Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Risella X 409

Product code Q6566

CAS-No. : 1437281-01-0

Synonyms : Hydrocarbons C15-C19, n-alkanes, isoalkanes, <2%

aromatics

Manufacturer or supplier's details

: Shell Chemicals Europe B.V. Manufacturer/Supplier

PO Box 2334

3000 CH Rotterdam

Netherlands

Telephone : +31 (0)10 441 5137 +31(0)10 441 5191 Telefax : +31 (0)20 716 8316/ +31 (0)20 713 9230

: +44 (0) 1235 239 670 (This telephone number is available 24 Emergency telephone

number hours per day, 7 days per week)

Recommended use of the chemical and restrictions on use

: Solvent. Recommended use

This product must not be used in applications other than the Restrictions on use

above without first seeking the advice of the supplier.

2. HAZARDS IDENTIFICATION

Classification (REGULATION (EC) No 1272/2008)

: Category 1 Aspiration hazard

Label elements

Hazard pictograms

Signal word Danger

Hazard statements PHYSICAL HAZARDS:

Not classified as a physical hazard according to CLP criteria.

HEALTH HAZARDS:

H304 May be fatal if swallowed and enters airways.

ENVIRONMENTAL HAZARDS:

Not classified as environmental hazard according to CLP

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

criteria.

Supplemental Hazard

Statements

EUH066 Repeated exposure may cause skin

dryness or cracking.

Precautionary statements : Prevention:

P243 Take action to prevent static discharges.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P331 Do NOT induce vomiting.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards

May form flammable/explosive vapour-air mixture. This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Substance

Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	(REGULATION	(% w/w)
	Registration	(EC) No	
	number	1272/2008)	
Alkanes, C15-19-	1437281-01-0	Asp. Tox. 1; H304	<= 100
branched and linear			

For explanation of abbreviations see section 16.

Other information

Refer to Chapter 8 for Occupational Exposure Guidelines.

4. FIRST-AID MEASURES

General advice : Not expected to be a health hazard when used under normal

conditions.

If inhaled : No treatment necessary under normal conditions of use.

If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with

Version 2.3	Revision Date 26.01.2022	Print Date 29.08.2022
	water and follow by washing wa	
In case of eye contact	 Flush eye with copious quanti Remove contact lenses, if pre rinsing. If persistent irritation occurs, or 	sent and easy to do. Continue
If swallowed	If any of the following delayed within the next 6 hours, transp facility: fever greater than 101	omiting: transport to nearest reatment. If vomiting occurs low hips to prevent aspiration. I signs and symptoms appear port to the nearest medical
Most important symptoms and effects, both acute and delayed	 Not considered to be an inhala conditions of use. Possible respiratory irritations a temporary burning sensation coughing, and/or difficulty brea 	signs and symptoms may include n of the nose and throat,
	No specific hazards under nor Skin irritation signs and symposensation, redness, or swelling	toms may include a burning
	No specific hazards under not Eye irritation signs and sympt sensation, redness, swelling,	oms may include a burning
	If material enters lungs, signs coughing, choking, wheezing, congestion, shortness of brea If any of the following delayed within the next 6 hours, transpfacility: fever greater than 101 breath, chest congestion or co	difficulty in breathing, chest th, and/or fever. signs and symptoms appear port to the nearest medical
	Defatting dermatitis signs and burning sensation and/or a dri	
Protection of first-aiders	 When administering first aid, e appropriate personal protectiv incident, injury and surroundir 	re equipment according to the
Notes to physician	: Call a doctor or poison contro Potential for chemical pneumon Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

Flammable properties

3 / 19 800010026776

SAFETY DATA SHEET

Risella X 409

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Flash point : 128,5 °C / 263,3 °F

: $> 200 \, ^{\circ}\text{C} \, / > 392 \, ^{\circ}\text{F}$ Ignition temperature

Upper explosion limit : 7 %(V)

Lower explosion limit : 0,5 %(V)

Flammability (solid, gas) : Data not available

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon

dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing

media

: Do not use water in a jet.

Specific hazards during

firefighting

: Clear fire area of all non-emergency personnel. Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke). Carbon monoxide.

Unidentified organic and inorganic compounds.

Flammable vapours may be present even at temperatures

below the flash point.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Will float and can be reignited on surface water.

Specific extinguishing

methods

: Standard procedure for chemical fires.

