

# Ficha de datos de seguridad

## WIZZY PLASTICA SATINATO



### Ficha de datos de seguridad del 12/12/2025, Revisión 1

#### SECCIÓN 1. Identificación de la sustancia o la mezcla y de la sociedad o la empresa

##### 1.1. Identificador de producto

Identificación del preparado:

Nombre comercial: WIZZY PLASTICA SATINATO

Código comercial: 1301

##### 1.2. Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

Uso recomendado:

Detergente/abrillantador para parachoques y partes de plástico.

Usos no recomendados:

Respetar estrictamente los usos recomendados.

##### 1.3. Datos del proveedor de la ficha de datos de seguridad

Proveedor:

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

Persona competente responsable de la ficha de datos de seguridad:

arexons@arexons.it

##### 1.4. Teléfono de emergencia

Arexons S.p.A.

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

Teléfono de emergencias: + 34 91 562 04 20 (Solo emergencias toxicológicas. Información en español (24h/365 días))

#### SECCIÓN 2. Identificación de los peligros

##### 2.1. Clasificación de la sustancia o de la mezcla

Criterios Reglamentación CE 1272/2008 (Clasificación, Etiquetado y Empacado):

El producto no se considera peligroso de acuerdo con el Reglamento CE 1272/2008 (CLP).

Efectos físico-químicos nocivos para la salud humana y para el medio ambiente:

Ningún otro riesgo

##### 2.2. Elementos de la etiqueta

El producto no se considera peligroso de acuerdo con el Reglamento CE 1272/2008 (CLP).

Pictogramas de peligro:

Ninguna

Indicaciones de peligro:

Ninguna

Consejos de prudencia:

Ninguna

Disposiciones especiales:

EUH208 Contiene 2-Metil-2H-isotiazol-3-ona. Puede provocar una reacción alérgica.

Disposiciones especiales de acuerdo con el anexo XVII del Reglamento REACH y sus posteriores modificaciones:

Ninguna

Reglamento (CE) no 648/2004 (detergentes).

Contenido del producto:

Tensioactivos no iónicos

< 5 %

Contiene también:

Perfumes

Conservantes:

2-Metil-2H-isotiazol-3-ona, 1,2-Bencisotiazol-3(2H)-ona; 1,2-bencisotiazolin-3-ona, PHENOXYETHANOL, LAURYLAMINE DIPROPYLENEDIAMINE, BENZISOTHIAZOLINONE

##### 2.3. Otros peligros

Ninguna sustancia PBT, mPmB o perturbador endocrino presente en concentración  $\geq 0.1\%$

Otros riesgos:

Ningún otro riesgo

#### SECCIÓN 3. Composición/información sobre los componentes

##### 3.1. Sustancias

N.A.

##### 3.2. Mezclas

Componentes peligrosos según el Reglamento CLP y su correspondiente clasificación:

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Cantidad	Nombre	Número de identif.	Clasificación
>= 1% - < 2%	Etanodiol; etilenglicol	Número Index: 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 (riñones) (oral)
3 ppm	2-Metil-2H-isotiazol-3-ona	CAS: 2682-20-4 EC: 220-239-6	⚠ 3.1/3/Oral Acute Tox. 3 H301 ⚠ 4.1/A1 Aquatic Acute 1 H400 M=10. ⚠ 4.1/C1 Aquatic Chronic 1 H410 M=1. ⚠ 3.1/3/Dermal Acute Tox. 3 H311 ⚠ 3.1/2/Inhal Acute Tox. 2 H330 ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 3.4.2/1A Skin Sens. 1A H317 EUH071 Límites de concentración específicos: C >= 0,0015%: Skin Sens. 1A H317

### SECCIÓN 4. Primeros auxilios

#### 4.1. Descripción de los primeros auxilios

En caso de contacto con la piel:

Lavar abundantemente con agua y jabón.

En caso de contacto con los ojos:

En caso de contacto con los ojos, lávense inmediata y abundantemente con agua y acúdase a un médico.

En caso de ingestión:

No provocar el vómito en ningún caso. CONSULTAR INMEDIATAMENTE AL MÉDICO.

En caso de inhalación:

Llevar al accidentado al aire libre y mantenerlo en reposo y abrigado.

#### 4.2. Principales síntomas y efectos, agudos y retardados

Ninguno

#### 4.3. Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente

Tratamiento:

Tratamiento sintomático. En caso de exposición o malestar, consultar a un médico.

