Sicherheitsdatenblatt
WIZZY RINNOVA PELLE

Sicherheitsdatenblatt vom 6/6/2022, Version 7

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

1.1. Produktidentifikator

Kennzeichnung der Mischung:

Handelsname: WIZZY RINNOVA PELLE

Handelscode: 19351

1.2. Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird

Empfohlene Verwendung:

getränktes Tuch zum Auffrischen von Leder

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 30686790

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.

EUH208 Enthält Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1). Kann allergische Reaktionen hervorrufen.

Besondere Regelungen gemäß Anhang XVII der REACH-Verordnung nachfolgenden Änderungen:

Keine

Verordnung (EG) Nr. 648/2004 (Detergenzien).

Produktinhaltsstoffe:
Amphotere Tenside, Nichtionische Tenside < 5 %
Das Produkt enthält ebenfalls: Duftstoffe
Konservierungsstoffe: LAURYLAMINE DIPROPYLENEDIAMINE, Pyridin-2-thiol-1-oxid, Natriumsalz, 1,2-Benzisothiazol-3(2H)-on; 1,2-Benzisothiazolin-3-on, 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 >= 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:
>= 1% - < 2% Ethandiol; 1,2-Ethandiol; Ethylenglycol
REACH No.: 01-2119456816-28, Index-Nummer: 603-027-00-1, CAS: 107-21-1, EC: 203-473-3
3.1/4/Oral Acute Tox. 4 H302
3.9/2 STOT RE 2 H373 (Nieren) (oral)

>= 0.5% - < 1% Amines, C12-14(even numbered)-alkyldimethyl, N-oxides
REACH No.: 01-2119490061-47, EC: 931-292-6
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

>= 0.005% - < 0.01% 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
3.2/2 Skin Irrit. 2 H315
3.3/1 Eye Dam. 1 H318
3.4.2/1 Skin Sens. 1 H317
4.1/A1 Aquatic Acute 1 H400
4.1/C2 Aquatic Chronic 2 H411

Spezifische Konzentrationsgrenzwerte:
C >= 0,005%: EUH208
C >= 0,05%: Skin Sens. 1 H317

2 ppm Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1)
Index-Nummer: 613-167-00-5, CAS: 55965-84-9
3.1/2/Inhal Acute Tox. 2 H330
3.1/2/Dermal Acute Tox. 2 H310
3.1/3/Oral Acute Tox. 3 H301
3.2/1C Skin Corr. 1C H314
3.3/1 Eye Dam. 1 H318
3.4.2/1A Skin Sens. 1A H317
4.1/A1 Aquatic Acute 1 H400 M=100.
4.1/C1 Aquatic Chronic 1 H410 M=100.

EUH071

Spezifische Konzentrationsgrenzwerte:
C >= 0,6%: Skin Corr. 1C H314
0,06% <= C < 0.6%: Skin Irrit. 2 H315
C >= 0,6%: Eye Dam. 1 H318
0,06% <= C < 0.6%: Eye Irrit. 2 H319
C >= 0,0015%: Skin Sens. 1A H317

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
Geeignete Atemgeräte verwenden.
Das kontaminierte Löschwasser getrennt auffangen. Nicht in der Abwasserleitung entsorgen.
Wenn im Rahmen der Sicherheit möglich, die unbeschädigten Behälter aus der unmittelbaren Gefahrenzone entfernen.

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
Mit reichlich Wasser waschen.

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
Lebensmittel, Getränke und Tiernahrung fern halten.
Unverträgliche Werkstoffe:
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 - TWA(8h): 25 ppm - STEL: 50 ppm - Anmerkungen: (V), A4 - URT irr
ACGIH - STEL: 10 mg/m3 - Anmerkungen: (I, H), A4 - URT irr

DNEL-Expositionsgrenzwerte
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
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:
Be normaler Verwendung nicht notwendig. In jedem Fall nach den gängigen Arbeitsrichtlinien arbeiten.
Hautschutz:
Bei normaler Verwendung sind besondere Vorsichtsmaßnahmen nicht notwendig.
Handschutz:

Be normaler Verwendung nicht notwendig.

Atemschutz:

Bei normaler Verwendung nicht erforderlich.

Wärmerisiken:

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:	>100°C	--	--
Entzündbarkeit:	N.A.	--	--
Untere und obere Explosionsgrenze:	N.A.	--	--
Flammpunkt:	nicht brennbar	IP 170	--
Selbstentzündungstemperatur:	N.A.	--	--
Zerfalltemperatur:	N.A.	--	--
pH:	6.9	--	--
Kinematische Viskosität:	N.A.	--	--
Wasserlöslichkeit:	löslich	--	--
Löslichkeit in Öl:	N.A.	--	--
Verteilungskoeffizient n-Oktanol/Wasser (log-Wert):	N.A.	--	--
Dampfdruck:	N.A.	--	--
Dichte und/oder relative Dichte:	1,007 g/cm3	--	--

Relative Dampfdichte:	N.A.	--	--
Partikeleigenschaften:			
Teilchengröße:	N.A.	--	--

9.2. Sonstige Angaben
Keine weiteren relevanten Informationen

ABSCHNITT 10: Stabilität und Reaktivität

10.1. Reaktivität
Stabil unter Normalbedingungen
10.2. Chemische Stabilität
Stabil unter Normalbedingungen
10.3. Möglichkeit gefährlicher Reaktionen
Keine
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:
WIZZY RINNOVA PELLE
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:

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:

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

Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1) - CAS: 55965-84-9

a) akute Toxizität:

Test: LD50 - Weg: Oral - Spezies: Ratte 100 mg/kg

Test: LD50 - Weg: Haut - Spezies: Ratte 300 mg/kg

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.

