

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

1.1. Product identifier

Product name : Arc White Spirits
Substance name : Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
EC-No. : 919-446-0
EU REACH registration No : 01-2119458049-33-XXXX
Product code : WHSP001, WHSP002, WHSP003
Product group : End product

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

1.2.1. Relevant identified uses

Use of the substance/mixture : General degreasing solvent. Paint brush cleaner Paint thinner

1.2.2. Uses advised against

Restrictions on use : Cosmetics, personal care products

1.3. Details of the supplier of the safety data sheet

Supplier

Arc Building Products
IDA Business & Technology Park
Ballynattin
Arklow
Co. Wicklow
Ireland
+353 (0)402 32370
sales@arcbuildingproducts.ie

1.4. Emergency telephone number

Emergency number : +353 (0)402 32370
(Office hours only)
NHS 111 - General Public (24 Hour service)

Country	Organisation/Company	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)

Also, in the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336
Specific target organ toxicity – Repeated exposure, Category 1 H372
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411
Full text of H- and EUH-statements: see section 16

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Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02

GHS07

GHS08

GHS09

Signal word (CLP)

: Danger

Contains

: Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Hazard statements (CLP)

: H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H336 - May cause drowsiness or dizziness.
H372 - Causes damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Supplementary precautionary statements (CLP)

: 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.
P260 - Do not breathe vapours.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

EUH-statements

: EUH066 - Repeated exposure may cause skin dryness or cracking.

Extra Labelling Phrases

: VOC content limit for this product (Cat B/a) is 850g/L. This product contains max 785 g/L VOC.

To avoid the risk of spillage always ensure that the cap is secure and the container is held upright during transportation & storage. When cleaning brushes use a non-plastic container and work into the brush well. Replace cap firmly after use.

2.3. Other hazards

This substance is not assessed to be a PBT and vPvB.

This substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance Type

: Unknown Or Variable Composition, Complex Reaction Products Or Of Biological Materials (UVCB)

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Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	EC-No.: 919-446-0	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not Applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Remove victim to uncontaminated area. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately.
First-aid measures after skin contact	: Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
First-aid measures of first aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Symptoms/effects after inhalation	: At high concentrations, the vapours can be irritating to the respiratory system. May have a narcotic effect at high concentrations. Other symptoms: Headache, dizziness, nausea, unconsciousness.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking. Irritation.
Symptoms/effects after eye contact	: Eye irritation. Redness.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting. Abdominal pain, nausea. Swallowing a small quantity of this material will result in serious health hazard. Liquid with low viscosity. May result in aspiration into the lungs. Product entering lungs lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours).

4.3. Indication of any immediate medical attention and special treatment needed

If swallowed accidentally, the product may enter the lungs due to its low viscosity

and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours). Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂), Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Explosion hazard : In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. Hydrocarbons. Aldehydes. Soot. Gas may accumulate in confined areas. *i.e.* toxic gases can be released.

5.3. Advice for firefighters

Precautionary measures fire : Avoid breathing (dust, vapor, mist, gas).
Firefighting instructions : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool..
Protection during firefighting : Wear fire/flame resistant/retardant clothing. In confined space use self-contained breathing apparatus. Full face piece respirator.
Other information : Keep run-off water out of sewers and water sources. Containers close to fire should be removed or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area.

6.1.1. For non-emergency personnel

Protective equipment : Keep unnecessary and unprotected personnel away from the spillage.
Emergency procedures : Land spill. Eliminate all ignition sources. Stop leak if safe to do so. Do not touch or walk on the spilled product. Shut off all ignition sources.
No flares, smoking or flames in hazard area. Avoid breathing vapour or mist.
Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Measures in case of dust release : Not applicable.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : For further information refer to section 8: "Exposure controls/personal protection". More detailed information: See section 11. For disposal of residues refer to section 13 : Disposal considerations" ".

