Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

EC No.

Product name Distillates (petroleum), light catalytic cracked

Product description V3008- CUTTER STOCK- Distillates (petroleum), light catalytic cracked

265-060-4

Trade Name CUTTER STOCK
Product code CUTTER
CAS No. 64741-59-9

REACH Registration No. 01-2119489734-23-xxxx

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

Identified use(s)

 No
 Exposure Scenario
 Page:

 1
 Distribution of Distillates (petroleum), light catalytic cracked
 12

 2
 Formulation and (re)packing of Distillates (petroleum), light catalytic cracked
 15

 3
 Use as a fuel (Industrial)
 18

 4
 Use as a fuel (Professional)
 21

Uses advised against

Anything other than the above.

1.3 Details of the supplier of the safety data sheet

Company Identification Vitol SA

Place des Bergues 3 1201 Geneva Switzerland +31 10 498 7200 +31 10 452 9545 xreach@vitol.com

1.4 Emergency Telephone Number

E-mail (competent person)

Telephone

Fax

Emergency Phone No. +44 (0) 1235 239 670, 24/7 Language(s) spoken: All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Flam. Liq. 3; H226

Asp. Tox. 1; H304 Skin Irrit. 2; H315 Acute Tox. 4; H332 Carc. 1B; H350

STOT RE 2; H373 (Thymus, Liver, Blood effects)

Aquatic Acute 1; H400 Aquatic Chronic 1; H410

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product description V3008- CUTTER STOCK- Distillates (petroleum), light catalytic cracked

Hazard Pictogram(s)









Signal Word(s) DANGER

Hazard Statement(s) H226: Flammable liquid and vapour.

Page: 1 of 24

Precautionary Statement(s)

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation. H332: Harmful if inhaled. H350: May cause cancer.

H373: May cause damage to organs through prolonged or repeated exposure:

Thymus, Liver, Blood effects

H410: Very toxic to aquatic life with long lasting effects.

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

ignition sources. No smoking.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

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 or

doctor/physician.
P331: Do NOT induce vomiting.

May form explosive mixture with air. The vapour is heavier than air; beware of pits and confined spaces. May cause irritation to eyes and air passages. 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Other hazards

SUBSTANCE	CAS No.	EC No.	%W/W
Distillates (petroleum), light catalytic	64741-59-9	265-060-4	100
cracked			

SECTION 4: FIRST AID MEASURES



2.3

4.1 Description of first aid measures

Self-protection of the first aider

providing aid to give mouth-to-mouth resuscitation. Avoid all contact. Do not ingest. If swallowed then seek immediate medical assistance.

Hydrogen sulphide (H2S) can accumulate in the headspace of storage tanks and

reach potentially hazardous concentrations.

The vapour is heavier than air; beware of pits and confined spaces. If it is suspected that fumes are still present, the responder should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person

If there is any suspicion of inhalation: A self contained breathing apparatus should be worn. Remove to fresh air immediately.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical advice/attention if you feel unwell.

IF ON SKIN (or hair): Remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED: Do not induce vomiting because of risk of aspiration into the lungs. If vomiting occurs spontaneously, keep head below hips to prevent

H2S Warning:

Inhalation

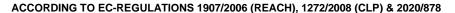
Skin contact

Eye contact

Ingestion

Page: 2 of 24

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

4.2 Most important symptoms and effects, both acute and delayed

aspiration. If unconscious, place in recovery position and get medical attention immediately. Do not give anything by mouth to an unconscious person. Get medical attention immediately. Do not wait for symptoms to appear.

4.3 Indication of any immediate medical attention and special treatment needed

Irritation of the respiratory tract. Causes skin irritation. Slightly irritant to eyes. Aspiration into the lungs may cause chemical pneumonitis, which can be fatal. Ingestion may cause irritation of the gastrointestinal tract. Nausea, vomiting and diarrhoea

Notes to a physician:

Treat symptomatically.

IF INHALED: If unconscious, place in recovery position and get medical attention immediately. Administer oxygen if available and artificial respiration if necessary. IF SWALLOWED: Do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

5.2

Suitable extinguishing media

Unsuitable extinguishing media

Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Extinguish with sand or dry chemical. Foam, Carbon dioxide, Water fog or dry powder.

Do not use water jet. Direct water jet may spread the fire.

Flammable liquid and vapour. The vapour is heavier than air; beware of pits and confined spaces. Will float and can be reignited on surface water. Decomposes in a fire giving off toxic fumes: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. If sulphur compounds are present in appreciable amounts, combustion products may include also H2S and SOx (sulfur oxides) or sulfuric acid.

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid release to the environment. Dike fire control water for later disposal.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

H2S Warning:

Small spillages: Large spillages:

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

Caution - spillages may be slippery. Ensure operatives are trained to minimise exposures. Ensure suitable personal protection during removal of spillages. Eliminate sources of ignition. Shut off leaks if without risk. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid all contact with substance. Ensure adequate ventilation. Do not breathe vapour. Do not ingest. If swallowed then seek immediate medical assistance. Do not use sparking tools.

Product may release Hydrogen Sulphide. Exposure controls - These controls may include: Segregation of areas, Access only to authorised persons, Permit to work systems, Confined space working procedures, Area H2S alarms, Personal H2S alarms, Personal escape sets, H2S awareness training. Please see section 8 for appropriate personal protection equipment.

Wear flame-resistant antistatic protective clothing.

Evacuate the area and keep personnel upwind. Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity. Avoid all contact. Wear chemical protection suit and breathing apparatus. See Also Section: 8

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body. If necessary: Dike area to contain the spill and prevent releases to sewers, drains, or other waterways.

Provided it is safe to do so, isolate the source of the leak. The vapour is heavier than air; beware of pits and confined spaces. Ensure that the equipment is

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



CUTTER STOCK V3008

Spillages onto land:

adequately grounded. Allow small spillages to evaporate provided there is adequate ventilation.

In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Dispose of this material and its container as hazardous waste.

Small spillages: Allow small spillages to evaporate provided there is adequate ventilation. Wear flame-resistant antistatic protective clothing.

Large spillages: Cover spillage with foam to reduce evaporation. Do not use water jet.

Spillages on water or at sea:

Collect as much as possible in clean container for reuse or disposal.

Small spillages: Contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents.

Large spillages: Open waters should be contained with floating barriers or other mechanical means and recovered, only if this is strictly necessary. Otherwise control the spreading of the spillage, and let the substance evaporate naturally.

See Section: 8,13

6.4 Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

H2S Warning:

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

Storage measures

Incompatible materials

7.3 Specific end use(s)

Obtain special instructions before use. Keep away from sources of ignition. - No smoking. Use only outdoors or in a well-ventilated area. Prevent vapour build up by providing adequate ventilation during and after use. Take action to prevent static discharges. Use non-sparking tools. All parts of the plant and equipment should be electrically bonded together and connected to earth. Electrical continuity should be checked at regular intervals. Antistatic clothing and footwear should be used. The vapour is heavier than air; beware of pits and confined spaces. Avoid all contact with substance. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe vapour. See Section: 8. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned.

