# Biztonsági adatlap.
# POLISH AND CLEAN

**-i biztonsági adatlap. 8/5/2024, ellenőrzés 13**

## 1. SZAKASZ: Az anyag/keverék és a vállalat/vállalkozás azonosítása

1.1. Termékazonosító

A készítmény azonosítása:

Kereskedelmi név: POLISH AND CLEAN

Kereskedelmi kód: 32025

1.2. Az anyag vagy keverék megfelelő azonosított felhasználásai, illetve ellenjavallt felhasználásai

Javasolt felhasználási mód:

Karosszéria polírozó/fényező

1.3. A biztonsági adatlap szállítójának adatai

Szállító:

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

A biztonsági adatlapért felelős illetékes személy:

arexons@arexons.it

1.4. Sürgősségi telefonszám

Arexons S.p.A.

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

Egészségügyi Toxikológiai Tájékoztató Szolgálat' (ETTSz) +36-80-20-11-99 (0-24 órában, díjmentesen hívható – csak Magyarországról)

## 2. SZAKASZ: A veszély azonosítása

2.1. Az anyag vagy keverék osztályozása

EC 1272/2008 (CLP) irányelv kritériumai:

- Figyelem, Flam. Liq. 3, Tűzveszélyes folyadék és gőz.
- Figyelem, Skin Irrit. 2, Bőrirritáló hatású.
- Figyelem, Eye Irrit. 2, Súlyos szemirritációt okoz.

Az emberi egészségre és a környezetre káros fizikokémiai hatások:

Egyéb veszélyek nincsenek

2.2. Címkézési elemek

Veszélyt jelző piktogramok:

Figyelem

Figyelmeztető mondatok:

H226 Tűzveszélyes folyadék és gőz.

H315 Bőrirritáló hatású.

H319 Súlyos szemirritációt okoz.

Óvintézkedésre vonatkozó mondatok:

P101 Orvosi tanácsadás esetén tartsa kéznél a termék edényét vagy címkéjét.

P102 Gyermekektől elzárva tartandó.

P103 Olvassa el figyelmesen és kövesse az összes utasítást.

P210 Hőtől, forró felületektől, szikrától, nyílt lángtól és más gyújtóforrástól távol tartandó. Tilos a dohányzás.

P370+P378 Tűz esetén: oltásra habbal oltó tűzoltókészülék használandó.

P403+P235 Jól szellőző helyen tárolandó. Hűvös helyen tartandó.

P501 A tartalom/edény elhelyezése hulladékként a hatályos szabályozásoknak megfelelően.
Különleges utasítások:
Semmi
Különleges intézkedések a többször módosított REACH rendelet XVII. mellékletének megfelelően:
Semmi

2.3. Egyéb veszélyek
Nincs jelen PBT, vPvB vagy endokrin károsító anyag 0,1%-nál nagyobb koncentrációban.
Egyéb veszélyek:
Egyéb veszélyek nincsenek

## 3. SZAKASZ: Összetétel/összetevőkre vonatkozó információk

3.1. Anyagok
N.A.
3.2. Keverékek
A CLP rendelet és a vonatkozó osztályozás értelmében veszélyesnek minősülő összetevők:

| | | | | |
|---|---|---|---|---|
| >= 15% - < 20% | Idrocarburi C10-C13, n-alcani, isoalacani, < 2% aromatici | EC:<br>REACH No.: | 940-726-3<br>01-2120083063-63 | 3.10/1 Asp. Tox. 1 H304<br>EUH066 |
| >= 5% - < 7% | Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics | CAS:<br>EC:<br>REACH No.: | 64742-48-9<br>919-857-5<br>01-2119463258-33 | 2.6/3 Flam. Liq. 3 H226<br>3.10/1 Asp. Tox. 1 H304<br>3.8/3 STOT SE 3 H336<br>EUH066<br>DECLP (CLP)* |
| >= 5% - < 7% | Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics | EC:<br>REACH No.: | 920-107-4<br>01-2119453414-43 | 3.10/1 Asp. Tox. 1 H304<br>EUH066 |
| >= 1% - < 2% | 2-aminoetanol; etanolamin | Index szám:<br>CAS:<br>EC:<br>REACH No.: | 603-030-00-8<br>141-43-5<br>205-483-3<br>01-2119486455-28 | 3.2/1B Skin Corr. 1B H314<br>3.3/1 Eye Dam. 1 H318<br>3.1/4/Oral Acute Tox. 4 H302<br>3.1/4/Dermal Acute Tox. 4 H312<br>3.1/4/Inhal Acute Tox. 4 H332<br>3.8/3 STOT SE 3 H335<br>4.1/C3 Aquatic Chronic 3 H412<br>Egyedi koncentrációs határértékek:<br>C >= 5%: STOT SE 3 H335 |
| >= 0,02% - < 0,05% | N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. | CAS:<br>EC:<br>REACH No.: | 68424-85-1<br>939-350-2<br>01-2119970550-39 | 2.16/1 Met. Corr. 1 H290<br>3.1/4/Oral Acute Tox. 4 H302<br>3.2/1B Skin Corr. 1B H314<br>3.3/1 Eye Dam. 1 H318<br>4.1/A1 Aquatic Acute 1 H400<br>M=10.<br>4.1/C1 Aquatic Chronic 1 H410 |

*DECLP (CLP): Az anyag az 1272/2008/EK rendelet VI. melléklet P megjegyzésének megfelelően kerül besorolásra. A rákkeltőként vagy mutagénként való harmonizált besorolás alkalmazandó, kivéve, ha kimutatható, hogy az anyag 0,1 tömegszázaléknál kevesebb benzolt (EINECS-szám: 200–753–7)

tartalmaz, amely esetben az e rendelet II. címe szerinti osztályozást ezekre a veszélyességi osztályokra is el kell végezni. Ha az anyag nincs rákkeltőként vagy mutagénként besorolva, legalább a (P102-)P260-P262-P301 + P310-P331 óvintézkedésre vonatkozó mondatokat szerepeltetni kell.

## 4. SZAKASZ: Elsősegély-nyújtási intézkedések

4.1. Az elsősegély-nyújtási intézkedések ismertetése

Bőrrel való érintkezés esetén:

A szennyezett ruhaneműt azonnal le kell venni.
Azonnal bő folyóvízzel és esetleg szappannal le kell mosni azt a testrészt, amely érintkezett a termékkel.
Mossuk le teljesen a testet (zuhany vagy fürdő).
Azonnal húzzuk le a szennyezett ruházatot és távolítsuk el azt biztonságos módon.
Bőrrel való érintkezés esetén azonnal mossuk le a bőrfelületet szappannal és bő vízzel.

Szemmel való érintkezés esetén:

Szemmel való érintkezés esetén bő vízzel öblítsük a szemet elegendő ideig, miközben a szemhéjat nyitva tartjuk, majd azonnal forduljunk szemészhez!
Védjük a sérült szemet.

Lenyelés esetén:

Egyáltalán nem szabad hánytatni. AZONNAL ORVOSHOZ KELL FORDULNI!

Belélegzés esetén:

A sérültet vigyük friss levegőre és tartsuk melegen, pihenő helyzetben.

4.2. A legfontosabb – akut és késleltetett – tünetek és hatások

Semmi

4.3. A szükséges azonnali orvosi ellátás és különleges ellátás jelzése

Baleset vagy rosszullét esetén azonnal forduljunk orvoshoz (ha lehetséges, mutassuk meg a biztonsági adatlapot vagy a használati útmutatót).
Kezelés:
Semmi

## 5. SZAKASZ: Tűzvédelmi intézkedések

5.1. Oltóanyag

Széndioxiddal.
Porral.
hab
Vízpermet
Oltóanyag nem ajánlott:
Közvetlen vízsugár használata tilos

5.2. Az anyagból vagy a keverékből származó különleges veszélyek

Ne lélegezzük be a robbanás vagy égés során kialakuló gázokat.
Az égés nehéz füstöt termel.

5.3. Tuzoltóknak szóló javaslat

Megfelelő légzőkészüléket használjon!
Külön gyűjtse össze az oltáshoz használt vizet. Ezt a vizet nem szabad a csatornákba önteni!
A nem károsodott tartályokat helyezze a közvetlen veszély zónáján kívülre, ha ez a művelet biztonságosan kivitelezhető.

## 6. SZAKASZ: Intézkedések véletlenszerű expozíciónál

6.1. Személyi óvintézkedések, egyéni védőeszközök és vészhelyzeti eljárások

Használjon egyéni védőfelszerelést.
Távolítson el minden gyulladási forrást.
A helyszínen tartózkodókat vezesse biztonságos helyre.
Nézze át a 7. és 8. pontokban található védelmi intézkedéseket.