6.2. Environmental precautions

Avoid release to the environment. Very toxic to aquatic life with long lasting effects. Material insoluble in water. may spread in water systems. Do not discharge into drains or the environment. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

- For containment : Eliminate sources of ignition. No open flames. No smoking.
- Methods for cleaning up : Stop leak if safe to do so. Absorb excess liquid spillage on inorganic adsorbent material such as fine sand, brick dust etc. Place spent adsorbent in sealed packages and contact specialist waste disposal contractor. Cover the spilled liquid product with foam to slow down evaporation. Use type. Alcohol resistant foam.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Handling temperature : 5 – 30 °C
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Do not dryhandwith rags that have been contaminated with product. Do not use abrasives, solvents or fuels

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep locked up and out of reach of children.
- Incompatible products : Oxidizing agent, Acids
- Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Storage area : Keep away from food, drink and animal feedingstuffs.
- Packaging materials : Carbon steel. Glass. Mild steel. Stainless steel. high density polyethylene (HDPE). Polyethylene terephthalate (PET).

7.3. Specific end use(s)

See Section 1.2 & exposure scenarios in Annex (i.e. after Section 16)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	350 mg/m ³
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8.1.2. Recommended monitoring procedures

No additional information available

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8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	570 mg/m ³
Long-term - systemic effects, dermal	44 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	330 mg/m ³ /8h
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	570 mg/m ³
Long-term - systemic effects, oral	26 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	71 mg/m ³ /24h
Long-term - systemic effects, dermal	26 mg/kg bodyweight/day
PNEC (additional information)	
Additional information	PNEC is not meaningful for petroleum substances

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Ensure that there is a suitable ventilation system. Mechanical ventilation is recommended. Avoid inhalation of vapours.

8.2.2. Personal protection equipment

Personal protective equipment:

Do not attempt to take action without suitable protective equipment. Appropriate engineering controls.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Use splash goggles when eye contact due to splashing is possible	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear gloves according to EN374 resistant to the solvent(s) in use.

Protective gloves. Nitrile-rubber protective gloves. Polyvinylchloride (PVC). Viton

Other skin protection

Materials for protective clothing:

Use appropriate personal protection equipment (PPE). According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn. *E.g.* When there is a risk of ignition from static electricity, wear anti-static protective clothing; clothing should include anti-static overalls, boots and gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear respiratory protection.

Respiratory protection			
Device	Filter type	Condition	Standard
Wear respiratory protection	Type A - High-boiling (>65 °C) organic compounds, Type P2	Vapour protection	EN 405

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Do not exceed the occupational exposure limits (OEL). Assure that emissions are compliant with all applicable air pollution control regulations. Emission reduction measures for the specific use situation has to be evaluated: Gas absorbers and scrubbers for relatively small volume structures. Minimisation of the fumigated volume by inflated balloons for large volume structure (e.g. churches, houses). (fumigation). Control measures to prevent releases. Keep container tightly closed. Dispose of this material and its container at hazardous or special waste collection point.

Other information:

Pregnant/breastfeeding women working with the product must not be in direct contact with the product. Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: clear.
Appearance	: Colourless liquid.
Odour	: Hydrocarbons, aromatic.
Odour threshold	: Not available
Melting point/Freezing Point	: Not applicable
Freezing point	: Not available
Boiling point	: 158 – 191 °C 316 – 376 degrees F (ISO 3405)
Flammability	: Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Non-flammable in the presence of the following materials or conditions: heat
Lower explosion limit	: 0.7%
Upper explosion limit	: 7%
Flash point	: 40 °C ISO 13736 / ~ 104°F (ISO 13736)
Auto-ignition temperature	: > 230 °C, >446°F (ASTM E 659-78)
Decomposition temperature	: Not available
pH	: Not applicable.
Viscosity, kinematic	: ≤ 20.5 mm ² /s @ 40°C; 0.95 mm ² /s @ 40°C (ASTM D 445)
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 1.9 hPa @ 20°C
Vapour pressure at 50 °C	: Not available
Density	: 785 kgm ⁻³ @ 15°C (ISO 12185)
Relative density	: ≈ 0.785 @ 15°C
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

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Explosive properties	: Not considered explosive based on chemical structure and oxygen balance considerations.
Oxidising properties	: Not considered oxidising based on chemical structure considerations.
Evaporation Rate	: 57 (ether (anhydrous) = 1) [DIN 53170]

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	: < 785 g/l
Volatility	: Volatile

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredient (Nb. Is flammable liquid and vapour.)

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Never pressurise packagings as they will not resist.