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. These controls may include: Segregation of areas, Access only to authorised persons, Permit to work systems, Confined space working procedures, Area H2S alarms, Personal H2S alarms, Personal escape sets, H2S awareness training. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep only in original packaging. Keep containers properly sealed when not in use. Protect from sunlight. Containers of this material may be hazardous when empty since they retain product residue. Empty container may contain product residue which may result in flammable or explosive vapours inside the container.

Store in a cool/low-temperature, well-ventilated (dry) place away from heat and

ignition sources.

Keep only in the original container.

Suitable containers: Mild steel, Stainless steel.

Keep away from oxidising agents. Strong acids and Alkalis.

Unsuitable containers: Synthetic materials See Section: 1.2 and/or Exposure Scenario

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

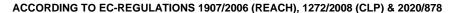
8.1 Control parameters

8.1.1 Occupational exposure limits Not established

8.1.2 Biological limit value Not established

Page: 4 of 24

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

8.1.3 PNECs and DNELs

PNEC: Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the environmental toxicity (HC5) of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore individual environmental compartments PNECs are not available for this product.

Distillates (petroleum), light catalytic cracked Derived No-Effect Level	Oral	Inhalation	Dermal
Worker - Long Term - Systemic effects	-	27.3 mg/m³	2.4 mg/kg bw/day
Worker - Acute - Systemic effects	-	2230 mg/m³	-
Consumer - Long Term - Systemic effects	1 mg/kg bw/day	-	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction if dusts, fumes or vapours are likely to be evolved. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Guarantee that the eye flushing systems and safety showers are located close to the working place.

8.2.2 Individual protection measures, such as personal protective equipment

Fuels are typically used, transferred and transported in closed systems. If exposure is likely (i.e. during sampling) the following advice may be appropriate. Keep good industrial hygiene. Always wash hands before smoking, eating and drinking. Do not eat, drink or smoke at the work place.

Refer to annexes for exposure scenarios detailing use specific exposure controls.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Use eye protection according to EN 166, designed to protect against liquid splashes.

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Recommended: Nitrile rubber

Body protection: Wear anti-static clothing and shoes.

Small scale: Wear suitable coveralls to prevent exposure to the skin.

Large scale: Chemical protection suit

Respiratory protection



When the product is heated/ln case of inadequate ventilation wear respiratory protection. The use of a high efficiency filter (EN143) is recommended. Filter type A2.

Closed system(s): Not normally required

Thermal hazards Not applicable

8.2.3 Environmental exposure controls Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Liquid
Colour Pale yellow
Odour Diesel Odour

Page: 5 of 24

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



CUTTER STOCK V3008

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature Decomposition temperature

Kinematic viscosity

Solubility

Partition coefficient: n-octanol/water (log value)

Vapour pressure

Density and/or relative density

Relative vapour density Particle characteristics

Conditions to avoid

Carcinogenicity

Incompatible materials

9.2 Other information

10.4

10.5

10.6

> - 20 °C

150 - 411 °C at 101 kPa

Flammable liquid and vapour.

Not established > 56 °C at 101 kPa > 250 °C at 101 kPa Not established Not established

> 1.1 mm²/s at 40 °C Practically insoluble Calculated as 3.9 - 6 0.4 kPa at 20°C

0.89 - 0.99 g/cm3 at 15 °C

> 1 (Air = 1)Not established

Vapour may create explosive atmosphere.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Stable under normal conditions. Reacts with - Strong oxidising agents 10.2 **Chemical stability** Stable under normal conditions. Hazardous polymerisation will not occur.

Product may release Hydrogen Sulphide.

10.3 Possibility of hazardous reactions

Vapours are heavier than air and may travel considerable distances to a source

of ignition and flashback. Product may release Hydrogen Sulphide.

Elevated temperature: > 50 °C

Keep away from heat, sources of ignition and direct sunlight. Keep away from oxidising agents. Strong acids and Alkalis.

A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. Decomposes in a fire giving off toxic fumes:

COx, H2S, Sox.

SECTION 11: TOXICOLOGICAL INFORMATION

Hazardous decomposition products

11.1 Information on hazard classes as defined in All test data taken from existing ECHA registrations for the substances

Regulation (EC) No 1272/2008 mentioned.

Acute toxicity - Ingestion Based upon the available data, the classification criteria are not met.

LD50 (oral,rat) mg/kg: >2000 (OECD 401) Acute toxicity - Inhalation Acute Tox. 4: Harmful if inhaled.

LC50 (inhalation,rat) mg/l/4h: 4.65 (OECD 403)

Acute toxicity - Skin contact Based upon the available data, the classification criteria are not met.

LD50 (skin,rabbit) mg/kg: >2000 (OECD 402) Skin corrosion/irritation

Skin Irrit. 2; Causes skin irritation.

Irritating to skin. (rabbit) (OECD 404)

Serious eye damage/irritation Based upon the available data, the classification criteria are not met.

Not irritating to eyes. (rabbit) (OECD 405)

Respiratory or skin sensitisation Based upon the available data, the classification criteria are not met.

Sensitisation (guinea pig) - Negative (OECD 406)

Germ cell mutagenicity Based upon the available data, the classification criteria are not met.

ECHA Registration Endpoint summary:

Not classified.

Carc. 1B; May cause cancer. ECHA Registration Endpoint summary:

Positive (mouse)

Reproductive toxicity Based upon the available data, the classification criteria are not met.

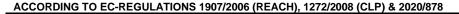
> Reproductive toxicity: Negative (rat) (OECD 421) Developmental toxicity: Negative (rat) (OECD 414)

STOT - Single Exposure Based upon the available data, the classification criteria are not met.

Weight of evidence approach.

Page: 6 of 24

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

STOT RE 2; May cause damage to organs through prolonged or repeated STOT - Repeated Exposure

exposure.

Oral: No data available.

Inhalation: NOAEC 0.88 mg/l (rat) Local effects (OECD 413)

NOAEC 1.71 mg/l (rat) Systemic effects

Dermal: NOEL 25 mg/kg bw/day (rat) (OECD 411)

Asp. Tox. 1; May be fatal if swallowed and enters airways.

Kinematic viscosity: > 1.5 mm²/s @ 40 °C

11.2 Information on other hazards

Long term (chronic):

12.2

Aspiration hazard

11.2.1 Endocrine disrupting properties This product does not contain a substance that has endocrine disrupting

properties with respect to humans as no components meets the criteria.

11.2.2 Other information None known

SECTION 12: ECOLOGICAL INFORMATION

Persistence and degradability

12.1 **Toxicity** Aquatic Acute 1: Very toxic to aquatic life.

Aquatic Chronic 1; Very toxic to aquatic life with long lasting effects.

Short Term (acute): LC50 (fish) mg/l 0.21 (OECD 203)

The aquatic toxicity was estimated using the PETROTOX computer model.