6.2. Környezetvédelmi óvintézkedések
Akadályozza meg, hogy az anyag a földre/föld alá jusson. Akadályozza meg, hogy az anyag vízbe vagy csatornákba jusson.
Gyűjtse össze a mosáshoz használt szennyezett vizet és ürítse ki.
Ha gáz szabadul fel, vagy gáz jut a vízvezetékekbe, földbe vagy csatornákba, értesítse a felelős hatóságokat.
A gyűjtéshez megfelelő anyagok: szívóhatású anyag, szerves, homok
6.3. A területi elhatárolás és a szennyezésmentesítés módszerei és anyagai
Bő vízzel mossa meg.
6.4. Hivatkozás más szakaszokra
Lásd a 8. és 13. pontokat is

## 7. SZAKASZ: Kezelés és tárolás

7.1. A biztonságos kezelésre irányuló óvintézkedések
Kerülje a bőrrel és szemmel való érintkezést, a gőzök, keverékek belélegzését.
Ne használjon olyan üres tartályt, melynek tisztítása még nem történt meg.
Átöntés előtt győződjön meg arról, hogy a tartályokban nincsen maradék összeférhetetlen anyag.
A javasolt védőfelszereléshez nézze át a 8. pontot.

Étkezőhelyiségekbe való belépés előtt le kell venni a szennyezett ruházatot.
Munka közben tilos az étkezés és az ivás!
7.2. A biztonságos tárolás feltételei, az esetleges összeférhetetlenséggel együtt
Mindig jól szellőztetett helyen kell tárolni.
50 C° alatt kell tárolni. Nyílt lángtól és hőforrástól távol kell tartani. Kerülni kell, hogy közvetlen nap érje.
Nyílt lángtól, szikrától és hőforrástól távol kell tartani. Kerülni kell, hogy közvetlen nap érje.
Tartsa távol ételtől, italtól és állateledeltől.
Összeférhetetlen anyagok:
Különösebben egyik sem.
A helyiségekre vonatkozó utasítások:
Hűvös és megfelelően szellőztetett.
7.3. Meghatározott végfelhasználás (végfelhasználások)
Nincs sajátos felhasználási mód

## 8. SZAKASZ: Az expozíció ellenőrzése/egyéni védelem

8.1. Ellenőrzési paraméterek
Idrocarburi C10-C13, n-alcani, isoalacani, < 2% aromatici
20101.13 - TWA: 1050 mg/m3
TLV TWA - 1660 mg/m3
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
ACGIH - TWA: 1200 mg/m3, 197 ppm
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics
20101.10 - TWA: 200 mg/m3
20101.12 - TWA: 1200 mg/m3, 150 ppm
2-aminoetanol; etanolamin - CAS: 141-43-5
20101.11 - TWA: 7.6 mg/m3, 3 ppm
EU - TWA(8h): 2.5 mg/m3, 1 ppm - STEL: 7.6 mg/m3, 3 ppm - Megjegyzések: Skin
ACGIH - TWA(8h): 3 ppm - STEL: 6 ppm - Megjegyzések: Eye and skin irr
DNEL expozíciós határértékek
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
Szakmunkás: 208 mg/kg - Expozíció: Humán dermatológiai - Frekvencia: Hosszú távú, rendszeres hatások
Szakmunkás: 871 mg/m3 - Expozíció: Humán belélegzés - Frekvencia: Hosszú távú, rendszeres hatások
Felhasználó: 125 mg/kg - Expozíció: Humán dermatológiai - Frekvencia: Hosszú távú, rendszeres hatások

Felhasználó: 185 mg/m3 - Expozíció: Humán belélegzés - Frekvencia: Hosszú távú, rendszeres hatások
Felhasználó: 125 mg/kg - Expozíció: Humán orális - Frekvencia: Hosszú távú, rendszeres hatások

2-aminoetanol; etanolamin - CAS: 141-43-5
Felhasználó: 3.75 mg/kg - Expozíció: Humán orális - Frekvencia: Hosszú távú, rendszeres hatások
Szakmunkás: 0.51 mg/m3 - Felhasználó: 0.18 mg/m3 - Expozíció: Humán belélegzés - Frekvencia: Hosszú távú, helyi hatások
Szakmunkás: 3 mg/kg - Felhasználó: 1.5 mg/kg - Expozíció: Humán dermatológiai - Frekvencia: Hosszú távú, rendszeres hatások

PNEC expozíciós határértékek

2-aminoetanol; etanolamin - CAS: 141-43-5
Cél: Édesvíz - Érték: 0.07 mg/l
Cél: Tengervíz - Érték: 0.007 mg/l
Cél: Édesvízi üledék - Érték: 0.357 mg/kg
Cél: Tengervízi üledék - Érték: 0.0357 mg/kg
Cél: 09 - Érték: 100 mg/l

8.2. Az expozíció ellenőrzése

A szem védelme:
Szemüveg oldalsó védelemmel.
Megfelel az EN 166 szabványnak

A bőr védelme:
Normál használat esetén nincs szükség speciális óvintézkedések alkalmazására.

A kéz védelme:
Nitril vagy viton kesztyű.
EN 374 konform.

Légzési óvintézkedések:
Normál használat esetén nem szükséges.

Termikus veszélyek:
Semmi

Környezeti kitettségi ellenőrzés:
Semmi

Megfelelő műszaki ellenőrzés:
Semmi

## 9. SZAKASZ: Fizikai és kémiai tulajdonságok

9.1. Az alapvető fizikai és kémiai tulajdonságokra vonatkozó információk

| **Tulajdonságok** | **Érték** | **Mód:** | **Megjegyzések** |
|---|---|---|---|
| Halmazállapot: | Folyadék | -- | -- |
| Szín: | krémszín | -- | -- |
| Szag: | jellegzetes | -- | -- |
| Olvadáspont/fagyáspont: | N.A. | -- | -- |
| Forráspont vagy kezdő forráspont és forrásponttartomány: | N.A. | -- | -- |
| Tűzveszélyesség: | Flam. Liq. 3, H226 | -- | -- |
| Felső és alsó robbanási határértékek: | N.A. | -- | -- |

| | | | |
|---|---|---|---|
| Gyulladáspont: | 59°C | -- | -- |
| Öngyulladási hőmérséklet: | N.A. | -- | -- |
| Bomlási hőmérséklet: | N.A. | -- | -- |
| pH: | 9.5 | -- | -- |
| Kinematikus viszkozitás: | > 20,5 mm2/ sec (40 °C) | -- | -- |
| Vízben oldhatóság: | Miscibile | -- | -- |
| Oldhatóság olajban: | N.A. | -- | -- |
| N-oktanol/víz megoszlási hányados (log érték): | N.A. | -- | -- |
| Gőznyomás: | N.A. | -- | -- |
| Sűrűség és/vagy relatív sűrűség: | 0,99 | -- | -- |
| Relatív gőzsűrűség: | N.A. | -- | -- |
| Részecskejellemzők: | | | |
| Részecskeméretet: | N.A. | -- | -- |

9.2. Egyéb információk

| **Tulajdonságok** | **Érték** | **Mód:** | **Megjegyzések** |
|---|---|---|---|
| Viszkozitás: | >30 s | DIN ISO NF3 | -- |

## 10. SZAKASZ: Stabilitás és reakciókészség

10.1. Reakciókészség
Normál körülmények között stabil
10.2. Kémiai stabilitás
Normál körülmények között stabil
10.3. A veszélyes reakciók lehetősége
Semmi
10.4. Kerülendő körülmények
Normál körülmények között stabil.
10.5. Nem összeférhető anyagok
Kerülni kell az oxidáló anyagokkal való érintkezést. A termék meggyulladhat.
10.6. Veszélyes bomlástermékek
Semmi.