### SECCIÓN 5. Medidas de lucha contra incendios

#### 5.1. Medios de extinción

Medios de extinción apropiados:

Con anhídrido carbónico.

Con polvo.

Espuma

Agua vaporizada.

Medios de extinción no recomendados:

No usar chorros de agua directos

#### 5.2. Peligros específicos derivados de la sustancia o la mezcla

No inhalar los gases producidos por la explosión y por la combustión.

La combustión produce humo pesado.

#### 5.3. Recomendaciones para el personal de lucha contra incendios

Ropa normal para la lucha contra incendios, como un aparato respiratorio de aire comprimido de circuito abierto (EN 137), traje ignífugo (EN469), guantes ignífugos (EN 659) y botas de bombero (HO A29 o A30).

Rociar con agua los recipientes para mantenerlos fríos.

Recoger por separado el agua contaminada utilizada para extinguir el incendio. No descargarla en la red de alcantarillado.

### SECCIÓN 6. Medidas en caso de vertido accidental

#### 6.1. Precauciones personales, equipo de protección y procedimientos de emergencia

Para el personal que no forma parte de los servicios de emergencia:

Consultar las medidas de protección expuestas en los puntos 7 y 8.

Proporcionar una ventilación adecuada.

Para el personal de emergencia:

Consultar las medidas de protección expuestas en los puntos 7 y 8.

Guantes

Quitar toda fuente de encendido.

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- Llevar las personas a un lugar seguro.
- 6.2. Precauciones relativas al medio ambiente  
Evitar que el producto penetre en el suelo/subsuelo. Evitar que penetre en aguas superficiales o en el alcantarillado. Conservar el agua de lavado contaminada y eliminarla.  
En caso de fuga de gas o penetración en cursos de agua, suelo o sistema de alcantarillado, informar a las autoridades responsables.  
Material apropiado para la recogida: material absorbente, orgánico, arena
- 6.3. Métodos y material de contención y de limpieza  
Limpieza:  
Evitar la presencia de llamas y/o chispas cerca de la pérdida y productos de desecho. No fumar. Contener en caso de vertido de cantidades relevantes del producto y absorber cuando disperse. Contener el derrame de pequeñas cantidades de producto con tierra, arena, sepiolita, trapos u otro absorbente inerte.  
Recuperar con paletas después de la absorción de disolvente y transferir en contenedores adecuados.  
Desechar los residuos según la normativa vigente.
- 6.4. Referencia a otras secciones  
Véanse también los apartados 8 y 13.

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### SECCIÓN 7. Manipulación y almacenamiento

- 7.1. Precauciones para una manipulación segura  
Evitar el contacto con la piel y los ojos, la inhalación de vapores y vahos.  
Remitirse también al apartado 8 para los dispositivos de protección recomendados.  
  
No comer, beber ni fumar durante su utilización.
- 7.2. Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades  
Conservar solo en el recipiente original.  
Mantener alejado de comidas, bebidas y piensos.  
Ninguna en particular.  
Indicaciones para los locales:  
Locales adecuadamente aireados.
- 7.3. Usos específicos finales  
Ningún uso particular

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### SECCIÓN 8. Controles de exposición/protección individual

- 8.1. Parámetros de control  
Etanodiol; etilenglicol - CAS: 107-21-1  
UE - TWA(8h): 52 mg/m<sup>3</sup>, 20 ppm - STEL: 104 mg/m<sup>3</sup>, 40 ppm - Notas: Skin  
ACGIH - STEL: 10 mg/m<sup>3</sup> - Notas: (I, H), A4 - URT irr  
NIOSH - Notas: Metodo raccomandato per il monitoraggio: NIOSH 5523
- Valores límites de exposición DNEL  
Etanodiol; etilenglicol - CAS: 107-21-1  
Trabajador profesional: 35 mg/m<sup>3</sup> - Consumidor: 7 mg/m<sup>3</sup> - Exposición: Por inhalación humana  
Trabajador profesional: 106 mg/kg - Consumidor: 53 mg/kg - Exposición: Dérmica humana
- Valores límites de exposición PNEC  
Etanodiol; etilenglicol - CAS: 107-21-1  
Objetivo: agua dulce - Valor: 10 mg/l  
Objetivo: Agua marina - Valor: 1 mg/l  
Objetivo: Sedimentos de agua dulce - Valor: 37 mg/kg  
Objetivo: Suelo (agricultura) - Valor: 1.53 mg/kg
- 8.2. Controles de la exposición  
Protección de los ojos:  
Gafas de seguridad  
Cumple con la norma EN 166
- Protección de la piel:  
Indumentaria de protección contra agentes químicos.  
Calzado de seguridad.
- Protección de las manos:  
Guantes de nitrilo o de Viton.  
Conformes EN 374.  
Grosor: Puño 0,10 mm; palma 0,12 mm; dedos 0,145 mm  
Los guantes deben seleccionarse en función del tipo específico de uso y del tiempo de permeación del material. El tiempo de permeación depende del tipo de guante, del grosor y del tipo de sustancia química. Consultar al proveedor de guantes para determinar el tiempo de permeación adecuado. Sustituir inmediatamente los guantes si se observan signos de desgaste o contaminación.
- Protección respiratoria:  
No se necesita en las condiciones normales de uso.
- Riesgos térmicos:  
Ninguno
- Controles de la exposición ambiental:  
Ninguno
- Controles técnicos apropiados:  
Ninguno

