %

4.2. CS11: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)
Product (Sub-)Categories	Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) (PC8_3, PC35_3)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 5 %.

4.2. CS12: Consumer Contributing Scenario: Consumer (PC15, PC23, PC34)

Product Categories	Non-metal surface treatment products - Leather treatment products - Textile dyes and impregnating products (PC15, PC23, PC34)
Product (Sub-)Categories	Waterborne latex wall paint (PC9a_1, PC15_1)

4.3 Exposure estimation and reference to its source

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.59
dermal, systemic, long-term	N/A	N/A	0.005
combined routes, systemic, long-term	N/A	N/A	0.505

4.2. CS3: Consumer Contributing Scenario: Consumer (PC4, PC16, PC17)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.28
dermal, systemic, long-term	N/A	N/A	0.08
combined routes, systemic, long-term	N/A	N/A	0.36

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0
dermal, systemic, long-term	N/A	N/A	0.09
combined routes, systemic, long-term	N/A	N/A	0.09

4.2. CS5: Consumer Contributing Scenario: Consumer (PC9a, PC15)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.04
dermal, systemic, long-term	N/A	N/A	0.02
combined routes, systemic, long-term	N/A	N/A	0.06

4.2. CS6: Consumer Contributing Scenario: Consumer (PC8)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0
dermal, systemic, long-term	N/A	N/A	0.006
combined routes, systemic, long-term	N/A	N/A	0.006

4.2. CS7: Consumer Contributing Scenario: Consumer (PC18)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.18
dermal, systemic, long-term	N/A	N/A	0
combined routes, systemic, long-term	N/A	N/A	0.18

4.2. CS8: Consumer Contributing Scenario: Consumer (PC31)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.56
dermal, systemic, long-term	N/A	N/A	0.04
combined routes, systemic, long-term	N/A	N/A	0.6

4.2. CS9: Consumer Contributing Scenario: Consumer (PC32)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.009
dermal, systemic, long-term	N/A	N/A	0.001
combined routes, systemic, long-term	N/A	N/A	0.01

4.2. CS10: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.09
dermal, systemic, long-term	N/A	N/A	0.22
combined routes, systemic, long-term	N/A	N/A	0.31

4.2. CS11: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	N/A	N/A	0.02
dermal, systemic, long-term	N/A	N/A	0.002
combined routes, systemic, long-term	N/A	N/A	0.022

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.