## 11. SZAKASZ: Toxikológiai információk

11.1. Az 1272/2008/EK rendeletben meghatározott, veszélyességi osztályokra vonatkozó információk
A termékkel kapcsolatos toxikológiai információk:
POLISH AND CLEAN ML 500
a) akut toxicitás
Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

b) bőrkorrózió/bőrirritáció

A termék osztályozása: Skin Irrit. 2 H315

c) súlyos szemkárosodás/szemirritáció

A termék osztályozása: Eye Irrit. 2 H319

d) légzőszervi vagy bőrszenzibilizáció

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

e) csírasejt-mutagenitás

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

f) rákkeltő hatás

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

g) reprodukciós toxicitás

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

h) egyetlen expozíció utáni célszervi toxicitás (STOT)

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

i) ismétlődő expozíció utáni célszervi toxicitás (STOT)

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

j) aspirációs veszély

Nincs besorolva

A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

A termékben talált legfontosabb anyagokkal kapcsolatos toxikológiai információk:

Idrocarburi C10-C13, n-alcani, isoalacani, < 2% aromatici

a) akut toxicitás:

Teszt: LD50 - Kijutás: Szájon át - Módosulatok: Patkány > 5000 mg/kg - Megjegyzések: OECD TG 401

Teszt: LD50 - Kijutás: Bőr - Módosulatok: Nyúl > 5000 mg/kg - Megjegyzések: OECD TG 402

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9

a) akut toxicitás:

Teszt: LC50 - Kijutás: Inhaláció - Módosulatok: Patkány > 5000 mg/m3 - Időtartam: 4h - Forrás: ECHA BP - SUPPLIER SDS

Teszt: LD50 - Kijutás: Szájon át - Módosulatok: Patkány > 5000 mg/kg - Forrás: ECHA BP - SUPPLIER SDS

Teszt: LD50 - Kijutás: Bőr - Módosulatok: Nyúl > 5000 mg/kg - Forrás: ECHA BP - SUPPLIER SDS

h) egyetlen expozíció utáni célszervi toxicitás (STOT):

Teszt: oecd 12 Pozitív - Forrás: SUPPLIER SDS - A termékről nem állnak rendelkezésre adatok

i) ismétlődő expozíció utáni célszervi toxicitás (STOT):

Teszt: oecd 7 Negatív - Forrás: SUPPLIER SDS

Teszt: NOAEL - Kijutás: Szájon át - Módosulatok: Patkány > 1000 mg/kg - Forrás: ECHA BP

Teszt: NOAEL - Kijutás: Inhaláció - Módosulatok: Patkány 200 ppm - Forrás: ECHA BP

Teszt: NOAEC - Kijutás: Inhaláció - Módosulatok: Patkány > 275 mg/m3 - Forrás: ECHA BP

j) aspirációs veszély:

Teszt: oecd 14 - Kijutás: Szájon át - Forrás: SUPPLIER SDS

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics

a) akut toxicitás:

Teszt: LD50 - Kijutás: Bőr - Módosulatok: Nyúl > 5000 mg/kg - Megjegyzések: OCSE 402

Teszt: LC50 - Kijutás: Inhaláció - Módosulatok: Patkány > 5000 mg/m3 - Időtartam: 4h - Megjegyzések: OCSE 403

Teszt: LD50 - Kijutás: Szájon át - Módosulatok: Patkány > 5000 mg/kg - Megjegyzések: OCSE 401

b) bőrkorrózió/bőrirritáció:

Teszt: Marja a bőrt - Kijutás: Bőr Negatív - Megjegyzések: OCSE 404 - Puň seccare la pelle e causare conseguenti dermatiti - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

c) súlyos szemkárosodás/szemirritáció:

Teszt: Marja a szemet - Kijutás: EYE Negatív - Megjegyzések: OCSE 405 - Puň causare disturbi lievi di breve durata agli occhi - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

e) csírasejt-mutagenitás:

Teszt: Mutagenezis 3 - Megjegyzések: OCSE 471, 473, 474, 476, 478, 479 - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

f) rákkeltő hatás:

Teszt: Karcinogenecitás 3 - Megjegyzések: OCSE 453 - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

g) reprodukciós toxicitás:

Teszt: Reprodukciós toxicitás 3 - Megjegyzések: OCSE 413, 414, 415 - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

i) ismétlődő expozíció utáni célszervi toxicitás (STOT):

3 - Megjegyzések: OCSE 408, 413 - A rendelkezésre álló adatok alapján az osztályozás kritériumai nem teljesülnek.

j) aspirációs veszély:

Pozitív - Forrás: sulla base dei dati chimicio-fisici

2-aminoetanol; etanolamin - CAS: 141-43-5

a) akut toxicitás:

Teszt: LD50 - Kijutás: Szájon át - Módosulatok: Patkány = 1089 mg/kg
Teszt: LD50 - Kijutás: Bőr - Módosulatok: Nyúl = 2504 mg/kg
Teszt: LC50 - Kijutás: Inhaláció - Módosulatok: Patkány > 1.3 mg/l - Időtartam: 4h

b) bőrkorrózió/bőrirritáció:

Teszt: Marja a szemet Pozitív - Megjegyzések: due to physical-chemical data (pH = 13)
Teszt: Marja a bőrt Pozitív - Megjegyzések: due to physical-chemical data (pH = 13)

N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1

a) akut toxicitás:

Teszt: LD50 - Kijutás: Szájon át - Módosulatok: Patkány 426 mg/kg
Teszt: LD50 - Kijutás: Bőr - Módosulatok: Patkány 400-2000 mg/kg

11.2. Egyéb veszélyekkel kapcsolatos információ

Endokrin károsító tulajdonságok:
Nincsenek jelen endokrin károsító anyagok 0,1%-nál nagyobb koncentrációban.

## 12. SZAKASZ: Ökológiai információk

12.1. Toxicitás

A megfelelő gyakorlati tapasztalatok alapján kell alkalmazni és el kell kerülni, hogy a termék a környezetet szennyezze.

Idrocarburi C10-C13, n-alcani, isoalacani, < 2% aromatici

a) Akut vízi toxicitás:

Végpont: LL50 - Módosulatok: Hal > 1000 mg/l - Időtartam h: 96
Végpont: LL50 - Módosulatok: Daphnia > 100 mg/l - Időtartam h: 48
Végpont: EL50 - Módosulatok: Alga > 100 mg/l - Időtartam h: 72

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9

a) Akut vízi toxicitás:

Végpont: EL0 - Módosulatok: Daphnia 1000 mg/l - Időtartam h: 48
Végpont: EL50 - Módosulatok: Alga > 1000 mg/l - Időtartam h: 72
Végpont: LL50 - Módosulatok: Hal > 1000 mg/l - Időtartam h: 96
Végpont: NOELR - Módosulatok: Alga 100 mg/l - Időtartam h: 72

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics

a) Akut vízi toxicitás:
Végpont: EL0 - Módosulatok: Daphnia 1000 mg/l - Időtartam h: 48
Végpont: CE7 - Módosulatok: Hal 1000 mg/l - Időtartam h: 96
Végpont: EL0 - Módosulatok: Alga 1000 mg/l - Időtartam h: 72
Végpont: NOELR - Módosulatok: Alga 1000 mg/l - Időtartam h: 72
2-aminoetanol; etanolamin - CAS: 141-43-5
a) Akut vízi toxicitás:
Végpont: LC50 - Módosulatok: Hal = 349 mg/l - Időtartam h: 96
Végpont: EC50 - Módosulatok: Daphnia = 27.04 mg/l - Időtartam h: 48
Végpont: EC50 - Módosulatok: Alga = 2.8 mg/l - Időtartam h: 2.8
N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1
a) Akut vízi toxicitás:
Végpont: EC50 - Módosulatok: Alga 670 µg/l - Időtartam h: 96
Végpont: EC50 - Módosulatok: Daphnia 5.9 ppb - Időtartam h: 48
Végpont: LC50 - Módosulatok: Hal 0.28 ppm - Időtartam h: 96
b) Krónikus vízi toxicitás:
Végpont: NOEC - Módosulatok: Daphnia 0.025 mg/l - Időtartam h: 504

12.2. Perzisztencia és lebonthatóság
Semmi
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics
Biodegradáció: Gyorsan lebomló
2-aminoetanol; etanolamin - CAS: 141-43-5
Biodegradáció: Gyorsan lebomló - Teszt: BIOGDG14 - Időtartam h: 21GG - %: 91
N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1
Biodegradáció: Gyorsan lebomló - Teszt: BIOGDG08 - Időtartam h: 28gg - %: 61

12.3. Bioakkumulációs képesség
N.A.

12.4. A talajban való mobilitás
N.A.

12.5. A PBT- és a vPvB-értékelés eredményei
vPvB anyagok: Semmi - PBT anyagok: Semmi

12.6. Endokrin károsító tulajdonságok
Nincsenek jelen endokrin károsító anyagok 0,1%-nál nagyobb koncentrációban.

12.7. Egyéb káros hatások
Semmi

## 13. SZAKASZ: Ártalmatlanítási szempontok

13.1. Hulladékkezelési módszerek
Amennyiben lehetséges vissza kell nyerni. Hivatalos hulladékfeldolgozó berendezéssel felszerelt gyűjtőbe v. ellenőrzött porlasztóba kell eljuttatni. Az érvényben levő helyi és országos rendelkezések értelmében kell eljárni.