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### SECCIÓN 9. Propiedades físicas y químicas

#### 9.1. Información sobre propiedades físicas y químicas básicas

Propiedad	Valor	Método:	Notas
Estado físico:	Líquido	--	--
Color:	blanco	--	--
Olor:	característico	--	--
Punto de fusión/punto de congelación:	N.A.	--	--
Punto de ebullición o punto inicial de ebullición e intervalo de ebullición:	N.A.	--	--
Inflamabilidad:	N.A.	--	--
Límite superior e inferior de explosividad:	N.A.	--	--
Punto de inflamación:	>70°C	08	--
Temperatura de auto-inflamación:	N.A.	--	--
Temperatura de descomposición:	N.A.	--	--
pH:	7.8	ASTM D1287	--
Viscosidad cinemática:	N.A.	--	--
Hidrosolubilidad:	soluble	--	--
Solubilidad en aceite:	N.A.	--	--
Coefficiente de reparto n-octano/ agua (valor logarítmico):	N.A.	--	--
Presión de vapor:	N.A.	--	--
Densidad y/o densidad relativa:	0.999 g/ml	09	--
Densidad de vapor relativa:	N.A.	--	--
Características de las partículas:			
Tamaño de las partículas:	N.A.	--	--

#### 9.2. Otros datos

Ninguna otra información relevante

### SECCIÓN 10. Estabilidad y reactividad

#### 10.1. Reactividad

Estable en condiciones normales

#### 10.2. Estabilidad química

Estable a las temperaturas ambiente normales y si se usa como está recomendado.

#### 10.3. Posibilidad de reacciones peligrosas

Ninguno

#### 10.4. Condiciones que deben evitarse

Estable en condiciones normales.

#### 10.5. Materiales incompatibles

Ninguna en particular.

#### 10.6. Productos de descomposición peligrosos

Ninguno.

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## **SECCIÓN 11. Información toxicológica**

11.1. Información sobre las clases de peligro definidas en el Reglamento (CE) n.º 1272/2008  
Información toxicológica del producto:

- foxim (ISO) (DCI)
- a) toxicidad aguda  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - b) corrosión o irritación cutáneas  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - c) lesiones o irritación ocular graves  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - d) sensibilización respiratoria o cutánea  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - e) mutagenicidad en células germinales  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - f) carcinogenicidad  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - g) toxicidad para la reproducción  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - h) toxicidad específica en determinados órganos (STOT) – exposición única  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - i) toxicidad específica en determinados órganos (STOT) – exposición repetida  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
  - j) peligro de aspiración  
No clasificado  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

La información toxicológica de las sustancias principales halladas en el producto:

Etanodiol; etilenglicol - CAS: 107-21-1

- a) toxicidad aguda:  
Ensayo: LD50 - Vía: Oral - Especies: Rata 7712 mg/kg  
Ensayo: LC50 - Vía: Inhalación - Especies: Rata 2.5 mg/l - Duración: 6h  
Ensayo: LD50 - Vía: Piel - Especies: Ratón 3500 mg/kg

11.2. Información relativa a otros peligros

Propiedades de alteración endocrina:

Ningún perturbador endocrino presente en concentración  $\geq 0.1\%$

## **SECCIÓN 12. Información ecológica**

12.1. Toxicidad

Utilícese con técnicas de trabajo adecuadas, evitando la dispersión del producto en el medio ambiente.