10.5. Incompatible materials

Acids. Oxidizing agent.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Based on available data, the classification criteria are not met
Acute toxicity (dermal)	: Based on available data, the classification criteria are not met
Acute toxicity (inhalation)	: Based on available data, the classification criteria are not met

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

LD50 oral	> 15000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation (vapour)	> 13.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LD50 dermal	> 3400 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation	: Based on available data, the classification criteria are not met pH: Not applicable.
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Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Not Irritating to skin. Based on read-across from structurally similar UVCB C9-C14 aliphatic solvents (2-25% aromatics). C9-C14 aliphatic solvents (2-25% aromatics) had a negative result in OECD Guideline 404 (Acute Dermal Irritation / Corrosion).

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Serious eye damage/irritation : Based on available data, the classification criteria are not met
pH: Not applicable

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Not Irritating to eyes. Based on read-across from structurally similar UVCB C9-C14 aliphatic solvents (2-25% aromatics). C9-C14 aliphatic solvents (2-25% aromatics) had a negative result in OECD Guideline 405 (Acute Eye Irritation / Corrosion).

Respiratory or skin sensitisation : Based on available data, the classification criteria are not met

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Not skin sensitiser.
Negative result, Signs of skin sensitisation were observed in 0% animals, Animal: Guinea Pig, Guideline: guinea pig maximization test

Germ cell mutagenicity : Based on available data, the classification criteria are not met

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Not mutagenic.
Negative result, *in vitro* method, Guideline: Bacterial reverse mutation test
Negative result, *in vivo* method, Animal: rat, Guideline: OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

Carcinogenicity : Based on available data, the classification criteria are not met

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

No evidence that substance causes cancer.

Reproductive toxicity : Based on available data, the classification criteria are not met

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Not toxic to reproduction. Negative result, NOAEC \geq 300 ppm via inhalation, Animal: rat, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test).
Not teratogenic. Negative result, NOAEC \geq 300 ppm via inhalation, Animal: rat, Guideline: Guidelines for Reproduction Studies for Safety and Evaluation of Drugs for Human Use, Segment II (Teratology Study).

STOT-single exposure : May cause drowsiness or dizziness.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard : May be fatal if swallowed and enters airways.

Arc White Spirits

Viscosity, kinematic	\leq 20.5 mm ² /s @ 40°C; 0.95 mm ² /s @ 40°C (ASTM D 445)
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11.2. Information on other hazards

11.2.1 Endocrine Disrupting Properties

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2 Other Information

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Based on available data, the classification criteria are not met

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Rapidly degradable

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

LC50 96h - Fish	> 10 - 30 mg/l Test organisms (species): Oncorhynchus mykiss, Guideline: OECD Guideline 203
EC50 48h – Daphnia magna	> 10 - 22 mg/l Test organisms (species): Daphnia magna, Guideline: OECD Guideline 202
EC50 72h – Algae	4.1 mg/l Test organisms (species): Pseudokirchneriella subcapitata, Guideline: OECD Guideline 201
EC50 72h – Algae	4.6 -10 mg/l Test organisms (species): Pseudokirchneriella subcapitata, Guideline: OECD Guideline 201
NOEC 72 h & NOEC 96 h – Algae	0.16 mg/l Test organisms (species): Pseudokirchneriella subcapitata, Guideline: OECD Guideline 201
NOEC 21 d - Daphnia magna	0.097 mg/l Test organisms (species): Oncorhynchus mykiss, Guideline: OECD Guideline 211

12.2. Persistence and degradability

Product is readily biodegradable/rapidly degradable

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Read Across from reference substance Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, aromatics (2 -25%)	74.7% biodegraded after 28 d, Guideline: OECD Guideline 301 F. Reference substance concluded to be readily biodegradable.
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12.3. Bioaccumulative potential

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Standard Bioaccumulation studies for this endpoint are intended for monoconstituent substances and are not appropriate for petroleum UVCB substances.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

This substance is not assessed to be a PBT and vPvB.

12.6. Endocrine disrupting properties

This substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

There are no other known adverse effects, as of yet, for this substance

SECTION 13: Disposal considerations

13.1. Waste treatment methods

This product **is** classified as Hazardous Waste as it is supplied.

Waste generation should be avoided or minimised where possible. When handling waste, the safety precautions applying to handling of the product should be considered. Label the containers containing waste and remove from the area as soon as possible. Label the containers containing waste contaminated material and remove from the area as soon as possible.