## 14. SZAKASZ: Szállításra vonatkozó információk


14.1. UN-szám vagy azonosító szám

| | |
|---|---|
| ADR-UN Number: | 1263 |
| IATA-UN Number: | 1263 |
| IMDG-UN Number: | 1263 |

14.2. Az ENSZ szerinti megfelelő szállítási megnevezés

| | |
|---|---|
| ADR-Shipping Name: | FESTÉKEK vagy FESTÉKEKHEZ HASONLÓ ANYAGOK |
| IATA-Shipping Name: | FESTÉKEK vagy FESTÉKEKHEZ HASONLÓ ANYAGOK |
| IMDG-Shipping Name: | FESTÉKEK vagy FESTÉKEKHEZ HASONLÓ ANYAGOK |

14.3. Szállítási veszélyességi osztály(ok)

| | |
|---|---|
| ADR-Class: | 3 |
| ADR - Veszély azonosító szám: | 30 |
| IATA-Class: | 3 |
| IATA-Label: | 3 |
| IMDG-Class: | 3 |
| IMDG-Osztály: | 3 PG III |

14.4. Csomagolási csoport

| | |
|---|---|
| ADR-Packing Group: | III |
| IATA-Packing group: | III |
| IMDG-Packing group: | III |

14.5. Környezeti veszélyek

| | |
|---|---|
| ADR-környezetszennyező: | Nem. |
| IMDG-Marine pollutant: | No |
| IMDG-EmS: | F-E,<br>S-E |

14.6. A felhasználót érintő különleges óvintézkedések

| | |
|---|---|
| ADR-Subsidiary hazards: | - |
| ADR-S.P.: | 163 367 640E 650 |
| ADR-Szállítási kategória (Alagútkorlátozási kód): | 3 (D/E) |
| IATA-Passenger Aircraft: | 355 |
| IATA-Subsidiary hazards: | - |
| IATA-Cargo Aircraft: | 366 |
| IATA-S.P.: | A3 A72 A192 |
| IATA-ERG: | 3L |
| IMDG-Subsidiary hazards: | - |
| IMDG-Stowage and handling: | Category A |
| IMDG-Segregation: | - |

14.7. Az IMO-szabályok szerinti tengeri ömlesztett szállítás

N.A.
Limited Quantity: 5 L
Exempted Quantity: E1

## 15. SZAKASZ: Szabályozással kapcsolatos információk

15.1. Az adott anyaggal vagy keverékkel kapcsolatos biztonsági, egészségügyi és környezetvédelmi előírások/jogszabályok

98/24/EK irányelv (A munkájuk során vegyi anyagokkal kapcsolatos kockázatoknak kitett munkavállalók egészségének és biztonságának védelme)
2000/39/EK irányelv (Munkahelyi expozíciós határértékek)
1907/2006/EK (REACH) szabályozás
1272/2008/EK (CLP) szabályozás
790/2009/EK (ATP 1 CLP) szabályozás és 758/2013/EU
2020/878/EU szabályozás
286/2011/EU (ATP 2 CLP) szabályozás
618/2012/EU (ATP 3 CLP) szabályozás
487/2013/EU (ATP 4 CLP) szabályozás
944/2013/EU (ATP 5 CLP) szabályozás
605/2014/EU (ATP 6 CLP) szabályozás
2015/1221/EU (ATP 7 CLP) szabályozás
2016/918/EU (ATP 8 CLP) szabályozás
2016/1179/EU (ATP 9 CLP) szabályozás
2017/776/EU (ATP 10 CLP) szabályozás
2018/669/EU (ATP 11 CLP) szabályozás
2018/1480/EU (ATP 13 CLP) szabályozás
2019/521 /EU (ATP 12 CLP) szabályozás
2020/217/EU (ATP 14 CLP) szabályozás
2020/1182/EU (ATP 15 CLP) szabályozás

2021/643/EU (ATP 16 CLP) szabályozás
2021/849/EU (ATP 17 CLP) szabályozás
2022/692/EU (ATP 18 CLP) szabályozás

Korlátozások a tartalmazott termékkel vagy anyaggal kapcsolatban, a többször módosított 1907/2006 (EC) (REACH) rendelet XVII. mellékletének megfelelően:

A termékkel kapcsolatos megkötések:

Korlátozás 3
Korlátozás 40

A termékben található anyagokkal kapcsolatos megkötések:

Korlátozás 75

Pronto all'Uso
Illékony Szerves Vegyületek - VOC = 26.80 %
Illékony Szerves Vegyületek - VOC = 268.00 g/Kg
Illékony Cancerogén, Mutagén és az Újrafeldolgozási ciklus során keletkező toxikus vegyületek = 0.00 %
Halogénezett VOC vegyületek, R40 veszélyességi fokozat megjelölésével = 0.00 %
Szerves szén - C = 0.71
Ahol alkalmazható, a következő szabályzat az irányadó:

Tanács 2012/18/EU irányelve (Seveso III)
Az Európai Parlament és a Tanács 648/2004/EK rendelete (a mosó- és tisztítószerekről).
2004/42/EK irányelv (illékony szerves vegyületek)

A termék kategóriába tartozik: P5c

15.2. Kémiai biztonsági értékelés

Kémiai biztonsági értékelést nem végeztek a keverékre.
A következő anyagoknál történt meg a kémiai biztonsági értékelés:

2-aminoetanol; etanolamin

## 16. SZAKASZ: Egyéb információk

A 3. bekezdésben használható szöveg:

H304 Lenyelve és a légutakba kerülve halálos lehet.
EUH066 Ismétlődő expozíció a bőr kiszáradását vagy megrepedezését okozhatja.
H226 Tűzveszélyes folyadék és gőz.
H336 Álmosságot vagy szédülést okozhat.
H314 Súlyos égési sérülést és szemkárosodást okoz.
H318 Súlyos szemkárosodást okoz.
H302 Lenyelve ártalmas.
H312 Bőrrel érintkezve ártalmas.
H332 Belélegezve ártalmas.
H335 Légúti irritációt okozhat.
H412 Ártalmas a vízi élővilágra, hosszan tartó károsodást okoz.
H290 Fémekre korrozív hatású lehet.
H400 Nagyon mérgező a vízi élővilágra.
H410 Nagyon mérgező a vízi élővilágra, hosszan tartó károsodást okoz.

| **Veszélyességi osztály és veszélyességi kategória** | **Kód** | **Leírás** |
|---|---|---|
| Met. Corr. 1 | 2.16/1 | Fémekre maró hatású anyagok és keverékek, kategória 1 |

| | | |
|---|---|---|
| Flam. Liq. 3 | 2.6/3 | Tűzveszélyes folyadékok, kategória 3 |
| Acute Tox. 4 | 3.1/4/Dermal | Akut toxicitás (bőrön át), kategória 4 |
| Acute Tox. 4 | 3.1/4/Inhal | Akut toxicitás (belélegzéssel), kategória 4 |
| Acute Tox. 4 | 3.1/4/Oral | Akut toxicitás (szájon át), kategória 4 |
| Asp. Tox. 1 | 3.10/1 | Aspirációs veszély, Kategória 1 |
| Skin Corr. 1B | 3.2/1B | Bőrmarás, kategória 1B |
| Skin Irrit. 2 | 3.2/2 | Bőrirritáció, kategória 2 |
| Eye Dam. 1 | 3.3/1 | Súlyos szemkárosodás, kategória 1 |
| Eye Irrit. 2 | 3.3/2 | Szemirritáció, kategória 2 |
| STOT SE 3 | 3.8/3 | Célszervi toxicitás – egyszeri expozíció, Kategória 3 |
| Aquatic Acute 1 | 4.1/A1 | Akut vízi toxicitási veszély, Kategória 1 |
| Aquatic Chronic 1 | 4.1/C1 | Krónikus (hosszú távú) vízi toxicitási veszély, Kategória 1 |
| Aquatic Chronic 3 | 4.1/C3 | Krónikus (hosszú távú) vízi toxicitási veszély, Kategória 3 |

Az előző kiadás módosított bekezdései:

9. SZAKASZ: Fizikai és kémiai tulajdonságok

A keverékek tekintetében az 1272/2008/EK rendelet [CLP] szerinti osztályozás és az osztályozás származtatására alkalmazott eljárás:

| **Az 1272/2008/EK rendelet szerinti osztályozás** | **Osztályozási eljárás** |
|---|---|
| Flam. Liq. 3, H226 | Vizsgálati adatok alapján |
| Skin Irrit. 2, H315 | Számítási módszer |
| Eye Irrit. 2, H319 | Számítási módszer |

