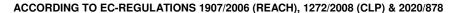
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name Crude

Product description V-Crude- Crude

Trade Name Crude

Product code Not applicable CAS No. 8002-05-9 EC No. 232-298-5 REACH Registration No. Not applicable

1.2 Relevant identified uses of the substance or mixture

and uses advised against

Uses advised against

Identified uses Refinery feedstock. Fuel for engines. Blending component for fuels

Anything other than the above. For industrial use only.

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

 Telephone
 +31 10 498 7200

 Fax
 +31 10 452 9545

 E-mail (competent person)
 xreach@vitol.com

1.4 Emergency Telephone Number

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. 1; H224

Asp. Tox. 1; H304 Eye Irrit. 2; H319 STOT SE 3; H336 Carc. 1B; H350 STOT SE 2; H373 Aquatic Chronic 2; H411

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

Product description Crude

Hazard Pictogram(s)









Signal Word(s)

Hazard Statement(s) H224: Extremely flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.

H350: May cause cancer.

 $\ensuremath{\mathsf{H373:}}$ May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

DANGER

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Precautionary Statement(s) P201: Obtain special instructions before use.

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

ignition sources. No smoking.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P331: Do NOT induce vomiting.

P308+P313: IF exposed or concerned: Get medical advice/attention. P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Supplemental information EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards May form explosive mixture with air. The vapour is heavier than air; beware of pits

and confined spaces.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

SUBSTANCE	CAS No.	EC No.	%W/W
Petroleum	8002-05-9	232-298-5	100
Crude Oil			

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin contact

Eye contact

Ingestion

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

Notes to a physician:

Eliminate sources of ignition. Spillage causes slippery surface. Ensure adequate ventilation. 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 providing aid to give mouth-to-mouth resuscitation. Avoid all contact

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. If breathing is laboured, administer oxygen. Get medical advice/attention if you feel unwell.

IF ON SKIN: Remove clothing and wash thoroughly before use. Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get

IF IN EYES: Flush eyes with water for at least 15 minutes while holding eyelids open. 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 aspiration into the lungs. Rinse mouth with water (do not swallow). Give 200-

300mls (half pint) water to drink. Do not give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Immediately call a POISON CENTER/doctor.

May be fatal if swallowed and enters airways. Causes serious eye irritation. Vapours may cause drowsiness and dizziness. Repeated exposure may cause

through prolonged or repeated exposure: Skin contact and Ingestion Treat symptomatically. If breathing is laboured, oxygen should be administered by qualified personnel.

skin dryness or cracking. May cause cancer. May cause damage to organs

IF SWALLOWED: Do NOT induce vomiting, if vomiting does occur, have victim lean forward to reduce risk of aspiration. Aspiration into the lungs may cause chemical pneumonitis, which can be fatal. Due to possible delayed effect of

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poisoning and for safety reasons, they should be kept under medical observation for at least 48 hours.

IF INHALED: If breathing is laboured, administer oxygen.

SECTION 5: FIREFIGHTING MEASURES

5.1 **Extinguishing media**

Suitable extinguishing media

Unsuitable extinguishing media

5.2 Special hazards arising from the substance or

mixture

5.3 Advice for firefighters Foam, CO2 or dry powder

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

Extremely flammable liquid and vapour. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Decomposes in a fire giving off toxic fumes: Oxides of carbon, Carbon monoxide, Carbon

dioxide, Hydrocarbons.

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

Methods and material for containment and cleaning

Caution - spillages may be slippery. Eliminate sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Stop leak if safe to do so. Ensure suitable personal protection during removal of spillages. Flammable vapours can accumulate in head space of closed systems. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe vapour. Only trained and properly protected personnel must be involved in clean-up operations. Avoid all contact. Do not use sparking tools. Use nonsparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems.

Small spillages: Large spillages:

6.3

6.2 **Environmental precautions** Wear flame-resistant antistatic protective clothing.

Wear chemical protection suit and breathing apparatus. See Also Section: 8

Avoid release to the environment. Dike area to contain the spill and prevent releases to sewers, drains, or other waterways. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body. Provided it is safe to do so, isolate the source of the leak. Use non-sparking equipment when picking up flammable spill. The vapour is heavier than air; beware of pits and confined spaces. Adsorb spillages onto sand, earth or any suitable adsorbent material. Ensure that the equipment is adequately grounded. Transfer to a lidded container for disposal or recovery. Dispose of this material

and its container as hazardous waste.

Allow small spillages to evaporate provided there is adequate ventilation. Wear

flame-resistant antistatic protective clothing.

Wear chemical protection suit and breathing apparatus.

See Section: 8, 13.

Small spillages:

up

Large spillages:

6.4 Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

ventilated area. Prevent vapour build up by providing adequate ventilation during and after use. May form explosive mixture with air. Take precautionary measures against static discharge. Use non-sparking tools. Ground/bond container and receiving equipment. The vapour is heavier than air; beware of pits and confined spaces. Use personal protective equipment as required. See Section: 8. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe vapour. Avoid all contact. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned.

Keep away from sources of ignition. - No smoking. Use only outdoors or in a well-

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container/package in a cool well-ventilated place. Protect from sunlight. Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep away from heat and sources of ignition. Keep containers properly sealed when not in use.

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



CRUDE OIL

Storage temperatureStable at ambient temperatures.Storage measuresKeep only in the original container.Incompatible materialsAcids. Strong oxidising agents.

7.3 Specific end use(s) See Section: 1.2.

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

8.1.3 PNECs and DNELs Not established

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.

Ensure the ventilation system is regularly maintained and tested.

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. Do not eat, drink or smoke at the work place.

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.