Further information : Keep adjacent containers cool by spraying with water.

Special protective equipment

for firefighters

: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained

Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Observe all relevant local and international regulations. Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

Local authorities should be advised if significant spillages

cannot be contained.

: Avoid contact with skin, eyes and clothing.

Isolate hazard area and deny entry to unnecessary or

unprotected personnel.

Do not breathe fumes, vapour.

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Do not operate electrical equipment.

Environmental precautions

: Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Monitor area with combustible gas indicator.

Methods and materials for containment and cleaning up

For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely

Ventilate contaminated area thoroughly.

If contamination of site occurs remediation may require

specialist advice.

Additional advice

: For guidance on selection of personal protective equipment

see Section 8 of this Safety Data Sheet.

For guidance on disposal of spilled material see Section 13 of

this Safety Data Sheet.

7. HANDLING AND STORAGE

General Precautions : Avoid breathing of or direct contact with material. Only use in

well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine

appropriate controls for safe handling, storage and disposal of

this material.

Ensure that all local regulations regarding handling and

storage facilities are followed.

Advice on safe handling : Avoid inhaling vapour and/or mists.

Avoid contact with skin, eyes and clothing.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Bulk storage tanks should be diked (bunded).

When using do not eat or drink.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Avoidance of contact : Strong oxidising agents.

Product Transfer : Even with proper grounding and bonding, this material can still

> accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/s until fill pipe submerged to twice its diameter, then ≤ 7 m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or

handling operations.

Refer to guidance under Handling section.

Storage

Refer to section 15 for any additional specific legislation Conditions for safe storage

covering the packaging and storage of this product.

Other data Storage Temperature:

Ambient.

Bulk storage tanks should be diked (bunded).

Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of

strict procedures and precautions.

Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not

harmful or toxic to man or to the environment.

Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment

to reduce the risk.

The vapours in the head space of the storage vessel may lie

in the flammable/explosive range and hence may be

flammable.

Version 2.3	Revision Date 26.01.2022	Print Date 29.08.2022
Packaging material	: Suitable material: For containers, o steel, stainless steel., For container zinc silicate paint. Unsuitable material: Avoid prolonge butyl or nitrile rubbers.	paints, use epoxy paint,
Container Advice	: Do not cut, drill, grind, weld or perfo near containers.	orm similar operations on or
Specific use(s)	: Not applicable	
	See additional references that prov for liquids that are determined to be American Petroleum Institute 2003 Ignitions Arising out of Static, Lightr National Fire Protection Agency 77 on Static Electricity). IEC/TS 60079-32-1: Electrostatic has	e static accumulators: (Protection Against ning and Stray Currents) or (Recommended Practices

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Data Source
Aliphatic dearom. solvents 200 - 250	Not Assigned	TWA	1.050 mg/m3	OEL based on European Hydrocarbon Solvents Producers (CEFIC- HSPA) methodology.

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

Engineering measures

: Use sealed systems as far as possible.

Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Local exhaust ventilation is recommended.

Firewater monitors and deluge systems are recommended.

Eye washes and showers for emergency use.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated. The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Personal protective equipment

Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection

: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Where air-filtering respirators are suitable, select an

appropriate combination of mask and filter.

If air-filtering respirators are suitable for conditions of use: Select a filter suitable for organic gases and vapours [Type A

Version 2.3 Print Date 29.08.2022 Revision Date 26.01.2022

boiling point >65°C (149°F)].

Hand protection Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC, neoprene or nitrile rubber gloves For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye protection

If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection

: Skin protection is not required under normal conditions of use. For prolonged or repeated exposures use impervious clothing over parts of the body subject to exposure. If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

Wear antistatic and flame-retardant clothing, if a local risk assessment deems it so.

Hygiene measures

: Wash hands before eating, drinking, smoking and using the

Launder contaminated clothing before re-use.

Do not ingest. If swallowed, then seek immediate medical

assistance.

