Safety Data Sheet
Diamond - Ceramic Bodywork Booster

Safety Data Sheet dated 7/10/2024, version 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: Diamond - Ceramic Bodywork Booster

Trade code: 8096

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Bodywork polish

Uses advised against:

Strictly adhere to the recommended uses.

1.3. Details of the supplier of the safety data sheet

Supplier:

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

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

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

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: emergency number 112

In South Africa: Poison Information Helpline 0861 555 777

In Malta: emergency number 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, Flam. Liq. 3, Flammable liquid and vapour.

Warning, Skin Irrit. 2, Causes skin irritation.

Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Warning

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P370+P378 In case of fire, use a foam fire extinguisher to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
None

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures
Hazardous components within the meaning of the CLP regulation and related classification:

stta	Name	Ident. Number		Classification
>= 12,5% - < 15%	Hydrocarbons isoparaffinic mixture	EC: REACH No.:	940-726-3 01-2120083063-63	3.10/1 Asp. Tox. 1 H304 EUH066
>= 3% - < 5%	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS: EC: REACH No.:	64742-48-9 919-857-5 01-2119463258-33	2.6/3 Flam. Liq. 3 H226 3.10/1 Asp. Tox. 1 H304 3.8/3 STOT SE 3 H336 EUH066 DECLP (CLP)*
>= 3% - < 5%	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics	EC: REACH No.:	920-107-4 01-2119453414-43	3.10/1 Asp. Tox. 1 H304 EUH066
>= 1% - < 2%	2-aminoethanol; ethanolamine	Index number: CAS: EC: REACH No.:	603-030-00-8 141-43-5 205-483-3 01-2119486455-28	3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 3.1/4/Oral Acute Tox. 4 H302 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332 3.8/3 STOT SE 3 H335 4.1/C3 Aquatic Chronic 3 H412 Specific Concentration Limits: C >= 5%: STOT SE 3 H335
>= 0,1% - < 0,25%	Ossidi di alluminio	CAS: EC:	1344-28-1 215-691-6	The product is not classified as hazardous according to Regulation EC 1272/2008 (CLP).
>= 0,02% - < 0,05%	N-C12-16 ALKYL DIMETHYL BENZYL	CAS:	68424-85-1	2.16/1 Met. Corr. 1 H290

	AMMONIUM CHLORIDE.	EC: REACH No.:	939-350-2 01-2119970550-39	3.1/4/Oral Acute Tox. 4 H302 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410

*DECLP (CLP): Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.

Substances in nanoform:
>= 0,1% - < 0,25% Ossidi di alluminio
CAS: 1344-28-1, EC: 215-691-6

Nanoform characteristics	**Value**
Particle size distribution:	D50: 25 nm

SECTION 4: First aid measures

4.1. Description of first aid measures
In case of skin contact:
Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.
In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.
In case of Ingestion:
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.
In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.
4.2. Most important symptoms and effects, both acute and delayed
None
4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Appropriate Extinguishing Media:
To carbon dioxide.
To dust.

Foam
Water spray.
Not Recommended Extinguishing Media:
Do not use direct water jets.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters
Normal fire-fighting clothing, such as an open-circuit compressed air breathing apparatus (EN 137), flame-resistant suit (EN469), flame-resistant gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
For cleaning up:
Avoid flame and/or spark near leak and produced waste. Do not smoke. In case of large spills dike,
absorb and shovel up into suitable containers for disposal. Contain small spills with absorbent material.
Put dirty material in suitable container. Dispose of dirty material in accordance with local or national
regulations.

6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities
Only store in the original container.
Always keep in a well ventilated place.
Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
None in particular.
Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons isoparaffinic mixture

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-aminoethanol; ethanolamine - 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 - Notes: Skin

ACGIH - TWA(8h): 3 ppm - STEL: 6 ppm - Notes: Eye and skin irr

Ossidi di alluminio - CAS: 1344-28-1

ACGIH - TWA(8h): 1 mg/m3

DNEL Exposure Limit Values

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

Worker Professional: 208 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 871 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 125 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 185 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 125 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-aminoethanol; ethanolamine - CAS: 141-43-5

Consumer: 3.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 0.51 mg/m3 - Consumer: 0.18 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 3 mg/kg - Consumer: 1.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

2-aminoethanol; ethanolamine - CAS: 141-43-5

Target: Fresh Water - Value: 0.07 mg/l

Target: Marine water - Value: 0.007 mg/l

Target: Freshwater sediments - Value: 0.357 mg/kg

Target: Marine water sediments - Value: 0.0357 mg/kg

Target: 09 - Value: 100 mg/l

8.2. Exposure controls

Eye protection:

Compliant with EN 166

Eye glasses with side protection.