Ezt a dokumentumot olyan szakember készítette, aki ezzel kapcsolatban megfelelő képzést kaputt
Főbb bibliográfiai források:

ECDIN – Vegyi anyagok környezetvédelmi adat- és információs hálózata – Közös Kutatóközpont, az Európai Közösségek Bizottsága
SAX: AZ IPARI ANYAGOK VESZÉLYES TULAJDONSÁGAI – Nyolcadik kiadás – Van Nostrand Reinold

A közzétett információk a fent jelzett időpontban rendelkezésünkre álló ismeretekre alapulnak.
Kizárólag a megjelölt termékre vonatkoznak és nem képeznek különösebb minőségi garanciát.
A felhasználónak kötelessége megbizonyosodni ezen információk helyessége és teljessége felől, az egyéni felhasználásnak megfelelően.
Ez az adatlap minden előzetes adatlapot érvénytelenít és helyettesít.

| | |
|---|---|
| ADR: | Veszélyes Áruk Nemzetközi Közúti Szállításáról szóló Európai Megállapodás. |
| ATE: | Becsült akut toxicitási érték |
| ATEmix: | Akut toxicitási érték (Keverékek) |
| CAS: | Kémiai Nyilvántartó Szolgálat (az Amerikai Kémiai Társaság részlege). |
| CLP: | Osztályozás, Címkézés, Csomagolás. |
| DNEL: | Származtatott hatásmentes szint. |
| EINECS: | Létező Kereskedelmi Vegyi Anyagok Európai Jegyzéke. |
| GefStoffVO: | Veszélyes Anyagok Német Szabályzata. |
| GHS: | Vegyi Anyagok Osztályozásának és Címkézésének Egyetemes Harmonizált Rendszere. |
| IATA: | Nemzetközi Légiszállítási Szövetség. |
| IATA-DGR: | Nemzetközi Légiszállítási Szövetség - Veszélyes Anyagok Előírásai. |
| ICAO: | Nemzetközi Polgári Repülési Szervezet. |
| ICAO-TI: | Nemzetközi Polgári Repülési Szervezet Műszaki Utasítása. |
| IMDG: | Veszélyes Áruk Nemzetközi Tengerészeti Kódexe. |
| INCI: | A Kozmetikai Összetevők Nemzetközi Nevezéktana. |
| KSt: | Robbanási együttható. |
| LC50: | Közepes halálos koncentráció |
| LD50: | Közepes halálos dózis |
| NA: | Nem alkalmazható |
| PNEC: | Becsült Hatásmentes Koncentráció |
| RID: | Veszélyes Áruk Nemzetközi Vasúti Fuvarozásáról szóló Szabályzat |
| STEL: | Rövid Távú Expozíciós Érték |
| STOT: | Célszervi Toxicitás. |
| TLV: | Küszöbérték. |
| TWA: | Időarányosan súlyozott átlag |
| WGK: | Vízveszélyeztetési osztály. |

# Exposure Scenario, 08/07/2019

| Substance identity | |
|---|---|
| **Chemical name** | Hydrocarbons C9-C11 cyclics-iso-alkanes <2% aromatics, declass. ex Notes "P" |
| **CAS No.** | 64742-48-9 |
| **EINECS No.** | 919-857-5 |

## Table of contents

# 1. ES 1 Formulation or re-packing; Solvent-based process

## 1.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Formulation and (re) packaging of substances and mixtures |
| **Date - Version** | 28/06/2019 - 1.0 |
| **Life Cycle Stage** | Formulation or re-packing |
| **Main user group** | Industrial uses |
| **Sector(s) of use** | Industrial uses (SU3) - Formulation [mixing] of preparations and/or re-packaging (SU10) |

| **Environment Contributing Scenario** | |
|---|---|
| **CS1 Wet formulation** | ERC2 |
| **Worker Contributing Scenario** | |
| **CS2 General exposures** | PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC14 - PROC15 |

## 1.2 Conditions of use affecting exposure

### 1.2. CS1: Environment Contributing Scenario: Wet formulation (ERC2)

| | |
|---|---|
| **Environmental release categories** | Formulation into mixture (ERC2) |

*Product (article) characteristics*

**Physical form of product:**

Liquid

### 1.2. CS2: Worker Contributing Scenario: General exposures (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC14, PROC15)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Tabletting, compression, extrusion, pelletisation, granulation - Use as laboratory reagent (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC14, PROC15) |

*Product (article) characteristics*

**Physical form of product:**

Liquid

*Amount used, frequency and duration of use/exposure*

**Duration:**

Covers daily exposures up to 8 hours

*Other conditions affecting worker exposure*

**Temperature:** Assumes use at not more than 20 °C above ambient temperature. 20°C

## 1.3 Exposure estimation and reference to its source

N/A

## 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 Use at industrial site

## 2.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricating agent |
| **Date - Version** | 28/06/2019 - 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 Solvent-based process** | ERC4 - ERC7 |

### Worker Contributing Scenario

| | |
|---|---|
| **CS2 General measures applicable to all activities** | PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18 |

## 2.2 Conditions of use affecting exposure

### 2.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4, ERC7)

| | |
|---|---|
| **Environmental release categories** | Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7) |

### 2.2. CS2: Worker Contributing Scenario: General measures applicable to all activities (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid

#### *Amount used, frequency and duration of use/exposure*

**Duration:**

Covers daily exposures up to 8 hours

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

**Personal protection**

Wear suitable gloves tested to EN374.

#### *Other conditions affecting worker exposure*

**Temperature:** Assumes use at not more than 20 °C above ambient temperature.

## 2.3 Exposure estimation and reference to its source

N/A

## 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 Use at industrial site

## 3.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants - Industrial use |
| **Date - Version** | 28/06/2019 - 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 Solvent-based process** | ERC4 - ERC7 |

| **Worker Contributing Scenario** | |
|---|---|
| **CS2 Lubricants** | PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18 |

## 3.2 Conditions of use affecting exposure

### 3.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4, ERC7)

| | |
|---|---|
| **Environmental release categories** | Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid

### 3.2. CS2: Worker Contributing Scenario: Lubricants (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18) |

#### *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

#### *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*

**Temperature:** Assumes use at not more than 20 °C above ambient temperature.

## 3.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 4. ES 4 Widespread use by professional workers

## 4.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants - Industrial use |
| **Date - Version** | 28/06/2019 - 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 Solvent-based process** | ERC9a - ERC9b |
| **Worker Contributing Scenario** | |
| **CS2 Lubricants** | PROC20 - PROC1 - PROC2 - PROC3 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18 |

## 4.2 Conditions of use affecting exposure

### 4.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)

| | |
|---|---|
| **Environmental release categories** | Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b) |

### 4.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) |

#### *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

## 4.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 5. ES 5 Widespread use by professional workers

## 5.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (high power) |
| **Date - Version** | 28/06/2019 - 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 Solvent-based process** | ERC8a - ERC8d |

### Worker Contributing Scenario

| | |
|---|---|
| **CS2 Lubricants** | PROC20 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18 |

## 5.2 Conditions of use affecting exposure

### 5.2. CS1: Environment Contributing Scenario: Solvent-based process (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

### 5.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) |

#### *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

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

**Personal protection**

Wear suitable gloves tested to EN374.

## 5.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 6. ES 6 Consumer use; Various products (PC1, PC24, PC31)

## 6.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (low release) |
| **Date - Version** | 28/06/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31) |
| **Environment Contributing Scenario** | |
| **CS1 Solvent-based process** | ERC9a - ERC9b |
| **Consumer Contributing Scenario** | |
| **CS2 Lubricants** | |

## 6.2 Conditions of use affecting exposure

### 6.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)

| | |
|---|---|
| **Environmental release categories** | Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid, vapour pressure < 0,5 kPa at STP

### 6.2. CS2: Consumer Contributing Scenario: Lubricants

#### *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*

**Frequency:**

Covers exposure up to 1 events per day

#### *Other conditions affecting consumers exposure*

**Temperature:** Covers use at ambient temperatures.

## 6.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 7. ES 7 Consumer use; Various products (PC1, PC24, PC31)

## 7.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (low release) |
| **Date - Version** | 01/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Solvent-based process** | ERC9a - ERC9b |

### Consumer Contributing Scenario

| | |
|---|---|
| **CS2 Lubricants** | PC24 |
| **CS3 Lubricants** | PC1 |
| **CS4 Lubricants** | PC31 - PC23_1, PC31_1 - PC23_2, PC31_2 |

## 7.2 Conditions of use affecting exposure

### 7.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)

| | |
|---|---|
| **Environmental release categories** | Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b) |

### 7.2. CS2: Consumer Contributing Scenario: Lubricants (PC24)

| | |
|---|---|
| **Product Categories** | Lubricants, greases, release products (PC24) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid, vapour pressure < 0,5 kPa at STP

**Concentration of substance in product:**

Covers percentage substance in the product up to 100 %.