Estimated: 0.029 mg/l (Fish) Inherently biodegradable

12.3 Bioaccumulative potential Substance is complex UVCB. Standard tests for this endpoint are intended for

single substances and are not appropriate for this complex substance

12.4 Mobility in soil Substance is complex UVCB. Standard tests for this endpoint are intended for

single substances and are not appropriate for this complex substance

Not classified as PBT or vPvB. None of the substances in this product fulfil the 12.5 Results of PBT and vPvB assessment

criteria for being regarded as a PBT or vPvB substance.

12.6 **Endocrine disrupting properties** This product does not contain a substance that has endocrine disrupting

properties with respect to humans as no components meets the criteria.

12.7 Other adverse effects None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or national legislation. Containers of this material may be hazardous when empty since they retain product residue. Containers must not be punctured or destroyed by burning, even when empty. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. Waste code: Fuel Oil (13

IMDC/ADN

07 01)

Waste classification according to Directive 2008/98/EC

(Waste Framework Directive)

HP3, HP4, HP5, HP6, HP7, HP14

SECTION 14: TRANSPORT INFORMATION

14.1	UN number or ID number	UN 1268	UN 1268
14.2	UN proper shipping name	PETROLEUM DISTALLATES LIGHT CATALYTIC CRACKED	PETROLEUM DISTALLATES LIGHT CATALYTIC CRACKED
14.3	Transport hazard class(es)	3	3
14.4	Packing group	III	III
14.5	Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant.
14.6	Special precautions for user	See Section: 2	
14.7	Maritime transport in bulk according to IMO instruments	No information available.	No information available.
14.8	Additional information	HIN: 30 Tunnel Code: 2 (D/E)	EmS: F-E, S-E Limited Quantity: 1L

A DD/DID

Page: 7 of 24

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Limited Quantity: 1L Special provisions: 357

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

regulations/legislation specific for the substance or

mixture

15.1.1 EU regulations

Seveso

Annex XVII (Restrictions) In accordance with REACH Annex XVII entry 30 (c) this substance is exempt from

Entry 28 and 29 of REACH Annex XVII as it is to be sold as a fuel in a closed

system.

Upper Tier: 25000 tonnes Lower Tier: 2500 tonnes

15.1.2 National regulations

Germany Water hazard class: 3

15.2 Chemical Safety Assessment A REACH chemical safety assessment (CSA) has been carried out. Refer to

annexes for exposure scenarios detailing use specific exposure controls.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

References:

Existing Safety Data Sheet (SDS).

Harmonised Classification(s) for Distillates (petroleum), light catalytic cracked (CAS No. 64741-59-9).

Existing ECHA registration(s) for Distillates (petroleum), light catalytic cracked (CAS No. 64741-59-9) and Chemical Safety Report.

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Legend

ADR ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

EC European Community
ECHA European Chemicals Agency

EU European Union
DNEL Derived no effect level

IATA IATA: International Air Transport Association
ICAO ICAO: International Civil Aviation Organization
IMDG IMDG: International Maritime Dangerous Goods

LC50 Lethal Concentration at which 50% of the population is killed

LD50 Lethal Dose at which 50% of the population is killed

LTEL Long term exposure limit

NOAEC No Observed Adverse Effect Concentration

NOEL No Observed Effect Level

OECD Organisation for Economic Cooperation and Development

PBT PBT: Persistent, Bioaccumulative and Toxic

PNEC Predicted No Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID RID: Regulations concerning the international railway transport of dangerous goods

STEL Short term exposure limit

UN United Nations

UVCB Unknown or Variable Composition, Complex reaction products or Biological materials

vPvB vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Flam. Liq. 3; Flammable liquid, Category 3

Hazard Statement(s)

H226: Flammable liquid and vapour.

Page: 8 of 24

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



CUTTER STOCK V3008

Asp. Tox. 1; Aspiration hazard, Category 1 Skin Irrit. 2; Skin corrosion/irritation, Category 2 Acute Tox. 4; Acute Toxicity, Category 4 Carc. 1B; Carcinogenicity, Category 1B

STOT RE 2; Specific target organ toxicity — repeated exposure,

Category 2

Aquatic Acute 1; Hazardous to the aquatic environment, Acute, Category

1

Aquatic Chronic 1; Hazardous to the aquatic environment, Chronic,

Category 1

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation. H332: Harmful if inhaled. H350: May cause cancer.

H373: May cause damage to organs through prolonged or repeated

exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Vitol SA gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Vitol SA accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Annex to the extended Safety Data Sheet (eSDS)

See below -

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Distillates (petroleum), light catalytic cracked

CAS No. 64741-59-9 EINECS No. 265-060-4

Summary of Parameters

Physical Parameters				
Vapour pressure (hPa)			0.4 kPa at 40°C	
Partition Coefficient (log K _{OW})			Substance is complex UVCB	
Aqueous solubility (mg/l)			Substance is complex UVCB	
Molecular weight			Substance is complex UVCB	
Biodegradability			Inherently Biodegradable	
Human Health (DNEL)				
	Short term	Inhalation (mg/m³)	2230	
Workers	Short term	Dermal (mg/kg bw/day)	Non-toxic	
Workers	Long Torm	Inhalation (mg/m³)	27.3	
Long Term Dermal (Dermal (mg/kg bw/day)	2.4	
Inhalation (mg/m³)		Inhalation (mg/m³)	None anticipated	
Consumer		Dermal (mg/kg bw/day)	None anticipated	
Oral (mg/kg bw/		Oral (mg/kg bw/day)	1.0	

Environmental Parameters (PNECs)

Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the environmental toxicity (HC5) of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore individual environmental compartments PNECs are not available for this product.

Page: 10 of 24

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Contents

Number	Title	Page:
Exposure scenario 1	Distribution of Distillates (petroleum), light catalytic cracked	12
Exposure scenario 2	Formulation and (re)packing of Distillates (petroleum), light catalytic cracked	15
Exposure scenario 3	Use as a fuel (Industrial)	18
Exposure scenario 4	Use as a fuel (Professional)	21

Contributing Scenarios

PROC Codes

PROC1 Use in closed process, no likelihood of exposure

(Storage) Bulk storage with occasional sampling from dedicated sample point

PROC2 Use in closed, continuous process with occasional controlled exposure

(Storage) Bulk storage with occasional sampling from dedicated sample point

PROC3 Use in closed batch process (synthesis or formulation)

(Sampling) with sample collection

(Additive) Use as a fuel additive

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

(Maintenance) Equipment cleaning and maintenance

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

(bulk) Bulk transfer in a closed system (e.g. bottom loading from barge, rail and road)

(Drum) Drum or batch transfers with dedicated equipment

(Refuelling) Refueling vehicles, light aircraft or marine craft

PROC15 Use as laboratory reagent

PROC16 Using material as fuel sources, limited exposure to unburned product to be expected