Product disposal to sewer should be avoided, if possible, and only be carried out after treatment, and under relevant rules, e.g. Consent to Discharge. Where wastes undergo disposal, external recovery or treatment, it must comply with the requirements of environmental protection, waste disposal legislation and any local authority requirements. If wastes undergo incineration, they must be suitable for it at an approved facility.

Used packaging waste should be reused or recycled, if uncontaminated. Contaminated packaging should be cleaned on site, if appropriate facilities exist, including any relevant rules or permits, or offsite by a specialist provider. Contaminated packaging which cannot be safely cleaned must be treated in the same way as the product, and should only be disposed of as a last resort.

List of waste code is 20 01 13* - solvents. These codes have been assigned based on the actual composition of the product as supplied. Seek advice from a hazardous waste specialist for waste classification.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1300	UN 1300	UN 1300	UN 1300	UN 1300
14.2. UN proper shipping name				
TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE	Turpentine substitute	TURPENTINE SUBSTITUTE	TURPENTINE SUBSTITUTE
Transport document description				
UN 1300 TURPENTINE SUBSTITUTE, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1300 TURPENTINE SUBSTITUTE, 3, III, MARINE POLLUTANT	UN 1300 Turpentine substitute, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1300 TURPENTINE SUBSTITUTE, 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1300 TURPENTINE SUBSTITUTE, 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
3	3	3	3	3
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

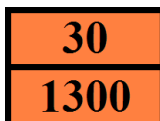
Classification code (ADR) : F1
 Limited quantities (ADR) : 5I
 Excepted quantities (ADR) : E1

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Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T2
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Operation (ADR) : S2
Hazard identification number (Kemler No.) : 30
Orange plates :



Tunnel restriction code (ADR) : D/E

Transport by sea

Special provisions (IMDG) : 223
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : A
Properties and observations (IMDG) : Immiscible with water.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12

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Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : < 785 g/l

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

A Chemical safety assessment has been done for this UVCB.

SECTION 16: Other information

General Information

The European Inventory of Existing Commercial Substances (EINECS) descriptions and numbers have been used historically to identify chemical substances. EINECS descriptions exist for a number of hydrocarbon substances derived from petroleum refining and chemical conversion. In the past this substances was identified by CAS 64742-82-1 but this description was overly broad as solvents have narrower hydrocarbon ranges. different classifications and different processing. A more focused and narrow definition was therefore required. REACH requires a clear and logical substance description and substance identification is a key component in registration. In order to facilitate appropriate registration of hydrocarbon solvents the Hydrocarbon Solvents Producers Association (HSPA) has conducted an in-depth assessment of hydrocarbon solvents in order to better characterize its substances and adopt a consistent substance identification system.

Indication of changes:

Due to change of classification database the revision numbering has been reset. You should therefore look at the revision date rather than the revision number to ensure you have the most up to date version.

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Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Annex

1. Exposure scenario

Use in Cleaning Agents, Professional.

Use Descriptor

Sector of use

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Process category

PROC1 - Use in closed process, no likelihood of exposure

PROC2 - Use in closed, continuous process with occasional controlled exposure

PROC3 - Use in closed batch process (synthesis or formulation)

PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC10 - Roller application or brushing

PROC11 - Non industrial spraying

PROC13 - Treatment of articles by dipping and pouring

Environmental release category

ERC8a - Wide dispersive indoor use of processing aids in open systems

ERC8d - Wide dispersive outdoor use of processing aids in open systems

Specific Environmental Release Category

ESVOC SpERC 8.4b.v1.

Processes, tasks, activities covered

Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).

2. Operational conditions and risk management measures

2.1. Control of environmental exposure

Product characteristics

Substance is complex UVCB. Predominantly hydrophobic.

Amounts used

Maximum daily site tonnage (kg/day): 0.47

Frequency and duration of use Continuous release

Emission Days (days/year): 365

Environment factors not influenced by risk management

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Other operational conditions of use affecting environmental exposure

Release fraction to air from process (initial release prior to RMM): 0.02

Release fraction to wastewater from process (initial release prior to RMM): 0.000001

Release fraction to soil from process (initial release prior to RMM): 0

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Risk from environmental exposure is driven by freshwater

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No wastewater treatment required

Treat air emission to provide a typical removal efficiency of (%): N/A

Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of (%): 0

If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of (%): 0

Organizational measures to prevent/limit release from the site

Prevent discharge of undissolved substance to or recover from onsite wastewater. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Conditions and measures related to municipal sewage treatment plant

Estimated substance removal from wastewater via domestic sewage treatment (%): 93.7

Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%): 93.7

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d): 470

Assumed domestic sewage treatment plant flow (m³/d): 2000

Conditions and measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or national regulations.