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

Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1) - CAS: 55965-84-9

a) Akute aquatische Toxizität:

Endpunkt: LC50 - Spezies: Fische 0.19 mg/l - Dauer / h: 96

Endpunkt: EC50 - Spezies: Daphnia 0.16 mg/l - Dauer / h: 48

Endpunkt: EC50 - Spezies: Algen 0.1 mg/l - Dauer / h: 72

12.2. Persistenz und Abbaubarkeit

Keine

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
Amines, C12-14(even numbered)-alkyldimethyl, N-oxides
Test: log Pow 2.7
Reaktionsmasse aus 5-Chlor-2-methyl-2H-isothiazol-3-on und 2-Methyl-2H-isothiazol-3-on (3:1) - CAS: 55965-84-9
Test: log Pow 0.401

12.4. Mobilität im Boden
N.A.

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.

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
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)

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 75

Flüchtige Organische Verbindung - FOV = 1.00 %
Flüchtige Organische Verbindung - FOV = 10.05 g/Kg
Flüchtige Organische Verbindung - FOV = 10.12 g/l

Wo möglich auf die folgenden Normen Bezug nehmen:

Richtlinie EU 2012/18 (Seveso III)
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:

Keine

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.
H317 Kann allergische Hautreaktionen verursachen.
EUH208 Enthält "Name des sensibilisierenden Stoffes". Kann allergische Reaktionen hervorrufen.
H330 Lebensgefahr bei Einatmen.
H310 Lebensgefahr bei Hautkontakt.
H301 Giftig bei Verschlucken.
H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
H410 Sehr giftig für Wasserorganismen mit langfristiger Wirkung.

EUH071 Wirkt ätzend auf die Atemwege.
H319 Verursacht schwere Augenreizung.

Gefahrenklasse und Gefahrenkategorie	Code	Beschreibung
Acute Tox. 2	3.1/2/Dermal	Akute Toxizität (dermal), Kategorie 2
Acute Tox. 2	3.1/2/Inhal	Akute Toxizität (inhalativ), Kategorie 2
Acute Tox. 3	3.1/3/Oral	Akute Toxizität (oral), Kategorie 3
Acute Tox. 4	3.1/4/Oral	Akute Toxizität (oral), Kategorie 4
Skin Corr. 1C	3.2/1C	Verätzung der Haut, Kategorie 1C
Skin Irrit. 2	3.2/2	Reizung der Haut, Kategorie 2
Eye Dam. 1	3.3/1	Schwere Augenschädigung, Kategorie 1
Eye Irrit. 2	3.3/2	Reizung der Augen, Kategorie 2
Skin Sens. 1	3.4.2/1	Sensibilisierung der Haut, 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 2: Mögliche Gefahren
ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen
ABSCHNITT 4: Erste-Hilfe-Maßnahmen
ABSCHNITT 7: Handhabung und Lagerung
ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen
ABSCHNITT 11: Toxikologische Angaben
ABSCHNITT 12: Umweltbezogene Angaben
ABSCHNITT 15: Rechtsvorschriften
ABSCHNITT 16: Sonstige Angaben

Diese Unterlagen wurden von einem Fachmann mit entsprechender Ausbildung abgefasst.
Hauptsächliche Literatur:

ECDIN - Daten- und Informationsnetz über umweltrelevante Chemikalien - Vereinigtes 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 Kurzzeitexposition
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

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.

Other conditions affecting worker exposure

Indoor use

1.2. CS6: Worker Contributing Scenario: Industrial (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:

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. CS7: Worker Contributing Scenario: Industrial (PROC7)

Process Categories	Industrial spraying (PROC7)

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

Amounts used:

Amount per use 1 L/min

Duration:

Covers daily exposures up to 8 hours

Frequency:

Use frequency 5 days per week

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 > 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)

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
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

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

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)

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)

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. 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

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. 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

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

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

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)

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)

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)

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 %

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

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
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)

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)

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. 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

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. 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)

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

Other conditions affecting worker exposure

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

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

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)

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)

Product (article) characteristics

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)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 45 %

Amount used, frequency and duration of use/exposure

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)

Product (article) characteristics

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)

Product (article) characteristics

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)

Product (article) characteristics

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)

Product (article) characteristics

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)

Product (article) characteristics

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.