Body protection:

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

Large scale: Chemical protection suit

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. In the unlikely event of formation of particularly high levels of vapour a self contained

breathing apparatus may be appropriate. Recommended: Gas filtering device (EN 14387)

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 Straw

Odour Hydrocarbon odour.

Melting point/freezing point -30°C - 30 °C (America

Boiling point or initial boiling point and boiling range

Flammability

-30°C - 30 °C (American Petroleum Institute)

Extremely flammable liquid and vapour.

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



CRUDE OIL

Lower and upper explosion limit

Flash point

<23 °C

Auto-ignition temperature

Decomposition temperature

PH

Not established

Not established

Kinematic viscosity

Not established

Not established

Solubility <20 mg/L at 20 °C (Katalog wassergefährdender Stoffe)

Partition coefficient: n-octanol/water (log value) 2-6

Vapour pressure 142.5 kPa at 37.8 °C Density and/or relative density Not established

Relative vapour density >

Particle characteristics Not established

9.2 Other information 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

10.3 Possibility of hazardous reactions Extremely flammable liquid and vapour. May form explosive mixture with air.

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

of ignition and flashback.

10.4 Conditions to avoid Elevated temperature. Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. Keep away from direct sunlight.

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

10.5 Incompatible materials Acids. Strong oxidising agents.

10.6 Hazardous decomposition products Decomposes in a fire giving off toxic fumes: Oxides of carbon, Carbon

monoxide, Carbon dioxide, Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in

Regulation (EC) No 1272/2008 Acute toxicity - Ingestion

Acute toxicity - Inhalation

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

Not classified. LD50 > 4300 mg/kg bw/day (rat) (Pesticide Manual, 1987)

Acute toxicity - Skin contact

Based upon the available data, the classification criteria are not met

Acute toxicity - Skin contact

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

Skin corrosion/irritation

EUH066: Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation Harmonised Classification

Serious eye damage/irritation Eye Irrit. 2; Causes eye irritation.

Mean eye Irritation score: 1.1 (48 hour) (rabbit) (American Petroleum Institute,

2003)

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

Germ cell mutagenicity Based upon the available data, the classification criteria are not met. There is no

evidence of mutagenic potential. Contains: <0.1% butadiene

Carcinogenicity Carc. 1B; May cause cancer.
Harmonised Classification

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

STOT - Single Exposure STOT SE 3; May cause drowsiness or dizziness.

No data available

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

exposure.

No data available

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

Viscosity: 1 mm²/s at 20 °C

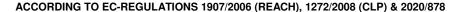
11.2 Information on other hazards

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

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CRUDE OIL

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.
	•	LC50 (Daphnia magna) mg/l 5.3 (48 hour) (MacLean, 1989)
		LC50 (Fish) mg/l 3 (96 hour) (Mayer, 1986)
12.2	Persistence and degradability	Not readily biodegradable (according to OECD criteria).
12.3	Bioaccumulative potential	The substance has potential for bioaccumulation.
		Log KOW: 3-6
12.4	Mobility in soil	Not established
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB. None of the substances in this product fulfil the 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 Dispose of this material and its container as hazardous waste. 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 classification according to Directive 2008/98/EC (Waste Framework Directive)

HP3, HP4, HP5, HP7, HP14

SECTION 14: TRANSPORT INFORMATION

14.1	UN number or ID number	ADR/RID UN 1267	IMDG UN 1267	IATA/ICAO UN 1267
14.2	UN proper shipping name	PETROLEUM CRUDE	PETROLEUM CRUDE	PETROLEUM CRUDE
14.3	Transport hazard class(es)	3	3	3
14.4	Packing group	Ī	Ĭ	Ī
14.5	Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant.	Environmentally hazardous substance
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.	No information available.
14.8	Additional information	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**

> Annex XVII (Restrictions) Entry 28: Restriction on supply of substances and mixtures to the general public,

> > if classified as Carc. 1A or 1B

Group 3

15.1.2 **National regulations**

IARC Monographs

Germany Water hazard class: 3

15.2 **Chemical Safety Assessment** A chemical safety assessment is not required under REACH.

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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 Petroleum Crude Oil (CAS No. 8002-05-9) C&L Inventory (38 Notifiers) for Petroleum Crude Oil (CAS No. 8002-05-9)

Literature References:

- 1. Pesticide Manual. Volume. 8, Page 169, 1987.
- 2. Mayer F. L. Jr., & Ellersieck M. R. 1986. Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals. Resources No.160, U.S. Department of Interior, Fish and Wildlife Services, Washington, DC.
- 3. MacLean M.M., & Doe K. G. 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p.
- 4. Katalog wassergefährdender Stoffe, Umweltbundesamt 1996 und Verwaltungsvorschrift wassergefährdende Stoffe (VwVwS) vom 1996, Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Gemeinsames Ministerialblatt (GMBI.) 47 (1996) Nr. 16, S. 327-357.
- 5. American Petroleum Institute. Robust summary for Crude Oil. November 2013.

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

DNEL Derived no effect level
EC European Community
ECHA European Chemicals Agency

EU European Union

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 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: Regulations concerning the international railway transport of dangerous goods

UN United Nations

vPvB vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Flam. Liq. 1; Flammable liquid, Category 1 Asp. Tox. 1; Aspiration hazard, Category 1 Evaluate: 2; Evaluation, Category 2

Eye Irrit. 2; Eye Irritation, Category 2

STOT SE 3; Specific Target Organ Toxicity — Single Exposure,

Category 3

Carc. 1B; Carcinogenicity, Category 1B

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

Category 2

Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic ,

Category 2

Hazard Statement(s)

EUH066: Repeated exposure may cause skin dryness or cracking.

H224: Extremely flammable liquid and vapour. H304: May be fatal if swallowed and enters airways.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H350: May cause cancer.

H373: May cause damage to organs through prolonged or repeated

exposure.

H411: 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

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable