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Revision nr: 3.0

Issue date: 17/08/2022

Supersedes : 02/06/2022

JET A 1

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

1.1. Product identifier

Product form : Mixture
Trade name : JET A 1

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use, Professional uses, Consumer use

Use of the substance/mixture : Further information: see exposure scenarios attached to this safety data sheet.

Title	Use descriptors
Distribution of substance (ES Ref.: 01a)	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ESVOC SPERC 1.1b.v1
Use as an intermediate (ES Ref.: 01b)	SU8, SU9, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15, ERC6a, ESVOC SPERC 6.1a.v1
Industrial use in cleaning agents : Not applicable EC 265-198-5) (ES Ref.: 04a)	PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13, ERC4, ESVOC SPERC 4.4a.v1
Use as a fuel in industrial settings (ES Ref.: 12a)	PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16, ERC7, ESVOC SPERC 7.12a.v1
Use as a fuel in professional settings (ES Ref.: 12b)	PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16, ERC9a, ERC9b, ESVOC SPERC 9.12b.v1
Use as a fuel (ES Ref.: 12c)	PC13, ERC9a, ERC9b, ESVOC SPERC 9.12c.v1
Manufacture of substance (ES Ref.: 01)	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15, ERC1, ESVOC SPERC 1.1.v1
Formulation & (re)packing of substances and mixtures (ES Ref.: 02)	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15, ERC2, ESVOC SPERC 2.2.v1

Full text of use descriptors: see section 16

1.2.2. Uses advised against

Title	Use descriptors	Reason
Uses in coatings: Professional uses	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19, ERC8a, ERC8d	General protective and hygienic measures
Uses in coatings: Consumer uses	PC1, PC4, PC5, PC9a, PC9b, PC9c, PC10, PC15, PC18, PC23, PC23, PC24, PC24, PC31, PC34, PC34, ERC8a, ERC8d	General protective and hygienic measures
Use in cleaning agents: Professional uses	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, ERC8a, ERC8d	General protective and hygienic measures
Use in cleaning agents: Consumer uses	PC0, PC3, PC4, PC8, PC9a, PC24, PC35, PC38, ERC8a, ERC8d	General protective and hygienic measures
Lubricants: Professional uses (Low environmental release)	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC9a, ERC9b	General protective and hygienic measures
Lubricants: Professional uses (High environmental release)	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC8a, ERC8d	General protective and hygienic measures



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Title	Use descriptors	Reason
Lubricants: Consumer uses (Low environmental release)	PC1, PC24, PC31, ERC9a, ERC9b	General protective and hygienic measures
Lubricants: Consumer uses (High environmental release)	PC1, PC24, PC31, ERC8a, ERC8d	General protective and hygienic measures
Metal working fluids / rolling oils: Professional uses	PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, ERC8a, ERC8d	
Use as binders and release agents: Professional uses	PROC1, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b, PROC10, PROC11, PROC14, ERC8a, ERC8d	General protective and hygienic measures
Use in agrochemicals: Professional uses	PROC1, PROC2, PROC4, PROC8a, PROC8b, PROC11, PROC13, ERC8a, ERC8d	General protective and hygienic measures
Use in agrochemicals: Consumer uses	PC12, PC27, ERC8a, ERC8d	General protective and hygienic measures
Road and construction applications: Professional uses	PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, ERC8d, ERC8f	General protective and hygienic measures
Explosives manufacture & use: Professional uses	PROC1, PROC3, PROC5, PROC8a, PROC8b, ERC8e	General protective and hygienic measures

Full text of use descriptors: see section 16

Details of the supplier of the safety data sheet

Supplier

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Only Representative

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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)

SECTION 2: Hazards identification

Classification of the substance or mixture

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

Flam. Liq. 3 H226 Skin Irrit. 2 H315 STOT SE 3 H336 H304 Asp. Tox. 1 Aquatic Chronic 2 H411

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



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2.2. Label elements

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

Hazard pictograms (CLP)









Signal word

: Danger

Contains

: Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).], Kerosine (petroleum)

Hazard statements (CLP)

: H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.

P331 - Do NOT induce vomiting.

Child-resistant fastening Tactile warning

: Applicable: Applicable

2.3. Other hazards

Other hazards

: Vapours can form explosive mixtures with air. Results of PBT and vPvB assessment: Not applicable. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

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 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures



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Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]	(CAS-No.) 64742-81-0 (EC-No.) 265-184-9 (EC Index) 649-423-00-8 (REACH-no) 01-2119462828-25-0109	≤ 100	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Kerosine (petroleum)	(CAS-No.) 8008-20-6 (EC-No.) 232-366-4 (EC Index) 649-404-00-4 (REACH-no) 01-2119485517-27-0133	≤ 100	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H336

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective equipment to

use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the

doctor in attendance.

Inhalation : Remove casualty to fresh air and keep warm and at rest. Give oxygen or artificial respiration

if necessary. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. In

case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses,

if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult

always a physician.

Ingestion : Rinse mouth thoroughly with water. Do NOT induce vomiting. Get immediate medical

advice/attention.

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

Inhalation : Harmful if inhaled. High concentration of vapours may induce: headache, dizziness,

drowsiness, nausea and vomiting.

Skin contact : Causes skin irritation. The following symptoms may occur: erythema (redness).

Eyes contact : Contact with eyes may cause irritation. The following symptoms may occur: erythema

(redness).

Ingestion : May be fatal if swallowed and enters airways. The following symptoms may occur: Nausea,

Diarrhoea, Unconsciousness.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Flammable liquid and vapour. Heating will cause a rise in pressure with a risk of bursting.

Explosion hazard : Can form explosive mixtures with air. Vapours are heavier than air and may travel

considerable distance to an ignition source and flash back to source of vapours.



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Hazardous decomposition products in case of : Carbon oxides (CO, CO2). Organic compounds. inorganic compounds. Hydrogen sulfide. Sulphur oxides. sulphuric acid.

Advice for firefighters

Firefighting instructions

: Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus.

Other information

: Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures 6.1.

6.1.1. For non-emergency personnel

For non-emergency personnel

: Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof equipment. Use only non-sparking tools. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

6.1.2. For emergency responders

For emergency responders

: Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

<u>6</u>.2. **Environmental precautions**

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up

: Stop leak if safe to do so. Dam up the liquid spill. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Recover large spills by pumping (use an explosion proof or hand pump). Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation. Cover the spilled liquid product with foam to slow down evaporation.

Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

Precautions for safe handling 7.1.

Additional hazards when processed Precautions for safe handling

- : Vapours may form explosive mixture with air.
- : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.



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Hygiene measures

: Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage. Take precautionary measures against static discharge.

Incompatible substances or mixtures

Heat and ignition sources

: Oxidizing agent.

: Keep away from open flames, hot surfaces and sources of ignition. Do not smoke. Keep out $\,$

of direct sunlight.

Special rules on packaging

Packaging materials

USA - NIOSH

: Tactile warning. Child-resistant fastening. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep in properly labelled containers.

hydrocarbon vapor (Kerosene/Jet fuels)

100 mg/m³

Keep only in the original container. Suitable material: Mild steel, Stainless steel. Unsuitable

Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum

material: Synthetic material.

7.3. Specific end use(s)

Further information: see exposure scenarios attached to this safety data sheet.