Protection for skin:

protective clothing

Protection for hands:

Compliant with EN 374.

Nitrile or Viton gloves.

Thickness: Cuff 0.10 mm; Palm 0.12 mm; Fingers 0.145 mm

Respiratory protection:

Use a suitable respiratory protection device.
Thermal Hazards:
None
Environmental exposure controls:
None
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Cream	--	--
Odour:	N.A.	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	Flam. Liq. 3, H226	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	59°C	IP 170	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	9.5	ASTM D1287	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0,99	08	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

Nanoforms:	See Nanoform information in Section 3.	--	--

9.2. Other information
No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable at normal ambient temperatures and when used as recommended.
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
Excessive heat.
10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Toxicological information of the product:
Diamond - Polish 500 ml
a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
b) skin corrosion/irritation
The product is classified: Skin Irrit. 2 H315
c) serious eye damage/irritation
The product is classified: Eye Irrit. 2 H319
d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met
i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Hydrocarbons isoparaffinic mixture

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Notes: OECD TG 401

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Notes: OECD TG 402

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

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m3 - Duration: 4h - Source: ECHA BP - SUPPLIER SDS

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: ECHA BP - SUPPLIER SDS

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Source: ECHA BP - SUPPLIER SDS

h) STOT-single exposure:

Test: May cause drowsiness and dizziness. Positive - Source: SUPPLIER SDS - No data available for the product

i) STOT-repeated exposure:

Test: OECD 422 Negative - Source: SUPPLIER SDS

Test: NOAEL - Route: Oral - Species: Rat > 1000 mg/kg - Source: ECHA BP

Test: NOAEL - Route: Inhalation - Species: Rat 200 Ppm - Source: ECHA BP

Test: NOAEC - Route: Inhalation - Species: Rat > 275 mg/m3 - Source: ECHA BP

j) aspiration hazard:

Test: May be fatal if swallowed and enters airways (physical-chemical properties) - Route: Oral - Source: SUPPLIER SDS

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

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Notes: OCSE 402

Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m3 - Duration: 4h - Notes: OCSE 403

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Notes: OCSE 401

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin Negative - Notes: OCSE 404 - Può seccare la pelle e causare conseguenti dermatiti - Based on available data, the classification criteria are not met

c) serious eye damage/irritation:

Test: Eye Corrosive - Route: EYE Negative - Notes: OCSE 405 - Può causare disturbi lievi di breve durata agli occhi - Based on available data, the classification criteria are not met

e) germ cell mutagenicity:

Test: Mutagenesis 3 - Notes: OCSE 471, 473, 474, 476, 478, 479 - Based on available data, the classification criteria are not met

f) carcinogenicity:

Test: Carcinogeneticy 3 - Notes: OCSE 453 - Based on available data, the classification criteria are not met

g) reproductive toxicity:

Test: Reproductive Toxicity 3 - Notes: OCSE 413, 414, 415 - Based on available data, the classification criteria are not met

i) STOT-repeated exposure:

3 - Notes: OCSE 408, 413 - Based on available data, the classification criteria are not met

j) aspiration hazard:

Positive - Source: sulla base dei dati chimicio-fisici

2-aminoethanol; ethanolamine - CAS: 141-43-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1089 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 2504 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 1.3 mg/l - Duration: 4h

b) skin corrosion/irritation:

Test: Eye Corrosive Positive - Notes: due to physical-chemical data (pH = 13)

Test: Skin Corrosive Positive - Notes: due to physical-chemical data (pH = 13)
N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 426 mg/kg
Test: LD50 - Route: Skin - Species: Rat 400-2000 mg/kg