Environmental exposure controls

General advice

: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Information on accidental release measures are to be found in

section 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless
Odour : Hydrocarbon

Odour Threshold : Data not available
pH : Data not available
Melting / freezing point : Data not available

Boiling point/boiling range : 260 - 320 °C / 500 - 608 °F

Flash point : 128,5 °C / 263,3 °F

Flammability (solid, gas) : Data not available

Upper explosion limit : 7 %(V)

Lower explosion limit : 0,5 %(V)

Vapour pressure : Data not available Relative vapour density : Data not available

Relative density : < 0,8

Density : $< 800 \text{ kg/m3} (15 ^{\circ}\text{C} / 59 ^{\circ}\text{F})$

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n- : log Pow: > 7

octanol/water

Auto-ignition temperature : $> 200 \, ^{\circ}\text{C} \, / > 392 \, ^{\circ}\text{F}$

Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : Data not available

Viscosity, kinematic : 3,3 mm2/s (40 °C / 104 °F)

Explosive properties : Not classified

Oxidizing properties : Not applicable

Surface tension : Data not available

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Conductivity : Low conductivity: < 100 pS/m, The conductivity of this material

> makes it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10,000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a

liquid

Particle size : Data not available

Molecular weight : Data not available

10. STABILITY AND REACTIVITY

Reactivity : The product does not pose any further reactivity hazards in

addition to those listed in the following sub-paragraph.

: No hazardous reaction is expected when handled and stored Chemical stability

according to provisions Stable under normal conditions of use.

Possibility of hazardous

reactions

: Reacts with strong oxidising agents.

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

In certain circumstances product can ignite due to static

electricity.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition

products

: Hazardous decomposition products are not expected to form

during normal storage.

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this

material undergoes combustion or thermal or oxidative

degradation.

11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on product testing, and/or similar

products, and/or components.

exposure

Information on likely routes of : Exposure may occur via inhalation, ingestion, skin absorption,

skin or eye contact, and accidental ingestion.

Acute toxicity

Product:

SAFETY DATA SHEET

Risella X 409

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Acute oral toxicity : LD50 Rat: > 5000 mg/kg

Remarks: Low toxicity:

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

Acute inhalation toxicity : Remarks: LC50 greater than near-saturated vapour

concentration. Low toxicity:

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

Acute dermal toxicity : LD50 Rabbit: > 2000 mg/kg

Remarks: Low toxicity:

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

Components:

Alkanes, C15-19-branched and linear:

Acute oral toxicity : LD50 Rat: > 5.000 mg/kg

Remarks: Based on available data, the classification criteria

are not met.

Acute inhalation toxicity : LC50 : > 5 mg/l

Exposure time: 4 h

Remarks: Based on available data, the classification criteria

are not met.

Acute dermal toxicity : LD50 Rat: > 2.000 mg/kg

Remarks: Based on available data, the classification criteria

are not met.

Skin corrosion/irritation

Product:

Remarks: Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis., Not irritating to skin.

Components:

Alkanes, C15-19-branched and linear:

Remarks: Not irritating to skin., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Not irritating to eye.

Components:

Alkanes, C15-19-branched and linear:

Remarks: Not irritating to eye., Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Remarks: Not a sensitiser.

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

Components:

Alkanes, C15-19-branched and linear:

Remarks: Not a sensitiser.

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

Germ cell mutagenicity

Product:

Remarks: Non mutagenic

Components:

Alkanes, C15-19-branched and linear:

Remarks: Based on available data, the classification criteria

are not met.

Remarks: Not mutagenic., Based on available data, the

classification criteria are not met.

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Components:

Alkanes, C15-19-branched and linear:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Material	GHS/CLP Carcinogenicity Classification
Alkanes, C15-19-branched and linear	No carcinogenicity classification.

Reproductive toxicity

Product:

Remarks: Not a developmental toxicant., Based on available data, the classification criteria are not met., Does not impair fertility.

Components:

Alkanes, C15-19-branched and linear:

Remarks: Does not impair fertility., Not a developmental toxicant., Based on available data, the classification criteria

13 / 19 800010026776

Version 2.3

Revision Date 26.01.2022

Print Date 29.08.2022

are not met.

STOT - single exposure

Product:

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

Components:

Alkanes, C15-19-branched and linear:

Remarks: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea., Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

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

Components:

Alkanes, C15-19-branched and linear:

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

Aspiration toxicity

Product:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Components:

Alkanes, C15-19-branched and linear:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Further information

Product:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

Components:

Alkanes, C15-19-branched and linear:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

12. ECOLOGICAL INFORMATION

Basis for assessment : Incomplete ecotoxicological data are available for this product.

The information given below is based partly on a knowledge of the components and the ecotoxicology of similar products.