- 110010	obing material as faci sources; infinited exposure to dribatined product to be exposited
Environ	ment
ERC1	Manufacture of substance
ERC2	Formulation of preparations
ERC3	Formulation in materials
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
ERC6a	Industrial use resulting in manufacture of another substance (use of intermediates)
ERC6b	Industrial use of reactive processing aids
ERC6c	Industrial use of monomers for manufacture of thermoplastics
ERC6d	Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
ERC7	Industrial use of substances in closed systems
ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Exposure Scenario 1 - Distribution of Distillates (petroleum), light catalytic cracked

1.0 Contributing Scenarios	
Sector of uses SU	SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU8 Manufacture of bulk, large scale chemicals (including petroleum products) SU9 Manufacture of fine chemicals
Process category [PROC]	PROC1 PROC2 PROC2 (Storage) PROC3 PROC3 (Sampling) PROC8a (Maintenance) PROC8b (Bulk) PROC15
Chemical product category [PC]	not applicable
Article Categories [AC]	not applicable
Environmental release categories [ERC]	ERC4 ERC5 ERC6a ERC6b ERC6c ERC6C
Specific Environmental Release Categories SPERC	ESVOC SpERC 1.1b.v1

2.1 Control of worker exposure				
Product characteristics				
Physical form of product	Liquid With potential for aerose	ol generation		
Vapour pressure	<0.5 kPa @ STP			
Concentration of substance in product	Covers percentage substance	Covers percentage substance in the product up to 100 % (unless stated differently).		
Human factors not influenced by risk m	anagement			
Potential exposure area	Not defined			
Frequency and duration of use	·			
Exposure duration per day	Covers daily exposures up to 8	3 hours (unless stated differently).		
Other operational conditions affecting worker exposure				
Area of use	All contributing scenarios	Indoor		
Characteristics of the surroundings	Not defined			

General measures applicable to all activities

Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented.

General measures (carcinogens)

Consider technical advances and process upgrades (including automation) for the elimination of releases. minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenario; clear up spills immediately and dispose of waste safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

General measures (skin irritants)

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

Technical conditions of use	
PROC1, PROC3	Handle substance within a closed system.
PROC2	Handle substance within a predominantly closed system provided with extract ventilation.

Revision: 24 March 2023 Version: 005

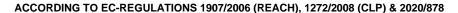


CUTTER STOCK V3008

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

PROC3, PROC8a (Maintenance), PROC8b	Store substance w		,		
(Bulk)	Ensure material transfers are under containment or extract ventilation.				
PROC15	Handle within a fume cupboard or implement suitable equivalent methods to minimise exposure.				
	Efficiency of at least 90%				
Organisational measures	•				
PROC3 (Sampling)			her system to avoid exposure.		
PROC8a (Maintenance)	Drain down and flush system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle. Clear up spills immediately and dispose				
PROC8b (Bulk)	of waste safely.	anefore are i	under containment or extract ventilation.		
Risk management measures related to hur		alisiels ale (dider containment of extract ventilation.		
Respiratory protection	No special measur	roo oro roou	irod		
	PROC8a (Mainten	•	Wear chemically resistant gloves (tested to EN374) in combination		
Hand and/or Skin protection	PROC8b (Bulk)	,	with 'basic' employee training. Efficiency of at least 90% Wear suitable gloves tested to EN374. Efficiency of at least 80%		
Eye Protection	No special measur	res are requi	,		
			cording to Article 37(4) of REACH do not apply		
Handle substance within a closed system. (PF Ensure samples are obtained under containm Wear suitable gloves tested to EN374. (PROC Avoid splashing. (PROC3, PROC8b (Bulk)) Wear suitable coveralls to prevent exposure to Clear transfer lines prior to de-coupling. (PROCA (Compliance))	ent or extract ventila C2, PROC2 (Samplin o the skin. (PROC8a	g), PROC3,	PROC15)		
Avoid dip sampling. (PROC2 (Sampling))					
2.2 Control of environmental exposure					
Amounts used					
Fraction of EU tonnage used in region:		0.1			
Regional use tonnage (tons/year):		4.4E+05			
Fraction of Regional tonnage used locally: tons/year		2.0E-03			
Annual site tonnage (tons/year):		8.7E+02			
Maximum daily site tonnage (kg/day):		4.4E+04			
Environment factors not influenced by risk	k management	•			
Flow rate of receiving surface water (m³/d):		2000			
Local freshwater dilution factor:		10			
Local marine water dilution factor:		100			
Onevetienel conditions		100			
Operational conditions		100			
Operational conditions Emission days (days/year):		20			
Emission days (days/year):	ease prior to	20			
Emission days (days/year): Release fraction to air from process (initial rel RMM):	·				
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM):	(initial release prior	20			
Emission days (days/year): Release fraction to air from process (initial rel-RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial re-RMM):	(initial release prior	20 1.0E-03 1.0E-05 1.0E-05			
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial re RMM): Technical onsite conditions and measures	(initial release prior elease prior to	20 1.0E-03 1.0E-05 1.0E-05	air emissions and releases to soil		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial re RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova	(initial release prior elease prior to to reduce or limit of l efficiency of (%):	20 1.0E-03 1.0E-05 1.0E-05	air emissions and releases to soil		
Emission days (days/year): Release fraction to air from process (initial rel-RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel-RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wastewater)	(initial release prior to lease prior to to reduce or limit of lefficiency of (%): ter discharge) to	20 1.0E-03 1.0E-05 1.0E-05 discharges,	air emissions and releases to soil		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial re RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%)	(initial release prior to lease prior to to reduce or limit of lefficiency of (%): ter discharge) to	20 1.0E-03 1.0E-05 1.0E-05 discharges,	air emissions and releases to soil		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical removal	(initial release prior to lease prior to to reduce or limit of lefficiency of (%): ter discharge) to : al efficiency of (%):	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2	air emissions and releases to soil estimates used. No wastewater treatment required.		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical removal Note: Common practices vary across sites the	(initial release prior to lease prior to reduce or limit of lefficiency of (%): ter discharge) to : al efficiency of (%): us conservative process.	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2			
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical removal Note: Common practices vary across sites the Organisational measures to prevent/limit relations.	(initial release prior to elease prior to reduce or limit of l efficiency of (%): ter discharge) to elease from site	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0	estimates used. No wastewater treatment required.		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical removal Note: Common practices vary across sites the Organisational measures to prevent/limit relation on to apply industrial sludge to natural soils.	(initial release prior lease prior to lease prior to lease prior to lefficiency of (%): ter discharge) to lease from site lease from site lease should be in	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release	estimates used. No wastewater treatment required.		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical removal	(initial release prior clease prior to lease prior to lefficiency of (%): ter discharge) to lefficiency of (%): al efficiency of (%): as conservative procelease from site. Sludge should be in lipal sewage treatm	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release	estimates used. No wastewater treatment required.		
Emission days (days/year): Release fraction to air from process (initial release): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial release): Release fraction to soil from process (initial release): RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving was provide the required removal efficiency of (%) Treat soil emission to provide a typical remova Note: Common practices vary across sites the Organisational measures to prevent/limit r Do not apply industrial sludge to natural soils. Conditions and measures related to munic	(initial release prior clease prior to lease prior to lefficiency of (%): ter discharge) to lefficiency of (%): al efficiency of (%): as conservative procelease from site. Sludge should be in lipal sewage treatm	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release cinerated, coent plant	estimates used. No wastewater treatment required.		
Emission days (days/year): Release fraction to air from process (initial release): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial release): Release fraction to soil from process (initial release): RMM): Technical onsite conditions and measures: Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving was provide the required removal efficiency of (%) Treat soil emission to provide a typical removal Note: Common practices vary across sites the Organisational measures to prevent/limit release to provide a typical removal Note: Common practices vary across sites the Organisational measures to prevent/limit release to provide a typical removal Note: Common practices vary across sites the Organisational measures to prevent/limit release to municipal sewage system/treatment process.	(initial release prior clease prior to lease prior to lease prior to lease prior to lefficiency of (%): ter discharge) to lease from site single should be inclipal sewage treatment (m³/d)	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release cinerated, coent plant 2,000 93.1	estimates used. No wastewater treatment required. ontained or reclaimed.		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical remova Note: Common practices vary across sites the Organisational measures to prevent/limit red on to apply industrial sludge to natural soils. Conditions and measures related to munical Size of municipal sewage system/treatment period pegradation effectiveness (%) Conditions and measures related to externations.	(initial release prior lease prior to lease prior to lease prior to lefficiency of (%): ter discharge) to : al efficiency of (%): is conservative proceelease from site Sludge should be in leipal sewage treatment (m³/d)	20 1.0E-03 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release ent plant 2,000 93.1 ste for disperse	estimates used. No wastewater treatment required. ontained or reclaimed.		
Emission days (days/year): Release fraction to air from process (initial rel RMM): Release fraction to wastewater from process to RMM): Release fraction to soil from process (initial rel RMM): Release fraction to soil from process (initial rel RMM): Technical onsite conditions and measures Treat air emission to provide a typical remova Treat onsite wastewater (prior to receiving wa provide the required removal efficiency of (%) Treat soil emission to provide a typical remova Note: Common practices vary across sites the Organisational measures to prevent/limit re Do not apply industrial sludge to natural soils. Conditions and measures related to munic Size of municipal sewage system/treatment p Degradation effectiveness (%)	(initial release prior lease prior to lease prior to lease prior to lefficiency of (%): ter discharge) to : al efficiency of (%): as conservative procelease from site Sludge should be in least (m³/d) least treatment of was all discomply with applications.	20 1.0E-03 1.0E-05 1.0E-05 1.0E-05 discharges, 90 24.2 0 ess release cinerated, coent plant 2,000 93.1 ste for disponsible local a	estimates used. No wastewater treatment required. ontained or reclaimed.		