2.2. Control of exposure - Workers or Consumers

Product characteristics

Physical state

Liquid, vapour pressure < 0.5 kPa at STP

Concentration of substance in product

Covers percentage substance in the product up to 100 % (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently)

Other operational conditions affecting exposure

Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

2.2a. Control of worker exposure	
Contributing Scenarios	Operational conditions and risk management measures
Filling / preparation of equipment from drums or containers. dedicated facility	No specific measures identified.
Automated process with (semi) closed systems. Use in contained systems	No specific measures identified.
Automated process with (semi) closed systems. Drum/batch transfers. Use in contained systems	No specific measures identified.
Semi-automated process (e.g. Semi-automatic application of floor care and maintenance products)	No specific measures identified.
Filling / preparation of equipment from drums or containers. non-dedicated facility	No specific measures identified.
Manual. Surfaces. Cleaning. Dipping, immersion and pouring	No specific measures identified.
Cleaning with low-pressure washers. Rolling, Brushing, no spraying	No specific measures identified.
Cleaning with high pressure washers. Spraying. Indoor	Provide a good standard of controlled ventilation (10 to 15 air changes per hour). or: Wear a respirator conforming to EN140 with Type A filter or better.
Cleaning with high pressure washers. Spraying. Outdoor	Ensure operation is undertaken outdoors. Limit the substance content in the product to 25 %. or: Wear a respirator conforming to EN140 with Type A filter or better.
Manual. Surfaces. Cleaning. Spraying	No specific measures identified.
Ad hoc manual application via trigger sprays, dipping, etc. Rolling, Brushing	No specific measures identified.
Application of cleaning products in closed systems. Outdoor	No specific measures identified.
Cleaning of medical devices	No specific measures identified.
Storage	No specific measures identified.

2.2b. Control of consumer exposure	
Product Category(ies)	Operational conditions and risk management measures

Remarks
Not applicable.

3. Exposure estimation and references

Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

4. Guidance for Downstream User (DU) to check compliance with the Exposure scenario

Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions

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outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

1. Exposure scenario

Use in Cleaning Agents, Consumer.

Use Descriptor

Sector of use

SU21 - Private households (= general public = consumers)

Product category

PC3 - Air care products

PC4 - Anti-Freeze and de-icing products

PC8 - Biocidal products (e.g. Disinfectants, pest control)

PC9 - Coatings and Paints, Fillers, Putties, Thinners

PC24 - Lubricants, greases, release products

PC35 - Washing and cleaning products (including solvent based products)

PC38 - Welding and soldering products (with flux coatings or flux cores.), flux products

Environmental release category

ERC8a - Wide dispersive indoor use of processing aids in open systems

ERC8d - Wide dispersive outdoor use of processing aids in open systems

Specific Environmental Release Category

ESVOC SpERC 8.4c.v1.

Processes, tasks, activities covered

Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.

2. Operational conditions and risk management measures

2.1. Control of environmental exposure

Product characteristics

Substance is complex UVCB. Predominantly hydrophobic.

Amounts used

Maximum daily site tonnage (kg/day): 0.068

Frequency and duration of use Continuous release

Emission Days (days/year): 365

Environment factors not influenced by risk management

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Other operational conditions of use affecting environmental exposure

Release fraction to air from process (initial release prior to RMM): 0.95

Release fraction to wastewater from process (initial release prior to RMM): 0.025

Release fraction to soil from process (initial release prior to RMM): 0.025

Conditions and measures related to municipal sewage treatment plant

Estimated substance removal from wastewater via domestic sewage treatment (%): 93.7

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d): 63

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Assumed domestic sewage treatment plant flow (m3/d): 2000

Conditions and measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or national regulations.

2.2. Control of exposure - Workers or Consumers

Product characteristics

Physical state

Liquid, vapour pressure > 10 Pa at STP

Vapour pressure

231 Pa

Concentration of substance in product

Covers percentage substance in the product up to 100 % (unless stated differently).

Amounts used

Unless otherwise stated, Covers use amounts up to (g) : 13800; Covers skin contact area up to (cm2): 857.5.