14 / 19 800010026776

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Ecotoxicity

Product:

Toxicity to fish (Acute

toxicity)

: LL50: > 100 mg/l

Remarks: Practically non toxic:

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

Toxicity to crustacean (Acute

toxicity)

: EL50 : > 100 mg/l

Remarks: Practically non toxic:

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

Toxicity to algae/aquatic

plants (Acute toxicity)

: EL50: > 100 mg/l

Remarks: Practically non toxic:

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

Toxicity to fish (Chronic

toxicity)

: Remarks: Data not available

Toxicity to crustacean : Remarks: Data not available

(Chronic toxicity)

Toxicity to microorganisms

(Acute toxicity)

: IC50 : > 100 mg/l

Remarks: Practically non toxic:

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

Components:

Alkanes, C15-19-branched and linear:

Toxicity to fish (Acute

toxicity)

: LL50: > 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to crustacean (Acute

toxicity)

: LL50: > 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to algae/aquatic

plants (Acute toxicity)

: LL50: > 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to microorganisms

(Acute toxicity)

: LL50: > 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to fish (Chronic

toxicity)

: NOEC: 100 mg/l

Remarks: Based on available data, the classification criteria

are not met.

Toxicity to

: NOEC: 32 mg/l

crustacean(Chronic toxicity) Remarks: Based on available data, the classification criteria

are not met.

Persistence and degradability

Product:

Biodegradability : Remarks: Oxidises rapidly by photo-chemical reactions in air.,

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Readily biodegradable.

Components:

Alkanes, C15-19-branched and linear:

Biodegradability : Remarks: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Has the potential to bioaccumulate.

Partition coefficient: n-

: $\log Pow: > 7$

octanol/water Components:

Alkanes, C15-19-branched and linear:

Bioaccumulation : Remarks: Contains constituents with the potential to

bioaccumulate.

Mobility in soil

Product:

Mobility : Remarks: Floats on water., If it enters soil, it will adsorb to soil

particles and will not be mobile.

Components:

Alkanes, C15-19-branched and linear:

Mobility : Remarks: Floats on water., Partly evaporates from water or

soil surfaces, but a significant proportion will remain after one

day., Large volumes may penetrate soil and could

contaminate groundwater.

Other adverse effects

no data available

Product:

Additional ecological

information

: Physical properties indicate that hydrocarbon gases will rapidly volatilise from the aquatic environment and that acute and chronic effects would not be observed in practice., Does

not have ozone depletion potential.

Components:

Alkanes, C15-19-branched and linear:

Additional ecological information

: Films formed on water may affect oxygen transfer and

damage organisms.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Waste product should not be allowed to contaminate soil or

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

ground water, or be disposed of into the environment. Do not dispose into the environment, in drains or in water courses

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local regulations may be more stringent than regional or national requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging

: Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

Send to drum recoverer or metal reclaimer.

Comply with any local recovery or waste disposal regulations.

14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

ΔDN

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied. MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

Additional Information

: This product may be transported under nitrogen blanketing. Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space entry.

15. REGULATORY INFORMATION

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

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Other international regulations

The components of this product are reported in the following inventories:

DSL : Listed **ENCS** Listed KECI Listed **TSCA** : Listed

PICCS : Notified with Restrictions. **IECSC** Notified with Restrictions.

16. OTHER INFORMATION

Full text of H-Statements

H304 May be fatal if swallowed and enters airways.

Full text of other abbreviations

Asp. Tox. Aspiration hazard

The standard abbreviations and acronyms used in this Abbreviations and Acronyms

document can be looked up in reference literature (e.g.

scientific dictionaries) and/or websites.

SDS Regulation 1. GN 2.2.5.1313-03 "Maximum permissible

concentration of harmful substance in the working zone

area".

2. GOST 12.1.007-76 "Harmful agents. Classification and

safety requirements."

3. GOST 12.1.005-88 "General hygiene requirements to

the working zone area".

4. GN 2.1.5.1315-03 "Reservoir water maximum

permissible concentration".

5. GOST 19433-88 "Dangerous goods. Classification and

marking".

6. Rail transportation safety rules and dangerous goods

accidents liquidation procedure.

Version 2.3 Revision Date 26.01.2022 Print Date 29.08.2022

7. GOST 30333-2007 Chemical product safety data

sheet. General requirements. Regulation 1907/2006/EC

Further information

Training advice : Provide adequate information, instruction and training for

operators.

Other information : A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to compile the Safety Data

Sheet

: The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

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