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

Substance release quantities after risk management measures			
Release to waste water from process (mg/l) Not defined			
Maximum allowable site tonnage (MSafe) (kg/d): 4.8E+05			

3. Exposure estimation and reference to its source

3.1 Human exposure prediction

	Inhal	Inhalation Der		mal	Combined
Process Category [PROC]	Inhalation exposure (mg/m³)	Risk characterisation ratio (RCR)	Dermal exposure (mg/kg bw/day)	Risk characterisation ratio (RCR)	Risk characterisation ratio (RCR)
PROC1	0.01	0.00	0.34	0.14	0.14
PROC2	0.5	0.02	1.37	0.57	0.59
PROC2 (Storage)	0.5	0.02	1.37	0.57	0.59
PROC3	0.1	0.00	0.03	0.01	0.02
PROC3 (Sampling)	1.0	0.04	0.34	0.14	0.18
PROC8a (maintenance)	0.5	0.02	1.37	0.57	0.59
PROC8b (bulk)	5.0	0.18	1.37	0.57	0.75
PROC15	0.05	0.00	0.03	0.01	0.01

3.2 Environmental exposure prediction

Exposure assessment (method/calculation model)

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

Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the PEC of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore a PEC is not available for Distillates (petroleum), light catalytic cracked for individual environmental compartments.

Environmental exposure	STP	Freshwater	Marine water	Soil	Freshwater sediment	Marine sediment
Predicted Environmental Exposure (PEC)	1.6E-02 mg/l	1.6E-03 mg/l	1.6E-04 mg/l	6.8E-02 mg/kg ww	6.0E-01 mg/kg ww	1.7E-02 mg/kg ww
Risk characterisation ratio (RCR)	1.7E-02	6.9E-02	6.9E-03	1.4E-05	9.0E-02	8.9E-03

Human exposure prediction:

Route of Exposure	Exposure (µg/kg/Day)	Risk characterisation ratio (RCR)
Oral	1.2E+01	1.2E-02
Inhalation	5.8E-02	7.4E-06

4. Evaluation guidance to downstream user			
For scaling see	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. Available hazard data do not support the need for a DNEL to be established for other health effects. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).		
Exposure assessment	Worker	ECETOC TRA	
instrument/tool/method	Environment	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.	

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Exposure Scenario 2 - Formulation and (re)packing of Distillates (petroleum), light catalytic cracked

1.0 Contributing Scenarios			
Sector of uses SU	SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU8 Manufacture of bulk, large scale chemicals (including petroleum products) SU9 Manufacture of fine chemicals SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)		
Process category [PROC]	PROC1 PROC2 PROC2 (Storage) PROC3 PROC3 (Sampling) PROC8a (Maintenance) PROC8b (Bulk) PROC8b (Drum) PROC15		
Chemical product category [PC]	not applicable		
Article Categories [AC]	not applicable		
Environmental release categories [ERC]	ERC2		
Specific Environmental Release Categories SPERC	ESVOC SpERC 1.1b.v1		

2.0 Operational conditions and risk management measures				
2.1 Control of worker exposure				
Product characteristics				
Physical form of product	Liquid With potential for aerosol of	eneration		
Vapour pressure	<0.5 kPa @ STP			
Concentration of substance in product	Covers percentage substance in	the product up to 100 % (unless stated differently).		
Human factors not influenced by risk ma	Human factors not influenced by risk management			
Potential exposure area	Not defined	Not defined		
Frequency and duration of use				
Exposure duration per day	Covers daily exposures up to 8 hours (unless stated differently).			
Other operational conditions affecting worker exposure				
Area of use	All contributing scenarios	Indoor		
Characteristics of the surroundings	Not defined			

General measures applicable to all activities

Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented.