NIOSH REL TWA

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0) OEL TWA [ppm] Portugal 200 ppm (restricted to conditions in which there are negligible aerosol exposures) USA - ACGIH ACGIH OEL TWA 200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures-total hydrocarbon vapor (Kerosene/Jet fuels) Kerosine (petroleum) (8008-20-6) **OEL TWA** 200 mg/m³ (application limited to exposure Belgium conditions to negligible aerosols-total hydrocarbon vapor) Bulgaria **OEL TWA** 300 mg/m³ Poland NDS (OEL TWA) 100 mg/m³ 300 mg/m³ Poland NDSCh (OEL STEL) 200 ppm (restricted to conditions in which there are Portugal OEL TWA [ppm] negligible aerosol exposures) Spain VLA-ED (OEL TWA) [1] 200 mg/m³ (aviation fuel) MAK (OEL TWA) [1] 350 mg/m³ (vapour) Switzerland 5 mg/m³ (aerosol, inhalable dust) Switzerland MAK (OEL TWA) [2] 50 ppm (vapour) Switzerland KZGW (OEL STEL) 20 mg/m³ (aerosol, inhalable dust) 700 mg/m³ (vapour) Switzerland KZGW (OEL STEL) [ppm] 100 ppm (vapour) USA - ACGIH ACGIH OEL TWA 200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures-total



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: Personal air monitoring. Room air monitoring. Recommended monitoring procedures

8.2. Exposure controls

Additional information

Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion

and exposure. See Section 7 for information on safe handling. Use only outdoors or in a well-ventilated area. Take precautionary measures against static discharges. Ensure equipment is adequately earthed. Use explosion-proof machinery, apparatus, ventilation

facilities, tools etc.

Personal protective equipment : The type of protective equipment must be selected according to the concentration and

amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: Polyvinylalcohol

(PVA). Breakthrough time: 8h. Thickness > 0.3 mm. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place

concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): goggles. Use splash goggles when eye contact due to

splashing is possible

Body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN

EN 140). full face mask (DIN EN 136). Filter type: respirator with A filter. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained

breathing apparatus must be used. (EN 137)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental

protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : liquid.
Colour : Colourless.

Odour : petroleum hydrocarbon odour.

Odour threshold : No data available pH : Not applicable Relative evaporation rate (butylacetate=1) : 0,212138

Melting / freezing point : -47 °C

Freezing point : No data available Initial boiling point and boiling range : $130 - 300 \,^{\circ}\text{C}$

Flash point : ≥ 38 °C (closed cup)

Auto-ignition temperature : 228,85 °C

Decomposition temperature : No data available

Flammability : Not applicable, liquid

Vapour pressure : < 1 kPa (20°C)

Vapour pressure : $< 1 \text{ kPa } (20^{\circ})$ Vapour density : $4,5 \text{ kg/m}^3$ Relative density : 0,8

Density : $0,775 - 0,84 \text{ g/ml } (15^{\circ}\text{C})$

Solubility : Water: UVCB

Partition coefficient n-octanol/water : UVCB



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Kinematic viscosity : < 0,08 cm²/s

Dynamic viscosity : No data available

Explosive properties : Not applicable. The study does not need to be conducted because there are no chemical

groups associated with explosive properties present in the molecule.

Oxidising properties : Not applicable. The classification procedure needs not to be applied because there are

no chemical groups present in the molecule which are associated with oxidising

properties.

Explosive limits : 0,7 vol %

7,7 vol %

Particle size : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable Particle aspect ratio : Not applicable Particle aggregation state : Not applicable Particle agglomeration state : Not applicable Particle specific surface area : Not applicable Particle dustiness : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : 0,212138

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour. Reference to other sections 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air. No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid the build-up of electrostatic charge. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Flammable vapours can accumulate in head space of closed systems. Protect from sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

oxidising substances. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Reference to other sections 5.2.

SECTION 11: Toxicological information

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

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)



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Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0)

LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5200 mg/m³ (Exposure time: 4 h)

Kerosine (petroleum) (8008-20-6)	
LD50/oral/rat	> 5000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5,28 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

pH: Not applicable

: Not classified (Based on available data, the classification criteria are not met) Serious eye damage/irritation

pH: Not applicable

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met) : Not classified (Based on available data, the classification criteria are not met) Carcinogenicity : Not classified (Based on available data, the classification criteria are not met) Reproductive toxicity

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : May be fatal if swallowed and enters airways.