11.2. Information on other hazards
Endocrine disrupting properties:
No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Hydrocarbons isoparaffinic mixture
a) Aquatic acute toxicity:
Endpoint: LL50 - Species: Fish > 1000 mg/l - Duration h: 96
Endpoint: LL50 - Species: Daphnia > 100 mg/l - Duration h: 48
Endpoint: EL50 - Species: Algae > 100 mg/l - Duration h: 72
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
a) Aquatic acute toxicity:
Endpoint: EL0 - Species: Daphnia 1000 mg/l - Duration h: 48
Endpoint: EL50 - Species: Algae > 1000 mg/l - Duration h: 72
Endpoint: LL50 - Species: Fish > 1000 mg/l - Duration h: 96
Endpoint: NOELR - Species: Algae 100 mg/l - Duration h: 72
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics
a) Aquatic acute toxicity:
Endpoint: EL0 - Species: Daphnia 1000 mg/l - Duration h: 48
Endpoint: CE7 - Species: Fish 1000 mg/l - Duration h: 96
Endpoint: EL0 - Species: Algae 1000 mg/l - Duration h: 72
Endpoint: NOELR - Species: Algae 1000 mg/l - Duration h: 72
2-aminoethanol; ethanolamine - CAS: 141-43-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 349 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 27.04 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 2.8 mg/l - Duration h: 2.8
N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae 670 µg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia 5.9 ppb - Duration h: 48
Endpoint: LC50 - Species: Fish 0.28 Ppm - Duration h: 96
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia 0.025 mg/l - Duration h: 504

12.2. Persistence and degradability
None
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics
Biodegradability: Readily biodegradable
2-aminoethanol; ethanolamine - CAS: 141-43-5
Biodegradability: Readily biodegradable - Test: BIOGDG14 - Duration: 21GG - %: 91
N-C12-16 ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE. - CAS: 68424-85-1
Biodegradability: Readily biodegradable - Test: BIOGDG08 - Duration: 28gg - %: 61

12.3. Bioaccumulative potential
N.A.

12.4. Mobility in soil
N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

"Use in accordance with good working practices, avoiding dispersal in the environment.
Do not discharge into drains, ground water or water courses. Comply with current legislation on the protection of water and soil from pollution (Legislative Decree No. 152 of 3/4/2006).
Dispose of used product and containers by handing them over to authorised companies, in accordance with the provisions of
Legislative Decree No. 152/2006 (Consolidated Environmental Act, which replaced the Ronchi Decree) as amended.
The used product is to be considered special waste to be classified in accordance with Directive No. 2008/98/EC on waste and related matters. Recover if possible. Send to authorised disposal plants or incineration under
controlled conditions (152/2006 art. 184).
Act in accordance with the local and national laws in force.
Contaminated packaging must be emptied as far as possible. After cleaning, send to an authorised centre for recycling or disposal."

SECTION 14: Transport information

14.1. UN number or ID number

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

14.2. UN proper shipping name

ADR-Shipping Name:	PAINT RELATED MATERIAL
IATA-Shipping Name:	PAINT RELATED MATERIAL
IMDG-Shipping Name:	PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR-Class:	3
ADR - Hazard identification number:	30
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3

14.4. Packing group

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

14.5. Environmental hazards

ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
IMDG-EmS:	F-E, [S-E]

14.6. Special precautions for user

ADR-Subsidiary hazards: -
ADR-S.P.: 163 367 650
ADR-Transport category (Tunnel restriction code): 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. Maritime transport in bulk according to IMO instruments

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3
Restriction 40

Restrictions related to the substances contained:
Restriction 75

Volatile Organic compounds - VOCs = 26.67 %
Volatile Organic compounds - VOCs = 266.66 g/Kg
Volatile Organic compounds - VOCs = 263.99 g/l

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: P5c

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclicis, < 2% aromatics
2-aminoethanol; ethanolamine

SECTION 16: Other information

Text of phrases referred to under heading 3:
H304 May be fatal if swallowed and enters airways.
EUH066 Repeated exposure may cause skin dryness or cracking.
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
H290 May be corrosive to metals.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 3: Composition/information on ingredients
SECTION 5: Firefighting measures
SECTION 6: Accidental release measures
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 10: Stability and reactivity
SECTION 13: Disposal considerations
SECTION 15: Regulatory information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.

ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NA:	Not applicable
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

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.