Frequency and duration of use

Unless otherwise stated, Covers use up to (days/year):365; Covers use up to (times/day of use):4; Covers exposure up to (hours/event):8

Other operational conditions affecting exposure

Unless otherwise stated, Assumes use at ambient temperature;
Assumes use in a 20 m3 room; Assumes use with typical ventilation.

2.2a. Control of worker exposure

Contributing Scenarios	Operational conditions and risk management measures
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Remarks

Not applicable.

2.2b. Control of consumer exposure	
Product Category(ies)	Operational conditions and risk management measures
PC3 - Air care products. Air care, instant action (aerosol sprays)	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):4; For each use event, covers use amounts up to (g):0.1; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):0.25;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC3 - Air care products. Air care, instant action (aerosol sprays). Pesticide, excipient only	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):4; For each use event, covers use amounts up to (g):0.5; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):0.25;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC3 - Air care products. Air care, continuous action (solid and liquid)	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):10; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 35.7; For each use event, covers use amounts up to (g):0.48; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):8;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC3 - Air care products. Air care, continuous action (solid and liquid). Pesticide, excipient only	<p>Operating conditions: Unless otherwise stated; Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 35.7; For each use event, covers use amounts up to (g):0.48; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):8;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Washing car window	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1; Covers use up to (days/year):365; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):0.5; Covers use in a one car garage (34 m3) under typical ventilation; Covers use in room size of (m3):34; For each use event, Covers exposure up to (hours/event):0.02;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Pouring into radiator	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):10; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 428; For each use event, covers use amounts up to (g):2000; Covers use in a one car garage (34 m3) under typical ventilation; Covers use in room size of (m3):34; For each use event, Covers exposure up to (hours/event):0.17;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Lock de-icer	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 214.4; For each use event, covers use amounts up to (g):4; Covers use in a one car garage (34 m3) under typical ventilation; Covers use in room size of (m3):34; For each use event, Covers exposure up to (hours/event):0.25;</p> <p>Risk Management Measures: No specific risk management measure identified</p>

beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Laundry and dish washing products

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):15; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.5;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):27; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):15; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428; For each use event, covers use amounts up to (g):35; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.17;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Waterborne latex wall paint

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1.5; Covers use up to (days/year):4; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):2760; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2.2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Solvent rich, high solid, water borne paint

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):27.5; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):744; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2.2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Aerosol spray can

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):2; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):215; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Removers (paint-, glue-, wall paper-, sealant-remover)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):100; Covers use up to (days/year):3; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):491; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2;

	<p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC9b - Fillers, putties, plasters, modelling clay. Fillers and putty</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):2; Covers use up to (days/year):12; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 35.73; For each use event, covers use amounts up to (g):85; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):4;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC9b - Fillers, putties, plasters, modelling clay. Plasters and floor equalizers</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):2; Covers use up to (days/year):12; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):13800; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC9b - Fillers, putties, plasters, modelling clay. Modelling clay</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 254.4; For each use event, assumes swallowed amount of (g):1;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC9c - Finger paints. Finger paints</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 254.4; For each use event, assumes swallowed amount of (g):1.35;</p> <p>Risk Management Measures: Avoid using at a product concentration greater than (%):5.</p>
<p>PC24 - Lubricants, greases, release products. Liquids</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):100; Covers use up to (days/year):4; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 468; For each use event, covers use amounts up to (g):2200; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.17;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC24 - Lubricants, greases, release products. Pastes</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):20; Covers use up to (days/year):10; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 468; For each use event, covers use amounts up to (g):34; For each use event, Covers exposure up to (hours/event):4;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC24 - Lubricants, greases, release products. Sprays</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):73; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.17;</p> <p>Risk Management Measures: No specific risk management measure identified</p>

PC35 - Washing and cleaning products (including solvent based products). Laundry and dish washing products

beyond those operational conditions stated.

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):15; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.5;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC35 - Washing and cleaning products (including solvent based products). Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):27; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC35 - Washing and cleaning products (including solvent based products). Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):15; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428; For each use event, covers use amounts up to (g):35; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.17;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC38 - Welding and soldering products (with flux coatings or flux cores.), flux products

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):20; Covers use up to (days/year):365; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):12; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):1;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation and references

Health

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated.

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

4. Guidance for Downstream User (DU) to check compliance with the Exposure scenario

Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

1. Exposure scenario

Uses in Coatings, Consumer.