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Kinematic viscosity	< 8 mm²/s

Other information

: Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by 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

Other information

: Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-

term (acute)

: Not classified

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

(chronic)



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Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0)

LC50 - Fish [1]	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
LC50 - Fish [2]	1740 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
EC50 - Crustacea [1]	4720 mg/l (Exposure time: 48 h - Species: Den-dronereides heteropoda)	

12.2. Persistence and degradability

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Persistence and degradability	Substance is complex UVCB.

12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water	UVCB

Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).] (64742-81-0)

BCF - Fish [1]	61 – 159
Partition coefficient n-octanol/water	3,3 - 6

Kerosine (petroleum) (8008-20-6)	
Partition coefficient n-octanol/water	3,3 - 6

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

JET A 1	
Results of PBT assessment	Not applicable

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by 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 %

12.7. Other adverse effects

Other adverse effects : No data available



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SECTION 13: Disposal considerations

Waste treatment methods 13.1.

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations. Do not pierce or burn, even after use. Never use pressure to empty container.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC)

This material and its container must be disposed of as hazardous waste Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

SECTION 14: Transport information

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

In accordance with ADR / R	D / INIDG / IATA / ADN			
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1863	1863	1863	1863	1863
14.2. UN proper shippi	ng name			•
FUEL, AVIATION, TURBINE	FUEL, AVIATION, TURBINE	Fuel, aviation, turbine	FUEL, AVIATION, TURBINE	FUEL, AVIATION, TURBINE
ENGINE	ENGINE	engine	ENGINE	ENGINE
Transport document descri	ption			
UN 1863 FUEL, AVIATION,	UN 1863 FUEL, AVIATION,	UN 1863 Fuel, aviation,	UN 1863 FUEL, AVIATION,	UN 1863 FUEL, AVIATION,
TURBINE ENGINE, 3, III,	TURBINE ENGINE, 3, III,	turbine engine, 3, III,	TURBINE ENGINE, 3, III,	TURBINE ENGINE, 3, III,
(D/E),	MARINE	ENVIRONMENTALLY	ENVIRONMENTALLY	ENVIRONMENTALLY
ENVIRONMENTALLY	POLLUTANT/ENVIRONME	HAZARDOUS	HAZARDOUS	HAZARDOUS
HAZARDOUS	NTALLY HAZARDOUS			
14.3. Transport hazard	class(es)			
3	3	3	3	3
1 1 1 1 1 1 1 1 1 1	**************************************	1	**************************************	1 1 1 1 1 1 1 1 1 1
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment : Yes	environment : Yes	environment : Yes	environment : Yes	environment : Yes
	Marine pollutant : Yes			
No supplementary information available				

Special precautions for user <u>14.6.</u>

Special precautions for user : No data available

- Overland transport

Classification code (ADR) F1 Special provisions 664 Limited quantities (ADR) 51 Excepted quantities (ADR) E1

Packing instructions (ADR) P001, IBC03, LP01, R001

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Mixed packing provisions (ADR) : MP19
Portable tank and bulk container : T2

instructions (ADR)

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 : V12

(ADR)

Special provisions for carriage - Operation

ADR)

S2

Hazard identification number (Kemler No.) : 30

Orange plates

30 1863

Tunnel restriction code : D/E EAC code : 3YE

- Transport by sea

Special provisions (IMDG) : 223 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



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Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : F1 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 : 3

Transport category (RID) Special provisions for carriage - Packages (RID) : W12 Colis express (express parcels) (RID) : CE4 Hazard identification number (RID) : 30

Maritime transport in bulk according to IMO instruments <u>14.7.</u>

Code: IBC : This product is being carried under the scope of MARPOL Annex I.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	JET A 1; Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]; Kerosine (petroleum)
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	JET A 1; Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified; [A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]; Kerosine (petroleum)
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	JET A 1; Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified;[A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]; Kerosine (petroleum)