General measures (carcinogens)

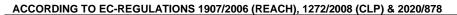
Consider technical advances and process upgrades (including automation) for the elimination of releases. minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenario; clear up spills immediately and dispose of waste safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

General measures (skin irritants)

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

Technical conditions of use	
PROC1, PROC3	Handle substance within a closed system.
PROC2	Handle substance within a predominantly closed system provided with extract ventilation.
PROC2 (Storage)	Store substance within a closed system.
PROC3, PROC8a (Maintenance), PROC8b (Bulk), PROC8b (Drum)	Ensure material transfers are under containment or extract ventilation. Efficiency of at least 90%

Revision: 24 March 2023 Version: 005

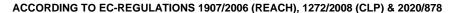




CUTTER STOCK V3008

PRULIS			d or implement suitable equivalent methods to minimise exposure.	
	Efficiency of at least 90%			
Organisational measures				
			her system to avoid exposure.	
			prior to equipment break-in or maintenance. Retain drain downs in	
` '	sealed storage pending disposal or for subsequent recycle. Clear up spills immediately and dispose of waste safely.			
		ansfers are i	under containment or extract ventilation.	
Risk management measures related to huma		ansicis are t	dider containment of extract ventilation.	
	No special measu	rec are requi	ired	
	PROC8a (mainten	•	Wear chemically resistant gloves (tested to EN374) in combination	
·	,		with 'basic' employee training. Efficiency of at least 90%	
	No special measu			
		ligations ac	cording to Article 37(4) of REACH do not apply	
Handle substance within a closed system. (PRO	, ,,			
Ensure samples are obtained under containmer				
Use drum pumps or carefully pour from contained	er. Avoid spillage v	vhen withdra	awing pump. (PROC8b (Drum))	
Wear suitable gloves tested to EN374. (PROC2	, PROC2 (Samplin	ng), PROC3,	PROC15)	
Avoid splashing. (PROC3)				
Wear suitable coveralls to prevent exposure to	he skin. (PROC8a	(Maintenan	ce), PROC8b (Bulk), PROC8b (Drum), PROC15)	
Clear transfer lines prior to de-coupling. (PROC				
Avoid dip sampling. (PROC2 (Sampling))				
Remotely vent displaced vapours. PROC8b (Bu	ılk)			
2.2 Control of environmental exposure	,			
Amounts used				
Fraction of EU tonnage used in region:		0.1		
Regional use tonnage (tons/year):		1.9E+05		
Fraction of Regional tonnage used locally: tons/	voar	1.6E-01		
Annual site tonnage (tons/year):	yeai	3.0E+04		
Maximum daily site tonnage (kg/day):		1.0E+05		
	nonovomont	1.0L+03		
	Environment factors not influenced by risk management			
Flow rate of receiving surface water (m³/d):		2000		
Local freshwater dilution factor:		10		
Local marine water dilution factor:		100		
Operational conditions				
Emission days (days/year):		300		
Release fraction to air from process (after typical consistent with EU Solvent Emissions Directive		0.01		
Release fraction to wastewater from process (in to RMM):		2.0E-04		
Release fraction to soil from process (initial rele	ase prior to			
RMM):	ase prior to	0.1E-04		
Technical onsite conditions and measures to		_	air emissions and releases to soil	
Treat air emission to provide a typical removal e		0		
Treat onsite wastewater (prior to receiving water	r discharge) to	98.3		
provide the required removal efficiency of (%):		30.0		
Treat soil emission to provide a typical removal	efficiency of (%):	75.5		
Note: Common practices vary across sites thus	conservative proce	ess release	estimates used. No wastewater treatment required.	
Organisational measures to prevent/limit rel	ease from site			
Do not apply industrial sludge to natural soils. S	ludge should be in	cinerated, c	ontained or reclaimed.	
Conditions and measures related to municip				
Size of municipal sewage system/treatment plant (m³/d)				
Conditions and measures related to external	treatment of was	93.1 ste for dispo	osal	
			I and/or national regulations. External recovery and recycling of waste	
should comply with applicable local and/or natio			The state of the s	
Substance release quantities after risk mana		s		
Release to waste water from process (mg/l)	. Januari medadi e	Not define	h	
	·			
Maximum allowable site tonnage (MSafe) (kg/d)	1.	1.0E+05		

Revision: 24 March 2023 Version: 005





3. Exposure estimation and reference to its source

3.1 Human exposure prediction

Exposure assessment (method/calculation model)

ECETOC TRA

	Inhalation		Dermal		Combined
Process Category [PROC]	Inhalation exposure (mg/m³)	Risk characterisation ratio (RCR)	Dermal exposure (mg/kg bw/day)	Risk characterisation ratio (RCR)	Risk characterisation ratio (RCR)
PROC1	0.01	0.00	0.03	0.01	0.01
PROC2	0.5	0.02	1.37	0.57	0.59
PROC2 (Storage)	0.5	0.02	1.37	0.57	0.59
PROC3	0.1	0.00	0.03	0.01	0.01
PROC3 (Sampling)	1.0	0.04	0.34	0.14	0.18
PROC8a (maintenance)	0.5	0.02	1.37	0.57	0.59
PROC8b (bulk)	0.5	0.02	0.69	0.29	0.31
PROC8b (Drum)	0.5	0.02	0.69	0.29	0.31
PROC15	0.05	0.00	0.03	0.01	0.01

3.2 Environmental exposure prediction

Exposure assessment (method/calculation model)

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

Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the PEC of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore a PEC is not available for Distillates (petroleum), light catalytic cracked for individual environmental compartments.

Environmental exposure	STP	Freshwater	Marine water	Soil	Freshwater sediment	Marine sediment
Predicted Environmental Exposure (PEC)	1.6E-01 mg/l	1.6E-02 mg/l	1.6E-03 mg/l	7.1E-02 mg/kg ww	1.1E+00 mg/kg ww	5.1E-02 mg/kg ww
Risk characterisation ratio (RCR)	1.8E-01	7.1E-01	7.1E-02	7.4E-03	9.1E-01	9.1E-02

Human exposure prediction:

Route of Exposure	Exposure (µg/kg/Day)	Risk characterisation ratio (RCR)
Oral	1.6E+01	1.6E-02
Inhalation	6.5E+01	8.4E-03

4. Evaluation guidance to downstream user				
For scaling see	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. Available hazard data do not support the need for a DNEL to be established for other health effects. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).			
Exposure assessment	Worker	ECETOC TRA		
instrument/tool/method	Environment	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.		

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Exposure Scenario 3 – Use as a fuel (Industrial)

1.0 Contributing Scenarios	
	SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
Sector of uses SU	SU8 Manufacture of bulk, large scale chemicals (including petroleum products) SU9 Manufacture of fine chemicals
	SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
	PROC1
	PROC2
	PROC2 (Storage)
Process category [PROC]	PROC3 (Additive)
Frocess category [FROC]	PROC8a
	PROC8b (Bulk)
	PROC8b (Drum)
	PROC16
Chemical product category [PC]	not applicable
Article Categories [AC]	not applicable
Environmental release categories [ERC]	ERC7
Specific Environmental Release Categories SPERC	ESVOC SpERC 1.1b.v1

2.0 Operational conditions and risk man	agement measures		
2.1 Control of worker exposure			
Product characteristics			
Physical form of product	Liquid With potential for aeroso	l generation	
Vapour pressure	<0.5 kPa @ STP		
Concentration of substance in product	Covers percentage substance	in the product up to 100 % (unless stated differently).	
Human factors not influenced by risk m	anagement		
Potential exposure area	Not defined		
Frequency and duration of use			
Exposure duration per day	Covers daily exposures up to 8 hours (unless stated differently).		
Other operational conditions affecting worker exposure			
Area of use	All contributing scenarios	Indoor	
Characteristics of the surroundings	Not defined		

General measures applicable to all activities

Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented.