Etanodiol; etilenglicol - CAS: 107-21-1

- a) Toxicidad acuática aguda:  
Parámetro: LC50 - Especies: Peces 49-72.86 GL - Duración h.: 96  
Parámetro: EC50 - Especies: Daphnia 100 mg/l - Duración h.: 48  
Parámetro: LC50 - Especies: Daphnia 74.448 GL - Duración h.: 242  
Parámetro: ECO - Especies: Daphnia 100 mg/l - Duración h.: 48  
Parámetro: CE4 - Especies: Algas 10.94 GL - Duración h.: 96
- b) Toxicidad acuática crónica:  
Parámetro: NOEC - Especies: Peces 49 mg/l - Duración h.: 504  
Parámetro: LC50 - Especies: Peces 1.5 GL - Duración h.: 504  
Parámetro: NOEC - Especies: Daphnia 8.59-24 mg/l - Duración h.: 168  
Parámetro: NOEC - Especies: Algas 1000 mg/l - Duración h.: 72

12.2. Persistencia y degradabilidad

Ninguno

Etanodiol; etilenglicol - CAS: 107-21-1

Biodegradabilidad: Rápidamente degradable - Ensayo: BIOGDG13 - Duración h.: .10gg - %: 90-10

12.3. Potencial de bioacumulación

Etanodiol; etilenglicol - CAS: 107-21-1

Bioacumulación: No bioacumulable

12.4. Movilidad en el suelo

Etanodiol; etilenglicol - CAS: 107-21-1

Movilidad en el suelo: Móvil



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- 12.5. Resultados de la valoración PBT y mPmB  
Sustancias vPvB: Ninguna - Sustancias PBT: Ninguna
- 12.6. Propiedades de alteración endocrina  
Ningún perturbador endocrino presente en concentración  $\geq 0.1\%$
- 12.7. Otros efectos adversos  
Ninguno

### SECCIÓN 13. Consideraciones relativas a la eliminación

- 13.1. Métodos para el tratamiento de residuos  
Recuperar si es posible. Operar conforme con las disposiciones locales y nacionales vigentes.
- Información adicional sobre eliminación:  
El producto sobrante debe considerarse residuo especial que debe clasificarse de acuerdo con la Directiva n.º 2008/98/CE sobre residuos y asuntos relacionados. Recupere el producto si es posible. Envíe el producto a plantas de eliminación autorizadas o incineración en condiciones controladas. Los embalajes pueden llevarse a recogida selectiva si se vacían de su contenido, comprobando la normativa de su municipio. En caso contrario, siempre es necesario llevarlo a un centro autorizado o a la isla ecológica de cada municipio.

### SECCIÓN 14. Información relativa al transporte

- 14.1. Número ONU o número ID  
Producto no peligroso según los criterios de la reglamentación del transporte.
- 14.2. Designación oficial de transporte de las Naciones Unidas  
N.A.
- 14.3. Clase(s) de peligro para el transporte  
N.A.
- 14.4. Grupo de embalaje  
N.A.
- 14.5. Peligros para el medio ambiente  
ADR-Contaminante ambiental: No  
IMDG-Marine pollutant: No
- 14.6. Precauciones particulares para los usuarios  
N.A.
- 14.7. Transporte marítimo a granel con arreglo a los instrumentos de la OMI  
N.A.