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40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified;[A complex combination of hydrocarbons obtained from a petroleum stock by treating with hydrogen to convert organic sulfur to hydrogen sulfide which is removed. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150 °C to 290 °C (302 °F to 554 °F).]; Kerosine (petroleum)

Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

France

No ICPE	Installations classées Désignation de la rubrique	Code Régime	Rayon
4734.text	Produits pétroliers spécifiques et carburants de substitution : essences et naphtas ; kérosènes (carburants d'aviation compris) ; gazoles (gazole diesel, gazole de chauffage domestique et mélanges de gazoles compris) ; fioul lourd ; carburants de substitution pour véhicules, utilisés aux mêmes fins et aux mêmes usages et présentant des propriétés similaires en matière d'inflammabilité et de danger pour l'environnement. La quantité totale susceptible d'être présente dans les installations y compris dans les cavités souterraines étant :		
4734.1a	1. Pour les cavités souterraines et les stockages enterrés : a) Supérieure ou égale à 2 500 t Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t.	A	
4734.1b	1. Pour les cavités souterraines et les stockages enterrés : b) Supérieure ou égale à 1 000 t mais inférieure à 2 500 t Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t.	E	2
4734.1c	1. Pour les cavités souterraines et les stockages enterrés : c) Supérieure ou égale à 50 t d'essence ou 250 t au total, mais inférieure à 1 000 t au total Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t.	DC	2
4734.2a	2. Pour les autres stockages : a) Supérieure ou égale à 1 000 t Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t.	A	2
4734.2b	 2. Pour les autres stockages : b) Supérieure ou égale à 100 t d'essence ou 500 t au total, mais inférieure à 1 000 t au total Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t. 	E	2
4734.2c	2. Pour les autres stockages : c) Supérieure ou égale à 50 t au total, mais inférieure à 100 t d'essence et inférieure à 500 t au total Quantité seuil bas au sens de l'article R. 511-10 : 2 500 t. Quantité seuil haut au sens de l'article R. 511-10 : 25 000 t.	DC	2

Germany

Regulatory reference



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Risk classification according to VbF : A II - Liquids with a flashpoint between 21°C and 55°C

German storage class (LGK) : LGK 3 - Flammable liquids

Hazardous Incident Ordinance (12. BImSchV) : Listed in the 12. BlmSchV (Annex I) under: 2.3.2

Quantity threshold for operational area under § 1 para. 1

Sentence 1: 2500000 kg Sentence 2: 25000000 kg

TA Luft : 5.2.6 Gaseous Emissions during the Processing, Conveying, Transfilling or Storage of Liquid

Organic Substances

Netherlands

: A (2) - Vergiftig voor in water levende organismen Waterbezwaarlijkheid

Contains

kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen -

Borstvoeding

SZW-lijst van reprotoxische stoffen -

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen -

Ontwikkeling

: None of the components are listed : None of the components are listed

: None of the components are listed

: None of the components are listed

: None of the components are listed

15.2. **Chemical safety assessment**

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

2.2	Contains	Added	
2.3	ED text	Added	
6.1	For non-emergency personnel	Modified	
7.1	Precautions for safe handling	Modified	
7.2	Special rules on packaging	Added	
9.2	Information with regard to physical hazard classes	Added	
9.2	Other safety characteristics	Added	
10.4	Conditions to avoid	Modified	
11.2	Adverse health effects caused by endocrine disrupting properties	Added	
12.1	Environmental properties	Modified	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
14.7	Maritime transport in bulk according to IMO instruments	Added	
15.1	12th Ordinance Implementing the Federal Immission Control Act -	Added	

Added



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	12.BImSchV		
15.1	Waterbezwaarlijkheid	Modified	

Abbreviations and acronyms:

ABM = Algemene beoordelingsmethodiek
ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
BTT = Breakthrough time (maximum wearing time)
DMEL = Derived Minimal Effect level
DNEL = Derived No Effect Level
 EC50 = Median Effective Concentration
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
EWC = European waste catalogue
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
NA = Not applicable
NOEC = No observed effect concentration
NOEL: no-observed-effect level
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
N.O.S. = Not Otherwise Specified
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
PNEC = Predicted No Effect Concentration
Quantitative structure-activity relationship (QSAR)
STOT = Specific Target Organ Toxicity
TWA = time weighted average
VOC = Volatile organic compounds
 WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet

: CSR. CONCAWE. ECHA (European Chemicals Agency).