General measures (carcinogens)

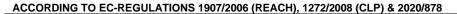
Consider technical advances and process upgrades (including automation) for the elimination of releases. minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenario; clear up spills immediately and dispose of waste safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

General measures (skin irritants)

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

Technical conditions of use	
PROC1, PROC2, PROC16	Handle substance within a closed system.
PROC2 (Storage)	Store substance within a closed system.
PROC8b (Bulk), PROC8b (Drum)	Ensure material transfers are under containment or extract ventilation. Efficiency of at least 90%
Organisational measures	
PROC8a	Drain down and flush system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle. Clear up spills immediately and dispose of waste safely.

Revision: 24 March 2023 Version: 005



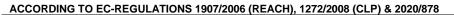


CUTTER STOCK V3008

Respiratory protection	No special measu	•		
Hand and/or Skin protection	PROC8a	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Efficiency of at least 90%		
Eye Protection				
Additional good practice advice beyo	nd the REACH CSA. Ob	ligations according to Article 37(4) of REACH do not apply		
Clear transfer lines prior to de-coupling.	(PROC8b (Bulk))			
Use drum pumps or carefully pour from	container. Avoid spillage v	when withdrawing pump. (PROC8b (Drum))		
Wear suitable gloves tested to EN374. (PROC8b (Bulk))			
Clear up spills immediately and dispose		o (Bulk), PROC8b (Drum))		
Remotely vent displaced vapours. (PRC				
Wear suitable coveralls to prevent expo				
Apply vessel entry procedures including	use of forced supplied air	r. (PROC8a)		
Avoid dip sampling. (PROC2 (Storage)				
2.2 Control of environmental exposur	е			
Amounts used		T		
Fraction of EU tonnage used in region:		0.1		
Regional use tonnage (tons/year):		8.2E+04		
Fraction of Regional tonnage used local	ly: tons/year	1		
Annual site tonnage (tons/year):		8.2E+04		
Maximum daily site tonnage (kg/day):		2.7E+05		
Environment factors not influenced by	y risk management			
Flow rate of receiving surface water (m ³	/d):	2000		
Local freshwater dilution factor:		10		
Local marine water dilution factor:		100		
Operational conditions				
Emission days (days/year):		300		
Release fraction to air from process (initial release prior to RMM):		5.0E-03		
Release fraction to wastewater from process (initial release prior		1.0E-05		
to RMM): Release fraction to soil from process (initial release prior to		0		
RMM):				
		discharges, air emissions and releases to soil		
Treat air emission to provide a typical re		95		
Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of (%):		87.7		
Treat soil emission to provide a typical r		0		
Note: Common practices vary across sit	es thus conservative proc	ess release estimates used. No wastewater treatment required.		
Organisational measures to prevent/				
Do not apply industrial sludge to natural	soils. Sludge should be in	cinerated, contained or reclaimed.		
Conditions and measures related to I		nent plant		
Size of municipal sewage system/treatment plant (m³/d)		2,000		
Degradation effectiveness (%)		93.1		
Conditions and measures related to e				
		ntrols. Combustion emissions considered in regional exposure assessment. The		
substance is consumed during use and				
Substance release quantities after ris				
Release to waste water from process (n		Not defined		
Maximum allowable site tonnage (MSafe	e) (ka/d):	4.9E+05		

3. Exposure estimation and reference to its source				
3.1 Human exposure pred	3.1 Human exposure prediction			
Exposure assessment (meth	Exposure assessment (method/calculation model)			
Inhalation		Dermal	Combined	

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

Process Category [PROC]	Inhalation exposure (mg/m³)	Risk characterisation ratio (RCR)	Dermal exposure (mg/kg bw/day)	Risk characterisation ratio (RCR)	Risk characterisation ratio (RCR)
PROC1	0.5	0.02	1.37	0.57	0.59
PROC2	0.5	0.02	1.37	0.57	0.59
PROC2 (Storage)	0.5	0.02	1.37	0.57	0.59
PROC3 (Additive)	1.0	0.04	0.34	0.14	0.18
PROC8a	0.5	0.02	1.37	0.57	0.59
PROC8b (bulk)	0.5	0.02	0.69	0.29	0.31
PROC8b (drum)	0.5	0.02	0.69	0.29	0.31
PROC16	5.0	0.18	0.03	0.01	0.20

3.2 Environmental exposure prediction	
Exposure assessment (method/calculation model)	The Hydrocarbon Block Method has been used to calculate environmental
	exposure with the Petrorisk model.

Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the PEC of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore a PEC is not available for Distillates (petroleum), light catalytic cracked for individual environmental compartments.

Environmental exposure	STP	Freshwater	Marine water	Soil	Freshwater sediment	Marine sediment
Predicted Environmental Exposure (PEC)	9.9E-02 mg/l	9.9E-03 mg/l	9.9E-04 mg/l	6.8E-02 mg/kg ww	8.6E-01 mg/kg ww	3.1E-02 mg/kg ww
Risk characterisation ratio (RCR)	1.1E-01	4.3E-01	4.3E-02	5.3E-04	5.6E-01	5.6E-02

Human exposure prediction:

Route of Exposure	Exposure (μg/kg/Day)	Risk characterisation ratio (RCR)
Oral	1.4E+01	5.8E-04
Inhalation	4.5E+00	1.4E-02

4. Evaluation guidance to	downstream user	
For scaling see	are managed to at least ed Available hazard data do n	ment Measures/Operational Conditions are adopted, then users should ensure that risks quivalent levels. not support the need for a DNEL to be established for other health effects. and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-
Exposure assessment	Worker	ECETOC TRA
instrument/tool/method	Environment	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



Exposure Scenario 4 – Use as a fuel (Professional)

1.0 Contributing Scenarios			
Sector of uses SU	SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)		
Process category [PROC]	PROC1 PROC1 (Storage) PROC2 PROC3 (Additive) PROC8a (Maintenance) PROC8a (Cleaning) PROC8b (Bulk) PROC8b (Drum) PROC8b (Refueling) PROC8b (Refueling)		
Chemical product category [PC]	not applicable		
Article Categories [AC]	not applicable		
Environmental release categories [ERC]	ERC9a ERC9b		
Specific Environmental Release Categories SPERC	ESVOC SpERC 1.1b.v1		

2.0 Operational conditions and risk management measures				
2.1 Control of worker exposure				
Product characteristics				
Physical form of product	Liquid With potential for aerosol of	eneration		
Vapour pressure	<0.5 kPa @ STP			
Concentration of substance in product	Covers percentage substance in	Covers percentage substance in the product up to 100 % (unless stated differently).		
Human factors not influenced by risk ma	Human factors not influenced by risk management			
Potential exposure area	Not defined	Not defined		
Frequency and duration of use				
Exposure duration per day	Covers daily exposures up to 8 hours (unless stated differently).			
Other operational conditions affecting worker exposure				
Area of use	All contributing scenarios	Indoor		
Characteristics of the surroundings	Not defined			

General measures applicable to all activities

Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented.