#### *Amount used, frequency and duration of use/exposure*

**Frequency:**

Covers exposure up to 1 uses per day

**Frequency:**

Covers exposure up to 4 days per year

#### *Other conditions affecting consumers exposure*

Indoor use

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

**Temperature:** Covers use at ambient temperatures.

**Ventilation rate:** Covers use under typical household ventilation.

### 7.2. CS3: Consumer Contributing Scenario: Lubricants (PC1)

| | |
|---|---|
| **Product Categories** | Adhesives, sealants (PC1) |

#### *Product (article) characteristics*

**Physical form of product:**
Liquid, vapour pressure < 0,5 kPa at STP

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

### *Amount used, frequency and duration of use/exposure*

**Frequency:**
Covers use up to 1 uses per day

**Frequency:**
Covers exposure up to 365 days per year

### *Other conditions affecting consumers exposure*

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

## 7.2. CS4: Consumer Contributing Scenario: Lubricants (PC31)

| | |
|---|---|
| **Product Categories** | Polishes and wax blends (PC31) |
| **Product (Sub-)Categories** | Polishes, wax/cream (floor, furniture, shoes) - Polishes, spray (furniture, shoes) (PC23_1, PC31_1, PC23_2, PC31_2) |

### *Product (article) characteristics*

**Physical form of product:**
Liquid, vapour pressure < 0,5 kPa at STP

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

### *Amount used, frequency and duration of use/exposure*

**Frequency:**
Covers exposure up to 1 uses per day

**Frequency:**
Covers exposure up to 29 days per year

### *Other conditions affecting consumers exposure*

Indoor use
**Room size:** Covers use in room size of 20 m³

## 7.3 Exposure estimation and reference to its source

N/A

## 7.4 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.

# 8. ES 8 Consumer use; Adhesives, sealants (PC1)

## 8.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (high release) |
| **Date - Version** | 01/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Adhesives, sealants (PC1) |

| **Environment Contributing Scenario** | |
|---|---|
| **CS1 Waste management** | ERC8a |

| **Consumer Contributing Scenario** | |
|---|---|
| **CS2 Lubricants** | PC1 |

## 8.2 Conditions of use affecting exposure

### 8.2. CS1: Environment Contributing Scenario: Waste management (ERC8a)

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

### 8.2. CS2: Consumer Contributing Scenario: Lubricants (PC1)

| | |
|---|---|
| **Product Categories** | Adhesives, sealants (PC1) |

***Product (article) characteristics***

**Physical form of product:**

Liquid

## 8.3 Exposure estimation and reference to its source

N/A

## 8.4 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.

# 9. ES 9 Consumer use; Various products (PC39, PC28)

## 9.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Cosumer other uses |
| **Date - Version** | 01/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Cosmetics, personal care products (PC39) - Perfumes, fragrances (PC28) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Processing of organic liquids** | ERC8a - ERC8d |

### Consumer Contributing Scenario

| | |
|---|---|
| **CS2 Consumer** | PC39 - PC28 |

## 9.2 Conditions of use affecting exposure

### 9.2. CS1: Environment Contributing Scenario: Processing of organic liquids (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) |

### 9.2. CS2: Consumer Contributing Scenario: Consumer (PC39, PC28)

| | |
|---|---|
| **Product Categories** | Cosmetics, personal care products - Perfumes, fragrances (PC39, PC28) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid

## 9.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# Exposure Scenario, 29/07/2019

| Substance identity | |
|---|---|
| **Chemical name** | idrocarburi dearomatizzati |
| **EINECS No.** | 920-107-4 |

## Table of contents

# 1. ES 1 Use at industrial site

## 1.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Use in coatings |
| **Date - Version** | 29/07/2019 - 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** | PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC10 - PROC13 - PROC15 |

## 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) |

### 1.2. CS2: Worker Contributing Scenario: Industrial (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Treatment of articles by dipping and pouring - Use as laboratory reagent (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15) |

#### *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

## 1.3 Exposure estimation and reference to its source

N/A

## 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 Use at industrial site

## 2.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Industrial use of laundry products |
| **Date - Version** | 29/07/2019 - 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 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC10 - PROC13 |

## 2.2 Conditions of use affecting exposure

| | |
|---|---|
| **2.2. 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) |
| **2.2. CS2: Worker Contributing Scenario: Industrial (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13)** | |
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Treatment of articles by dipping and pouring (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13) |

### *Product (article) characteristics*

**Physical form of product:**

Liquid

**Concentration of substance in product:**

Covers percentage substance in the product up to 100 %.

## 2.3 Exposure estimation and reference to its source

N/A

## 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 Use at industrial site

## 3.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants - Industrial use |
| **Date - Version** | 29/07/2019 - 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 - ERC7 |

### Worker Contributing Scenario

| | |
|---|---|
| **CS2 Industrial** | PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18 |

## 3.2 Conditions of use affecting exposure

### 3.2. CS1: Environment Contributing Scenario: Covered by (ERC4, ERC7)

| | |
|---|---|
| **Environmental release categories** | Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7) |

### 3.2. CS2: Worker Contributing Scenario: Industrial (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18) |

#### *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

## 3.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 4. ES 4 Use at industrial site

## 4.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Metal working fluids / rolling oils |
| **Date - Version** | 29/07/2019 - 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** | PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 |

## 4.2 Conditions of use affecting exposure

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

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

### 4.2. CS2: Worker Contributing Scenario: Industrial (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17) |

#### *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

## 4.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 5. ES 5 Widespread use by professional workers

## 5.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Use in coatings |
| **Date - Version** | 29/07/2019 - 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** | PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC10 - PROC11 - PROC13 - PROC15 - PROC19 |

## 5.2 Conditions of use affecting exposure

### 5.2. 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) |

### 5.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Use as laboratory reagent - Manual activities involving hand contact (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19) |

#### *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

## 5.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# 6. ES 6 Widespread use by professional workers

## 6.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Laundry products |
| **Date - Version** | 29/07/2019 - 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 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC10 - PROC11 - PROC13 - PROC19 |

## 6.2 Conditions of use affecting exposure

### 6.2. 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) |

### 6.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC19)

| | |
|---|---|
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Manual activities involving hand contact (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC19) |

#### *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

## 6.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

equivalent levels.

# 7. ES 7 Widespread use by professional workers

## 7.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (low release) |
| **Date - Version** | 29/07/2019 - 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** | ERC9a - ERC9b |

### Worker Contributing Scenario

| | |
|---|---|
| **CS2 General use from professional operators** | PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18 |

## 7.2 Conditions of use affecting exposure

### 7.2. CS1: Environment Contributing Scenario: Covered by (ERC9a, ERC9b)

| | |
|---|---|
| **Environmental release categories** | Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b) |

### 7.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) |

#### *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

## 7.3 Exposure estimation and reference to its source

N/A

## 7.4 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.

# 8. ES 8 Widespread use by professional workers

## 8.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (high power) |
| **Date - Version** | 29/07/2019 - 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** | PROC20 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18 |

## 8.2 Conditions of use affecting exposure

### 8.2. 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) |

### 8.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

| | |
|---|---|
| **Process Categories** | Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18) |

#### *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

## 8.3 Exposure estimation and reference to its source

N/A

## 8.4 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.

# 9. ES 9 Widespread use by professional workers

## 9.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Metal working fluids / rolling oils |
| **Date - Version** | 29/07/2019 - 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** | PROC5 - PROC1 - PROC2 - PROC3 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 |

## 9.2 Conditions of use affecting exposure

### 9.2. 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) |

### 9.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC5, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations (PROC5, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17) |

### *Product (article) characteristics*

**Physical form of product:**

Liquid

**Concentration of substance in product:**

Covers percentage substance in the product up to 100 %.