Training advice

: Training staff on good practice. Manipulations are to be done only by qualified and authorised persons.

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
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.



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Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Full text of use descriptors

ERC1	Manufacture of the substance
ERC2	Formulation into mixture
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC5	Use at industrial site leading to inclusion into/onto article
ERC6a	Use of intermediate
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC6c	Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC6d	Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC7	Use of functional fluid at industrial site
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
ERC8f	Widespread use leading to inclusion into/onto article (outdoor)
ERC9a	Widespread use of functional fluid (indoor)
ERC9b	Widespread use of functional fluid (outdoor)
ESVOC SPERC 1.1.v1	Manufacture of substance: Industrial (SU3)
ESVOC SPERC 1.1b.v1	Distribution: Industrial (SU3)
ESVOC SPERC 2.2.v1	Formulation & packing of preparations and mixtures: Industrial (SU10)
ESVOC SPERC 4.4a.v1	Use in cleaning agents: Industrial (SU3)
ESVOC SPERC 6.1a.v1	Manufacture of substances: Industrial (SU8, SU9)
ESVOC SPERC 7.12a.v1	Use as a fuel: Industrial (SU3)
ESVOC SPERC 9.12b.v1	Use as a fuel: Professional (SU22)
ESVOC SPERC 9.12c.v1	Use as a fuel: Consumer (SU21)
PC0	Other
PC1	Adhesives, sealants
PC10	Building and construction preparations not covered elsewhere
PC12	Fertilizers
PC13	Fuels
PC15	Non-metal-surface treatment products
PC18	Ink and Toners
PC23	Leather treatment products
PC24	Lubricants, greases, release products
PC27	Plant protection products
PC3	Air care products
PC31	Polishes and wax blends
PC34	Textile dyes, finishing and impregnating products; including bleaches and other processing aids
PC35	Washing and cleaning products (including solvent based products)