Use Descriptor

Sector of use

SU21 - Private households (= general public = consumers)

Product category

PC1 - Adhesives, sealants

PC4 - Anti-Freeze and de-icing products

PC8 - Biocidal products (e.g. Disinfectants, pest control)

PC9 - Coatings and Paints, Fillers, Putties, Thinners

PC15 - Non-metal-surface treatment products

PC18 - Ink and toners

PC23 - Leather tanning, dye, finishing, impregnation and care products

PC24 - Lubricants, greases, release products

PC31 - Polishes and wax blends

PC34 - Textile dyes, finishing and impregnating products; including bleaches and other processing aids

Environmental release category

ERC8a - Wide dispersive indoor use of processing aids in open systems

ERC8d - Wide dispersive outdoor use of processing aids in open systems

Specific Environmental Release Category

ESVOC SpERC 8.3c.v1.

Processes, tasks, activities covered

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning. Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.

2. Operational conditions and risk management measures

2.1. Control of environmental exposure

Product characteristics

Substance is complex UVCB. Predominantly hydrophobic.

Amounts used

Maximum daily site tonnage (kg/day): 6

Frequency and duration of use Continuous release

Emission Days (days/year): 365

Environment factors not influenced by risk management

Local freshwater dilution factor: 10

Local marine water dilution factor: 100

Other operational conditions of use affecting environmental exposure

Release fraction to air from process (initial release prior to RMM): 0.985

Release fraction to wastewater from process (initial release prior to RMM): 0.01

Release fraction to soil from process (initial release prior to RMM): 0.005

Arc White Spirits

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Conditions and measures related to municipal sewage treatment plant

Estimated substance removal from wastewater via domestic sewage treatment (%): 93.7

Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d): 1900

Assumed domestic sewage treatment plant flow (m³/d): 2000

Conditions and measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or national regulations.

2.2. Control of exposure - Workers or Consumers

Product characteristics

Physical state

Liquid, vapour pressure > 10 Pa at STP

Vapour pressure

231 Pa

Concentration of substance in product

Covers percentage substance in the product up to 100 % (unless stated differently).

Amounts used

Unless otherwise stated, Covers use amounts up to (g) : 13800; Covers skin contact area up to (cm²): 857.5.

Frequency and duration of use

Unless otherwise stated, Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers exposure up to (hours/event):6

Other operational conditions affecting exposure

Unless otherwise stated, Assumes use at ambient temperature;

Assumes use in a 20 m³ room; Assumes use with typical ventilation.

2.2a. Control of worker exposure

Contributing Scenarios	Operational conditions and risk management measures
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Remarks

Not applicable.

2.2b. Control of consumer exposure	
Product Category(ies)	Operational conditions and risk management measures
PC1 - Adhesives, sealants. Glues, hobby use	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):30; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 35.73; For each use event, covers use amounts up to (g):9; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):4;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC1 - Adhesives, sealants. Glues DIY-use (carpet glue, tile glue, wood parquet glue)	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):30; Covers use up to (days/year):1; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 110; For each use event, covers use amounts up to (g):6390; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):6;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC1 - Adhesives, sealants. Glue from spray	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):30; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 35.73; For each use event, covers use amounts up to (g):85.05; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):4;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC1 - Adhesives, sealants. Sealants	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):30; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 35.73; For each use event, covers use amounts up to (g):75; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):1;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Washing car window	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1; Covers use up to (days/year):365; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):0.5; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.02;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Pouring into radiator	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):10; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428; For each use event, covers use amounts up to (g):2000; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.17;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC4 - Anti-Freeze and de-icing products. Lock de-icer	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 214.4; For each use event, covers use amounts up to (g):4; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.25;</p>

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Laundry and dish washing products

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):15; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.5;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):5; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):27; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC8 - Biocidal products (e.g. Disinfectants, pest control). Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):15; Covers use up to (days/year):128; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428; For each use event, covers use amounts up to (g):35; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.17;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Waterborne latex wall paint

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1.5; Covers use up to (days/year):4; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):2760; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2.2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Solvent rich, high solid, water borne paint

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):27.5; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):744; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2.2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Aerosol spray can

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):2; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):215; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC9a - Coatings and paints, thinners, paint removers. Removers (paint-, glue-, wall paper-, sealant-remover)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):100; Covers use up to (days/year):3; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):491; Covers use under typical household