## 9.3 Exposure estimation and reference to its source

N/A

## 9.4 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.

# 10. ES 10 Consumer use; Various products (PC9b, PC9a, PC1, PC4, PC8)

## 10.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Use in coatings |
| **Date - Version** | 29/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Anti-freeze and de-icing products (PC4) - Biocidal products (PC8) - Non-metal surface treatment products (PC15) - Ink and toners (PC18) - Leather treatment products (PC23) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31) - Textile dyes and impregnating products (PC34) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Covered by** | ERC8a - ERC8d |

### Consumer Contributing Scenario

| | |
|---|---|
| **CS2 Use in coatings** | PC9b - PC9a - PC1 - PC4 - PC8 - PC15 - PC18 - PC23 - PC24 - PC31 - PC34 - PC9c |

## 10.2 Conditions of use affecting exposure

### 10.2. 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) |

### 10.2. CS2: Consumer Contributing Scenario: Use in coatings (PC9b, PC9a, PC1, PC4, PC8, PC15, PC18, PC23, PC24, PC31, PC34)

| | |
|---|---|
| **Product Categories** | Fillers, putties, plasters, modelling clay - Coatings and paints, thinners, paint removers - Adhesives, sealants - Anti-freeze and de-icing products - Biocidal products - Non-metal surface treatment products - Ink and toners - Leather treatment products - Lubricants, greases, release products - Polishes and wax blends - Textile dyes and impregnating products (PC9b, PC9a, PC1, PC4, PC8, PC15, PC18, PC23, PC24, PC31, PC34) |
| **Product (Sub-)Categories** | Finger paints (PC9c) |

*Product (article) characteristics*

**Physical form of product:**

Liquid

## 10.3 Exposure estimation and reference to its source

N/A

## 10.4 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.

# 11. ES 11 Consumer use; Various products (PC9b, PC9a, PC3, PC4, PC8)

## 11.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Laundry products |
| **Date - Version** | 29/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Air care products (PC3) - Anti-freeze and de-icing products (PC4) - Biocidal products (PC8) - Lubricants, greases, release products (PC24) - Washing and cleaning products (PC35) - Welding and soldering products, flux products (PC38) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Covered by** | ERC8a - ERC8d |

### Consumer Contributing Scenario

| | |
|---|---|
| **CS2 Laundry products** | PC9b - PC9a - PC3 - PC4 - PC8 - PC24 - PC35 - PC38 - PC9c |

## 11.2 Conditions of use affecting exposure

### 11.2. 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) |

### 11.2. CS2: Consumer Contributing Scenario: Laundry products (PC9b, PC9a, PC3, PC4, PC8, PC24, PC35, PC38)

| | |
|---|---|
| **Product Categories** | Fillers, putties, plasters, modelling clay - Coatings and paints, thinners, paint removers - Air care products - Anti-freeze and de-icing products - Biocidal products - Lubricants, greases, release products - Washing and cleaning products - Welding and soldering products, flux products (PC9b, PC9a, PC3, PC4, PC8, PC24, PC35, PC38) |
| **Product (Sub-)Categories** | Finger paints (PC9c) |

#### *Product (article) characteristics*

**Physical form of product:**

Liquid

## 11.3 Exposure estimation and reference to its source

N/A

## 11.4 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.

# 12. ES 12 Consumer use; Various products (PC1, PC24, PC31)

## 12.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (low release) |
| **Date - Version** | 29/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31) |
| **Environment Contributing Scenario** | |
| **CS1 Covered by** | ERC9a - ERC9b |
| **Consumer Contributing Scenario** | |
| **CS2 Lubricants** | PC1 - PC24 - PC31 |

## 12.2 Conditions of use affecting exposure

| | |
|---|---|
| **12.2. CS1: Environment Contributing Scenario: Covered by (ERC9a, ERC9b)** | |
| **Environmental release categories** | Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b) |
| **12.2. CS2: Consumer Contributing Scenario: Lubricants (PC1, PC24, PC31)** | |
| **Product Categories** | Adhesives, sealants - Lubricants, greases, release products - Polishes and wax blends (PC1, PC24, PC31) |

### *Product (article) characteristics*

**Physical form of product:**

Liquid

## 12.3 Exposure estimation and reference to its source

N/A

## 12.4 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.

# 13. ES 13 Consumer use; Various products (PC1, PC24, PC31)

## 13.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Lubricants (high release) |
| **Date - Version** | 29/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31) |
| **Environment Contributing Scenario** | |
| **CS1 Covered by** | ERC8a - ERC8d |
| **Consumer Contributing Scenario** | |
| **CS2 Lubricants** | PC1 - PC24 - PC31 |

## 13.2 Conditions of use affecting exposure

| | |
|---|---|
| **13.2. 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) |
| **13.2. CS2: Consumer Contributing Scenario: Lubricants (PC1, PC24, PC31)** | |
| **Product Categories** | Adhesives, sealants - Lubricants, greases, release products - Polishes and wax blends (PC1, PC24, PC31) |

## 13.3 Exposure estimation and reference to its source

N/A

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

**Guidance to check compliance with the exposure scenario:**

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

# Exposure Scenario, 10/07/2019

| Substance identity | |
|---|---|
| **Chemical name** | 2-Aminoetanolo |
| **CAS No.** | 141-43-5 |
| **EINECS No.** | 205-483-3 |

## Table of contents

# 1. ES 1 Consumer use; Washing and cleaning products (PC35)

## 1.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Consumer goods |
| **Date - Version** | 10/07/2019 - 1.0 |
| **Life Cycle Stage** | Consumer use |
| **Main user group** | Consumer uses |
| **Sector(s) of use** | Consumer uses (SU21) |
| **Product Categories** | Washing and cleaning products (PC35) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Water-based process** | ERC8d |

### Consumer Contributing Scenario

| | |
|---|---|
| **CS2 Detergent liquids** | PC35 |

## 1.2 Conditions of use affecting exposure

### 1.2. CS1: Environment Contributing Scenario: Water-based process (ERC8d)

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

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

**Amounts used:**

Annual amount per site 60000000 kg

**Release type:** Continuous release

**Emission days:** 365 days per year

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

**Waste treatment**

| | |
|---|---|
| Contain and dispose of waste according to local regulations. | Waste - minimum efficiency of: 87 % |

#### *Other conditions affecting environmental exposure*

**Local marine water dilution factor:** 100
**Local freshwater dilution factor:** 10
**Receiving surface water flow:** 18000 m³/day
Covers indoor and outdoor use

### 1.2. CS2: Consumer Contributing Scenario: Detergent liquids (PC35)

| | |
|---|---|
| **Product Categories** | Washing and cleaning products (PC35) |

#### *Product (article) characteristics*

**Vapour pressure:**

0.539 hPa

**Concentration of substance in product:**

Covers concentrations up to 5 %

#### *Amount used, frequency and duration of use/exposure*

**Duration:**

Application duration 0.3 min

**Frequency:**

Covers exposure up to 365 days per year

**Duration:**

Exposure duration 0.75 min

### *Information and behavioural advice for consumers*

**Information and behavioural advice for consumers:**

Avoid contact with eyes

### *Other conditions affecting consumers exposure*

**Room size:** Covers use in room size of 1 m³

**Ventilation rate:** Covers use under typical household ventilation.

**Body parts exposed:**

Palm of one hand Hands and forearms

## 1.3 Exposure estimation and reference to its source

### 1.3. CS1: Environment Contributing Scenario: Water-based process (ERC8d)

| protection target | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| freshwater | 9.6 kg/d | ECETOC TRA environment v2.0 | 0.514 |

### 1.2. CS2: Consumer Contributing Scenario: Detergent liquids (PC35)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| inhalative, systemic, long-term | 0.01 mg/m³ | N/A | 0.01 |
| inhalative, systemic, short-term | 0.01 mg/m³ | N/A | 0.01 |
| dermal, systemic, long-term | 0.008 mg/kg KW | N/A | 0.03 |
| dermal, systemic, long-term | 0.002 mg/kg KW | N/A | 0.01 |
| oral, systemic, long-term | 0.002 mg/kg KW | N/A | 0.01 |

## 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; Washing and cleaning products (PC35)

## 2.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Cleaning agent |
| **Date - Version** | 10/07/2019 - 1.0 |
| **Life Cycle Stage** | Widespread use by professional workers |
| **Main user group** | Professional uses |
| **Sector(s) of use** | Professional uses (SU22) |
| **Product Categories** | Washing and cleaning products (PC35) |

| | |
|---|---|
| **Environment Contributing Scenario** | |
| **CS1 Water-based process** | ERC8d |
| **Worker Contributing Scenario** | |
| **CS2 Cleaning** | PROC3 |
| **CS3 Cleaning** | PROC8a |
| **CS4 Cleaning** | PROC10 |
| **CS5 Cleaning** | PROC7 - PROC11 |
| **CS6 Cleaning** | PROC13 |
| **CS7 Cleaning** | PROC19 |

## 2.2 Conditions of use affecting exposure

### 2.2. CS1: Environment Contributing Scenario: Water-based process (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

**Concentration of substance in product:**

Covers concentrations up to 10 %

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

**Amounts used:**

Annual amount per site 65000000 kg

**Release type:** Continuous release

**Emission days:** 220 days per year

#### *Conditions and measures related to sewage treatment plant*

**STP type:**

Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 87 %

**Additional information on STP:**

Acclimated biological treatment

**STP sludge treatment:**

**STP effluent (m³/day):** 2300

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

**Waste treatment**

Product residual disposal complies with applicable regulations.