General measures (carcinogens)

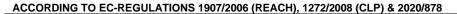
Consider technical advances and process upgrades (including automation) for the elimination of releases. minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenario; clear up spills immediately and dispose of waste safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

General measures (skin irritants)

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

Technical conditions of use	
PROC8b (Bulk)	Ensure material transfers are under containment or extract ventilation. Efficiency of at least 80%
PROC8b (Drum), PROC8b (Refueling)	Ensure material transfers are under containment or extract ventilation.
PROC1 (Storage)	Store substance within a closed system.
Organisational measures	
PROC8a (Maintenance), PROC8a	Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage
(Cleaning)	pending disposal or for subsequent recycle. Clear up spills immediately and dispose of waste safely.

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

Risk management measures related to huma	n health				
Respiratory protection	No special measures are required.				
Hand and/or Skin protection	PROC8a (Maintenance), PROC8a (Cleaning)		Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Efficiency of at least 90%		
	PROC8b (Drum), PROC8b (refueling)		Wear suitable gloves tested to EN374. Efficiency of at least 80%		
Eye Protection N	No special measures		ired.		
Additional good practice advice beyond the I	REACH CSA. Obl	igations ac	cording to Article 37(4) of REACH do not apply		
Handle substance within a closed system. (PRO	C8b (Bulk))				
Clear transfer lines prior to de-coupling. (PROC8	Bb (Bulk))				
Wear suitable gloves tested to EN374. (PROC8b	(Bulk))				
Clear up spills immediately and dispose of waste	safely. (PROC8b	(Bulk))			
Use drum pumps or carefully pour from containe	r. Avoid spillage v	vhen withdra	awing pump. (PROC8b (Drum), PROC8b (Refueling))		
Wear suitable coveralls to prevent exposure to the	ne skin. (PROC8a	(Maintenan	ice), PROC8a (Cleaning))		
Apply vessel entry procedures including use of for	orced supplied air	. (PROC8a ((Cleaning))		
2.2 Control of environmental exposure					
Amounts used					
Fraction of EU tonnage used in region:		0.1			
Regional use tonnage (tons/year):		1.1E+05			
Fraction of Regional tonnage used locally: tons/y	/ear	5.0e-01			
Annual site tonnage (tons/year):		5.3E+01			
Maximum daily site tonnage (kg/day):		1.5E+02			
Environment factors not influenced by risk m	nanagement				
Flow rate of receiving surface water (m³/d):		2000			
Local freshwater dilution factor:		10			
Local marine water dilution factor:		100			
Operational conditions					
Emission days (days/year):		365			
Release fraction to air from process (initial releas	se prior to				
RMM):		1.0E-04			
Release fraction to wastewater from process (initial release prior to RMM):		1.0E-05			
Release fraction to soil from process (initial release prior to RMM):		1.0E-05			
Technical onsite conditions and measures to	reduce or limit of	discharges,	air emissions and releases to soil		
Treat air emission to provide a typical removal ef		0			
Treat onsite wastewater (prior to receiving water					
provide the required removal efficiency of (%):		0			
Treat soil emission to provide a typical removal e	Treat soil emission to provide a typical removal efficiency of (%):		0		
		ess release estimates used. No wastewater treatment required.			
Organisational measures to prevent/limit release from site					
Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.					
Conditions and measures related to municipal sewage treatment plant					
Size of municipal sewage system/treatment plant (m³/d) 2,000					
, , , , ,			93.1		
Conditions and measures related to external treatment of waste for disposal					
Combustion emissions limited by required exhaust emission controls. Combustion emissions considered in regional exposure assessment. This					
substance is consumed during use and no waste of the substance is generated.					
Substance release quantities after risk management measures					
Release to waste water from process (mg/l)	<u> </u>	Not defined			
Maximum allowable site tonnage (MSafe) (kg/d):		1.2E+04			

3. Exposure estimation and reference to its source				
3.1 Human exposure prediction				
Exposure assessment (method/calculation model)		ECETOC TRA		
	Inhalation	Dermal	Combined	

Revision: 24 March 2023 Version: 005





CUTTER STOCK V3008

Process Category [PROC]	Inhalation exposure (mg/m³)	Risk characterisation ratio (RCR)	Dermal exposure (mg/kg bw/day)	Risk characterisation ratio (RCR)	Risk characterisation ratio (RCR)
PROC1	1.0	0.04	1.37	0.57	0.61
PROC1 (Storage)	0.01	0.00	0.34	0.14	0.14
PROC2	1.0	0.04	1.37	0.57	0.61
PROC3 (Additive)	1.0	0.04	0.34	0.14	0.18
PROC8a (maintenance)	5	0.18	1.37	0.57	0.75
PROC8a (Cleaning)	0.5	0.02	1.37	0.57	0.59
PROC8b (bulk)	1.0	0.04	0.69	0.29	0.32
PROC8b (drum)	5.0	0.18	1.37	0.57	0.75
PROC8b (refueling)	5.0	0.18	1.37	0.57	0.75
PROC16	20.0	0.73	0.34	0.14	0.87

3.2 Environmental exposure prediction

Exposure assessment (method/calculation model)

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

Distillates (petroleum), light catalytic cracked is a hydrocarbon UVCB. The hydrocarbon block method is used in PETRORISK to calculate the PEC of each group of components in the substance. These are used to estimate the environmental risk for the substance. Therefore a PEC is not available for Distillates (petroleum), light catalytic cracked for individual environmental compartments.

Environmental exposure	STP	Freshwater	Marine water	Soil	Freshwater sediment	Marine sediment
Predicted Environmental Exposure (PEC)	5.36E-05 mg/l	3.1E-05 mg/l	5.3E-07 mg/l	6.8E-02 mg/kg ww	5.5E-01 mg/kg ww	1.2E-02 mg/kg ww
Risk characterisation ratio (RCR)	5.8E-05	1.6E-03	2.3E-05	2.5E-04	1.2E-03	4.4E-05

Human exposure prediction:

Route of Exposure	Exposure (µg/kg/Day)	Risk characterisation ratio (RCR)
Oral	1.2E+01	4.9E-06
Inhalation	3.9E-02	1.2E-02

4. Evaluation guidance to downstream user				
For scaling see	Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. Available hazard data do not support the need for a DNEL to be established for other health effects. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).			
Exposure assessment instrument/tool/method	Worker	ECETOC TRA		
	Environment	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.		

Revision: 24 March 2023 Version: 005

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