	<p>ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):2;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC9b - Fillers, putties, plasters, modelling clay. Fillers and putty	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):2; Covers use up to (days/year):12; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 35.73; For each use event, covers use amounts up to (g):85; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):4;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC9b - Fillers, putties, plasters, modelling clay. Plasters and floor equalizers	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):2; Covers use up to (days/year):12; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 857.5; For each use event, covers use amounts up to (g):13800; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):2;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC9b - Fillers, putties, plasters, modelling clay. Modelling clay	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 254.4; For each use event, assumes swallowed amount of (g):1;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC9c - Finger paints. Finger paints	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 254.4; For each use event, assumes swallowed amount of (g):1.35;</p> <p>Risk Management Measures: Avoid using at a product concentration greater than (%):5.</p>
PC15 - Non-metal-surface treatment products. Waterborne latex wall paint	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):1.5; Covers use up to (days/year):4; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 428.75; For each use event, covers use amounts up to (g):2760; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):2.2;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC15 - Non-metal-surface treatment products. Solvent rich, high solid, water borne paint	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):27.5; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 428.75; For each use event, covers use amounts up to (g):744; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):2.2;</p> <p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
PC15 - Non-metal-surface treatment products. Aerosol spray can	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):2; Covers use up to (times/day of use):1; For each use event, covers use amounts up to (g):215; Covers use in a one car garage (34 m3) under typical ventilation; Covers use in room size of (m3):34; For each use event, Covers exposure up to (hours/event):0.33;</p>

PC15 - Non-metal-surface treatment products. Removers (paint-, glue-, wall paper-, sealant-remover)

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):3; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 857.5; For each use event, covers use amounts up to (g):491; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC18 - Ink and toners. Inks and toners.

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):10; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 71.4; For each use event, covers use amounts up to (g):40; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):2.2;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC23 - Leather tanning, dye, finishing, impregnation and care products. Polishes, wax / cream (floor, furniture, shoes)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):29; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 430; For each use event, covers use amounts up to (g):56; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):1.23;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC23 - Leather tanning, dye, finishing, impregnation and care products. Polishes, spray (furniture, shoes)

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):8; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 430; For each use event, covers use amounts up to (g):56; Covers use under typical household ventilation; Covers use in room size of (m³):20; For each use event, Covers exposure up to (hours/event):0.33;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC24 - Lubricants, greases, release products. Liquids

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):100; Covers use up to (days/year):4; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 468; For each use event, covers use amounts up to (g):2200; Covers use in a one car garage (34 m³) under typical ventilation; Covers use in room size of (m³):34; For each use event, Covers exposure up to (hours/event):0.17;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC24 - Lubricants, greases, release products. Pastes

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):20; Covers use up to (days/year):10; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 468; For each use event, covers use amounts up to (g):34; For each use event, Covers exposure up to (hours/event):4;

Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.

PC24 - Lubricants, greases, release products. Spray Bottle

Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):6; Covers use up to (times/day of use):1; Covers skin contact area up to (cm²): 428.75; For each use event, covers use amounts up to (g):73; Covers use under typical household ventilation; Covers

<p>PC31 - Polishes and wax blends. Polishes, wax / cream (floor, furniture, shoes)</p>	<p>use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):0.17;</p>
	<p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):29; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 430; For each use event, covers use amounts up to (g):142; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):1.23;</p>
	<p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC31 - Polishes and wax blends. Polishes, spray (furniture, shoes)</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):50; Covers use up to (days/year):8; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 430; For each use event, covers use amounts up to (g):35; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):0.33;</p>
	<p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>
<p>PC34 - Textile dyes, finishing and impregnating products; including bleaches and other processing aids</p>	<p>Operating conditions: Unless otherwise stated, Covers concentrations up to (%):10; Covers use up to (days/year):365; Covers use up to (times/day of use):1; Covers skin contact area up to (cm2): 857.5; For each use event, covers use amounts up to (g):115; Covers use under typical household ventilation; Covers use in room size of (m3):20; For each use event, Covers exposure up to (hours/event):1;</p>
	<p>Risk Management Measures: No specific risk management measure identified beyond those operational conditions stated.</p>

3. Exposure estimation and references

Health

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated.

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

4. Guidance for Downstream User (DU) to check compliance with the Exposure scenario

Health

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Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Environment

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Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).