### *Other conditions affecting environmental exposure*

**Local marine water dilution factor:** 100
**Local freshwater dilution factor:** 10
**Receiving surface water flow:** 1800 m³/day
Covers indoor and outdoor use

## 2.2. CS2: Worker Contributing Scenario: Cleaning (PROC3)

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

### *Product (article) characteristics*

**Physical form of product:**

Liquid

**Vapour pressure:**

0.539 hPa

**Concentration of substance in product:**

Covers concentrations up to 10 %

### *Amount used, frequency and duration of use/exposure*

**Duration:**

Covers daily exposures up to 8 hours

**Frequency:**

Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**

Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use
**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**

Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.2. CS3: Worker Contributing Scenario: Cleaning (PROC8a)

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

### *Product (article) characteristics*

**Physical form of product:**

Liquid

**Vapour pressure:**
0.539 hPa

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

### *Amount used, frequency and duration of use/exposure*

**Duration:**
Covers daily exposures up to 8 hours
**Frequency:**
Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**
Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use
**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**
Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.2. CS4: Worker Contributing Scenario: Cleaning (PROC10)

| | |
|---|---|
| **Process Categories** | Roller application or brushing (PROC10) |

### *Product (article) characteristics*

**Physical form of product:**
Liquid

**Vapour pressure:**
0.539 hPa

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

### *Amount used, frequency and duration of use/exposure*

**Duration:**
Covers daily exposures up to 8 hours
**Frequency:**
Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**
Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use
**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**
Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.2. CS5: Worker Contributing Scenario: Cleaning (PROC7, PROC11)

| | |
|---|---|
| **Process Categories** | Industrial spraying - Non industrial spraying (PROC7, PROC11) |

### *Product (article) characteristics*

**Physical form of product:**
Liquid

**Vapour pressure:**
0.539 hPa

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

### *Amount used, frequency and duration of use/exposure*

**Duration:**
Covers daily exposures up to 8 hours
**Frequency:**
Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**
Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use
**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**
Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.2. CS6: Worker Contributing Scenario: Cleaning (PROC13)

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

### *Product (article) characteristics*

**Physical form of product:**
Liquid

**Vapour pressure:**
0.539 hPa

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

### *Amount used, frequency and duration of use/exposure*

**Duration:**
Covers daily exposures up to 8 hours

**Frequency:**
Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**
Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use
**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**
Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.2. CS7: Worker Contributing Scenario: Cleaning (PROC19)

| Process Categories | Manual activities involving hand contact (PROC19) |
|---|---|

### *Product (article) characteristics*

**Physical form of product:**
Liquid

**Vapour pressure:**
0.539 hPa

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

### *Amount used, frequency and duration of use/exposure*

**Duration:**
Covers daily exposures up to 8 hours

**Frequency:**
Covers use up to 240 days per year

### *Technical and organisational conditions and measures*

**Technical and organisational measures**

Ensure that direct skin contact is avoided.

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

**Personal protection**

| | |
|---|---|
| Wear suitable gloves tested to EN374. | Dermal - minimum efficiency of: 98 % |
| Wear suitable respiratory protection. | Dermal - minimum efficiency of: 90 % |
| Use suitable eye protection. | |

### *Other conditions affecting worker exposure*

Indoor use

**Ventilation rate:** Provide forced ventilation 80 %

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

**Additional Good Practice Advice:**

Ensure regular inspection, cleaning and maintenance of equipment and machines.

## 2.3 Exposure estimation and reference to its source

### 2.3. CS1: Environment Contributing Scenario: Water-based process (ERC8d)

| protection target | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| freshwater | 9343 kg/d | ECETOC TRA environment v2.0 | 0.482 |

### 2.3. CS2: Worker Contributing Scenario: Cleaning (PROC3)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.01 mg/kg KW | ECETOC TRA worker v2.0 | 0.01 |
| inhalative, systemic, long-term | 0.15 mg/m³ | ECETOC TRA worker v2.0 | 0.05 |
| inhalative, systemic, short-term | 0.15 mg/m³ | ECETOC TRA worker v2.0 | 0.05 |

### 2.3. CS3: Worker Contributing Scenario: Cleaning (PROC8a)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.03 mg/kg KW | ECETOC TRA worker v2.0 | 0.03 |
| inhalative, systemic, long-term | 1.27 mg/m³ | ECETOC TRA worker v2.0 | 0.39 |

### 2.3. CS4: Worker Contributing Scenario: Cleaning (PROC10)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.05 mg/kg KW | ECETOC TRA worker v2.0 | 0.05 |

| | | | |
|---|---|---|---|
| inhalative, systemic, long-term | 0.76 mg/m³ | ECETOC TRA worker v2.0 | 0.23 |

### 2.3. CS5: Worker Contributing Scenario: Cleaning (PROC7, PROC11)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.21 mg/kg KW | ECETOC TRA worker v2.0 | 0.21 |
| inhalative, systemic, long-term | 1.53 mg/m³ | ECETOC TRA worker v2.0 | 0.46 |

### 2.3. CS6: Worker Contributing Scenario: Cleaning (PROC13)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.03 mg/kg KW | ECETOC TRA worker v2.0 | 0.03 |
| inhalative, systemic, long-term | 0.25 mg/m³ | ECETOC TRA worker v2.0 | 0.08 |

### 2.3. CS7: Worker Contributing Scenario: Cleaning (PROC19)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.28 mg/kg KW | ECETOC TRA worker v2.0 | 0.28 |
| inhalative, systemic, long-term | 0.38 mg/m³ | ECETOC TRA worker v2.0 | 0.12 |

## 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 Use at industrial site; Polymer preparations and compounds (PC32)

## 3.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Additive |
| **Date - Version** | 10/07/2019 - 1.0 |
| **Life Cycle Stage** | Use at industrial site |
| **Main user group** | Industrial uses |
| **Product Categories** | Polymer preparations and compounds (PC32) |
| **Environment Contributing Scenario** | |
| **CS1 Solvent-based process** | ERC5 |
| **Worker Contributing Scenario** | |
| **CS2 Additive** | PROC14 |

## 3.2 Conditions of use affecting exposure

### 3.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC5)

| | |
|---|---|
| **Environmental release categories** | Use at industrial site leading to inclusion into/onto article (ERC5) |

#### *Product (article) characteristics*

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

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

**Amounts used:**
Annual amount per site 6720000 kg

**Release type:** Continuous release

**Emission days:** 365 days per year

#### *Conditions and measures related to sewage treatment plant*

**STP type:**
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 87 %
**Additional information on STP:**
Biological elimination
**STP sludge treatment:**
No application of sewage sludge to soil
**STP effluent (m³/day):** 2300

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

**Waste treatment**
Do not apply industrial sludge to natural soils.

#### *Other conditions affecting environmental exposure*

**Local marine water dilution factor:** 100
**Local freshwater dilution factor:** 10
**Receiving surface water flow:** 18000 m³/day

### 3.2. CS2: Worker Contributing Scenario: Additive (PROC14)

| Process Categories | Tabletting, compression, extrusion, pelletisation, granulation (PROC14) |
|---|---|

### *Product (article) characteristics*

**Physical form of product:**

Liquid

**Vapour pressure:**

0.539 hPa

**Concentration of substance in product:**

Covers percentage substance in the product up to 100 %.

### *Amount used, frequency and duration of use/exposure*

**Duration:**

Covers use up to 480 min

**Frequency:**

Covers frequency up to: 240 days per year

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

**Personal protection**

| | |
|---|---|
| Use suitable eye protection. | |
| Wear suitable gloves tested to EN374. | Inhalation - minimum efficiency of: 90 % |

### *Other conditions affecting worker exposure*

Indoor use

**Ventilation rate:** Provide forced ventilation 90 %

## 3.3 Exposure estimation and reference to its source

### 3.3. CS1: Environment Contributing Scenario: Solvent-based process (ERC5)

| protection target | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| freshwater | 6.28 kg/d | N/A | N/A |

### 3.3. CS2: Worker Contributing Scenario: Additive (PROC14)

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| dermal, systemic, long-term | 0.07 mg/kg bw/day | ECETOC TRA worker v3 | 0.07 |
| inhalative, systemic, long-term | 1.27 mg/m³ | ECETOC TRA worker v3 | 0.39 |
| inhalative, local, long-term | 1.27 mg/m³ | ECETOC TRA worker v3 | 0.39 |

## 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.