### SECCIÓN 15. Información reglamentaria

- 15.1. Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla  
Dir. 98/24/CE (Riesgos relacionados con los agentes químicos durante el trabajo)  
Dir. 2000/39/CE (Valores límite de exposición profesional)  
Reglamento (CE) n. 1907/2006 (REACH)  
Reglamento (CE) n. 1272/2008 (CLP)  
Reglamento (CE) n. 790/2009 (ATP 1 CLP) y (UE) n. 758/2013  
Reglamento (UE) n. 2020/878  
Reglamento (UE) n. 286/2011 (ATP 2 CLP)  
Reglamento (UE) n. 618/2012 (ATP 3 CLP)  
Reglamento (UE) n. 487/2013 (ATP 4 CLP)  
Reglamento (UE) n. 944/2013 (ATP 5 CLP)  
Reglamento (UE) n. 605/2014 (ATP 6 CLP)  
Reglamento (UE) n. 2015/1221 (ATP 7 CLP)  
Reglamento (UE) n. 2016/918 (ATP 8 CLP)  
Reglamento (UE) n. 2016/1179 (ATP 9 CLP)  
Reglamento (UE) n. 2017/776 (ATP 10 CLP)  
Reglamento (UE) n. 2018/669 (ATP 11 CLP)  
Reglamento (UE) n. 2018/1480 (ATP 13 CLP)  
Reglamento (UE) n. 2019/521 (ATP 12 CLP)  
Reglamento (UE) n. 2020/217 (ATP 14 CLP)  
Reglamento (UE) n. 2020/1182 (ATP 15 CLP)  
Reglamento (UE) n. 2021/643 (ATP 16 CLP)  
Reglamento (UE) n. 2021/849 (ATP 17 CLP)  
Reglamento (UE) n. 2022/692 (ATP 18 CLP)  
Reglamento (UE) 2023/707  
Reglamento (UE) n. 2023/1434 (ATP 19 CLP)  
Reglamento (UE) n. 2023/1435 (ATP 20 CLP)  
Reglamento (UE) n. 2024/197 (ATP 21 CLP)
- Restricciones relacionadas con el producto o las sustancias contenidas, de acuerdo con el anexo XVII del Reglamento (CE) 1907/2006 (REACH) y las modificaciones posteriores:  
Restricciones relacionadas con el producto:

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Ninguna restricción.

Restricciones relacionadas con las sustancias contenidas:

Restricción 40

Restricción 70

Restricción 75

Compuestos orgánicos volátiles - COV = 1.01 %

Compuestos orgánicos volátiles - COV = 10.10 g/Kg

Compuestos orgánicos volátiles - COV = 10.08 g/l

Cuando sean aplicables, hágase referencia a las siguientes normativas:

Directiva 2012/18/EU (Seveso III)

Reglamento (CE) no 648/2004 (detergentes).

Dir. 2004/42/CE (directiva COV)

Disposiciones sobre la directiva EU 2012/18 (Seveso III):

Categoría Seveso III de acuerdo con el anexo 1, parte 1

Ninguno

15.2. Evaluación de la seguridad química

No se ha realizado ninguna evaluación de la seguridad química para la mezcla.

Sustancias para las cuales se ha realizado una evaluación de la seguridad química

Etanodiol; etilenglicol

## SECCIÓN 16. Otra información

Texto de las frases utilizadas en el párrafo 3:

H302 Nocivo en caso de ingestión.

H373 (riñones) (oral) Puede provocar daños en los órganos (riñones) tras exposiciones prolongadas o repetidas por ingestión.

H301 Tóxico en caso de ingestión.

H400 Muy tóxico para los organismos acuáticos.

H410 Muy tóxico para los organismos acuáticos, con efectos nocivos duraderos.

H311 Tóxico en contacto con la piel.

H330 Mortal en caso de inhalación.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

H318 Provoca lesiones oculares graves.

H317 Puede provocar una reacción alérgica en la piel.

EUH071 Corrosivo para las vías respiratorias.

Clase y categoría de peligro	Código	Descripción
Acute Tox. 2	3.1/2/Inhal	Toxicidad aguda (por inhalación), Categoría 2
Acute Tox. 3	3.1/3/Dermal	Toxicidad aguda (cutánea), Categoría 3
Acute Tox. 3	3.1/3/Oral	Toxicidad aguda (oral), Categoría 3
Acute Tox. 4	3.1/4/Oral	Toxicidad aguda (oral), Categoría 4
Skin Corr. 1B	3.2/1B	Corrosión cutánea, Categoría 1B
Eye Dam. 1	3.3/1	Lesiones oculares graves, Categoría 1
Skin Sens. 1A	3.4.2/1A	Sensibilización cutánea, Categoría 1A
STOT RE 2	3.9/2	Toxicidad específica en determinados órganos (exposiciones repetidas), Categoría 2
Aquatic Acute 1	4.1/A1	Peligro agudo para el medio ambiente acuático, Categoría 1
Aquatic Chronic 1	4.1/C1	Peligro crónico (a largo plazo) para el medio ambiente acuático, Categoría 1

Este documento ha sido preparado por una persona competente que ha recibido un entrenamiento adecuado

Principales fuentes bibliográficas:

ECDIN: Environmental Chemicals Data and Information Network, Centro Común de Investigación, Comisión de las Comunidades Europeas

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, 8ª ed., Van Nostrand Reinold

La información aquí detallada se basa en nuestros conocimientos hasta la fecha señalada arriba. Se refiere exclusivamente al

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producto indicado y no constituye garantía de cualidades particulares.  
El usuario debe asegurarse de la idoneidad y exactitud de dicha información en relación al uso específico que debe hacer del producto.  
Esta ficha anula y sustituye toda edición precedente.