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PC38 Welding and soldering products PC4 Anti-Freeze and De-king products PC5 Artists Supply and Hobby preparations PC8 Bioidal products PC9a Costiges and paints, thinners, paint removers PC9b Fillers, putties, plasters, modelling clay PC9c Finger paints PROC1 Romain production or refinery in closed process without likelihood of exposure or processes with equivalent conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC12 Teatment of articles by dipping and pouring PROC13 Teatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use of fuels PROC16 Use of fuels PROC17 Useriation at high energy conditions in metal working operations PROC18 Ceneral greasing /fubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC20 Use of functional fluids in small devices PROC3 Anisang or functional fluids in small devices PROC3		
PCS Artists Supply and Hobby preparations PC8 Biocidal products PC9a Coatings and paints, thinners, paint removers PC9b Fillers, putties, plasters, modelling clay PC9c Finger paints PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC1 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Use of fuels PROC19 Annual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent conditions PROC2 Chemical production where opportunity for exposure arises PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Clendering operations PROC6 Industrial spraying PROC6 Industrial spraying PROC6 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC8 Transfer of substance or preparation into small containers (dedicated falling line, including weighing)	PC38	Welding and soldering products, flux products
PC8 Biocidal products PC9a Coatings and paints, thinners, paint removers PC9b Fillers, putties, plasters, modelling clay PC9c Finger paints PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Usbriction at high energy conditions in metal working operations PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Chemical production where opportunity for exposure arises PROC3 Abmunfacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Aberlina operations PROC6 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)	PC4	Anti-Freeze and De-icing products
PC99 Coatings and paints, thinners, paint removers PC96 Fillers, putties, plasters, modelling clay PC96 Finger paints PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Useration at high energy conditions in metal working operations PROC18 General greasing //ubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manual activities involving hand levices PROC3 Manual recomment conditions PROC4 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manual activities involving hand evices PROC3 Chemical production where opportunity for exposure arises PROC4 Chemical production where opportunity for exposure arises PROC5 Allowing or blending in batch processes White equivalent containment conditions PROC6 Calendering operations PROC7 Industrial spraying PROC8 Transfer of substance or mixture (charging and discharging) at endicated facilities PROC8 Transfer of substance or preparation into small containers (dedicated flilling line, including weighing) Su8 Manufacture of bulk, large scale chemicals (including petroleum products)	PC5	Artists Supply and Hobby preparations
PC9B Fillers, putties, plasters, modelling clay PC9C Finger paints PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC11 Non industrial spraying PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /fubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment condition PROC2 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC3 Mixing or blending in batch processes PROC4 Chemical production where opportunity for exposure arises PROC5 <	PC8	Biocidal products
PPGS Finger paints PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manual activities in which in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manual activities in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC3 Manual activities in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or preparation into small containers (dedicated facilities) Transfer of substance or preparation into small containers (dedicated facilities) Transfer of substance or preparation into small containers (dedicated filling line, including weighing)	PC9a	Coatings and paints, thinners, paint removers
PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC10 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated filling line, including weighing) SUB Manufacture of bulk, large scale chemicals (including petroleum products)	PC9b	Fillers, putties, plasters, modelling clay
PROC10 Roller application or brushing PROC11 Non industrial spraying PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC3 Mixing or blending in batch processes PROC4 Chemical production where opportunity for exposure arises PROC5	PC9c	Finger paints
PROC13	PROC1	
PROC13 Treatment of articles by dipping and pouring PROC14 Tabletting, compression, extrusion, pelettisation, granulation PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at processed facilities PROC9 Transfer of substance or mixture (charging and discharging) at processed facilities PROC9 Transfer of substance or mixture (charging and discharging) at processed facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture (charging and discharging) at processed facilities PROC9 Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC10	Roller application or brushing
PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) SUS Manufacture of bulk, large scale chemicals (including petroleum products)	PROC11	Non industrial spraying
PROC15 Use as laboratory reagent PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC9 Transfer of substance or preparation into small containers (dedicated facilities) PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) SUB Manufacture of bulk, large scale chemicals (including petroleum products)	PROC13	Treatment of articles by dipping and pouring
PROC16 Use of fuels PROC17 Lubrication at high energy conditions in metal working operations PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC20 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) SUS Manufacture of bulk, large scale chemicals (including petroleum products)	PROC14	Tabletting, compression, extrusion, pelettisation, granulation
PROC18 General greasing /lubrication at high kinetic energy conditions PROC19 Manual activities involving hand contact PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC2 Use of functional fluids in small devices PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC6 Calendering operations PROC7 Industrial spraying PROC8 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8 Transfer of substance or preparation into small containers (dedicated facilities including weighing) SU8 Manufacture of bulk, large scale chemicals (including petroleum products)	PROC15	Use as laboratory reagent
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PROC6 Calendering operations PROC7 Industrial spraying PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) SU8 Manufacture of bulk, large scale chemicals (including petroleum products)	PROC4	Chemical production where opportunity for exposure arises
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SU8 Manufacture of bulk, large scale chemicals (including petroleum products)	PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU9 Manufacture of fine chemicals	SU8	Manufacture of bulk, large scale chemicals (including petroleum products)
	SU9	Manufacture of fine chemicals

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Classification according to Regulation (EC) No. 1272/2008 [CLP] Labelling according to Regulation (EC) No. 1272/2008 [CLP]

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