ADR:	Acuerdo europeo relativo al transporte internacional de mercancías peligrosas por carretera.
CAS:	Chemical Abstracts Service (de la American Chemical Society).
CLP:	Clasificación, etiquetado, embalaje.
DNEL:	Nivel sin efecto derivado.
EINECS:	Catálogo Europeo de Sustancias Químicas Comercializadas.
ETA:	Estimación de la toxicidad aguda
ETAmix:	Estimación de Toxicidad Aguda (Mezclas)
GefStoffVO:	Ordenanza sobre sustancias peligrosas, Alemania.
GHS:	Sistema Globalmente Armonizado de clasificación y etiquetado de productos químicos.
IATA:	Asociación de Transporte Aéreo Internacional.
IATA-DGR:	Normas aplicadas a las mercancías peligrosas por la "Asociación de Transporte Aéreo Internacional" (IATA).
ICAO:	Organización de la Aviación Civil Internacional.
ICAO-TI:	Instrucciones Técnicas de la "Organización de la Aviación Civil Internacional" (OACI).
IMDG:	Código marítimo internacional de mercancías peligrosas.
INCI:	Nomenclatura internacional de ingredientes cosméticos.
KSt:	Coefficiente de explosión.
LC50:	Concentración letal para el 50% de la población expuesta.
LD50:	Dosis letal para el 50% de la población expuesta.
NA:	No aplicable
PNEC:	Concentración prevista sin efecto.
RID:	Normas relativas al transporte internacional de mercancías peligrosas por ferrocarril.
STEL:	Nivel de exposición de corta duración.
STOT:	Toxicidad específica en determinados órganos.
TLV:	Valor límite del umbral.
TWA:	Promedio ponderado en el tiempo
WGK:	Clase de peligro para las aguas (Alemania).

**Continúa en la siguiente página - Esta FDS se ha integrado con uno o más escenarios de exposición. Los escenarios de exposición que siguen deben considerarse como parte de la FDS.**

# 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
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#### 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)
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#### *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)
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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:

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<sup>3</sup>**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
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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

***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 m<sup>3</sup>

**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 %
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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.

### *Other conditions affecting worker exposure*

Indoor use

### **3.2. CS3: Worker Contributing Scenario: General use from professional operators (PROC2)**

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

### *Other conditions affecting worker exposure*

Indoor use

### **3.2. CS4: Worker Contributing Scenario: General use from professional operators (PROC8a)**

<b>Process Categories</b>	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
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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.	
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)**

<b>Process Categories</b>	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)
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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.

### *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 m<sup>3</sup>

## 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

<b>Exposure Scenario name</b>	Consumer goods
<b>Date - Version</b>	19/07/2019 - 1.0
<b>Life Cycle Stage</b>	Consumer use
<b>Main user group</b>	Consumer uses
<b>Product Categories</b>	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

<b>CS1 Covered by</b>	ERC8a - ERC8c - ERC8d - ERC8f - ERC9a - ERC9b
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### Consumer Contributing Scenario

<b>CS2 Consumer</b>	PC1
<b>CS3 Consumer</b>	PC4 - PC16 - PC17 - PC4_1
<b>CS4 Consumer</b>	PC4 - PC4_2
<b>CS5 Consumer</b>	PC9a - PC15 - PC9a_2, PC15_2
<b>CS6 Consumer</b>	PC8
<b>CS7 Consumer</b>	PC18
<b>CS8 Consumer</b>	PC31
<b>CS9 Consumer</b>	PC32
<b>CS10 Consumer</b>	PC35 - PC8_2, PC35_2
<b>CS11 Consumer</b>	PC35 - PC8_3, PC35_3
<b>CS12 Consumer</b>	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)

<b>Environmental release categories</b>	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)

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

<b>Product Categories</b>	Washing and cleaning products (PC35)
<b>Product (Sub-)Categories</b>	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)**

<b>Product Categories</b>	Washing and cleaning products (PC35)
<b>Product (Sub-)Categories</b>	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)**

<b>Product Categories</b>	Non-metal surface treatment products - Leather treatment products - Textile dyes and impregnating products (PC15, PC23, PC34)
<b>Product (Sub-)Categories</b>	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.