IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ShellSol D 100

Product code : Q7732

Manufacturer or supplier's details

Supplier : Shell - See 'Shipper' section of the Bill of Lading

and/or 'Supplier' section of the Bunker Delivery Note for

details

Telephone : See Bill of Lading and/or Bunker Delivery Note

Emergency telephone

number

: +1 703-527-3887

MARPOL Annex I Category : Naphthas and Condensates

Description on Bill of Lading

(B/L)/Bunker delivery not/Shipping document

: Naphtha (Annex 1, Appendix 1 Name)

Other information : SHELLSOL is a trademark owned by Shell Trademark

Management B.V. and Shell Brands Inc. and used by affiliates

of Shell plc.

Other information: See Section 14 for transportation information related to the Bill of Lading,

other shipping documents.

2. HAZARDS IDENTIFICATION

GHS Classification

Aspiration hazard : Category 1 Skin irritation : Category 3

GHS-Labelling

Hazard pictograms :

Signal word : Danger

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard under GHS criteria.

HEALTH HAZARDS:

H304 May be fatal if swallowed and enters airways.

H316 Causes mild skin irritation. ENVIRONMENTAL HAZARDS:

Not classified as an environmental hazard under GHS criteria.

1 / 18 800001007479

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Precautionary statements : **Prevention**:

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/

attention. **Storage:**

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to appropriate waste

site or reclaimer in accordance with local and national

regulations.

Other hazards which do not result in classification

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.

Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydro- treated light; Kerosine — unspecified	64742-47-8	100 %

Further information

Contains:

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.

2 / 18 800001007479

PUBLIC IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

In case of skin contact : Remove contaminated clothing. Immediately flush skin with

large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical

facility for additional treatment.

In case of eye contact : Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : Call emergency number for your location / facility.

If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Most important symptoms and effects, both acute and delayed

: Not considered to be an inhalation hazard under normal conditions of use.

Possible respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat,

coughing, and/or difficulty breathing.

Skin irritation signs and symptoms may include a burning

sensation, redness, or swelling.

No specific hazards under normal use conditions. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest

congestion, shortness of breath, and/or fever.

If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

Notes to physician : Call a doctor or poison control center for guidance.

Potential for chemical pneumonitis.

Treat symptomatically.

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

5. FIRE-FIGHTING MEASURES

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.

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. Do not operate electrical equipment.

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,

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023

Print Date 30.11.2023

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.

Bulk storage tanks should be diked (bunded).

When using do not eat or drink.

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

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

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

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.

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Packaging material : Suitable material: For containers, or container linings use mild

steel, stainless steel., For container paints, use epoxy paint,

zinc silicate paint.

Unsuitable material: Avoid prolonged contact with natural,

butyl or nitrile rubbers.

Container Advice : Do not cut, drill, grind, weld or perform similar operations on or

near containers.

Specific use(s) : Not applicable

See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or

National Fire Protection Agency 77 (Recommended Practices on Static Electricity).

IEC/TS 60079-32-1: Electrostatic hazards, guidance

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value (Form of exposure)	Control parameters / Permissible concentration	Basis
Aliphatic dearom. solvents 200 - 250	Not Assigned	TWA	1,050 mg/m3	EU HSPA

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/

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

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

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

Protective measures

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

Engineering measures

: 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:

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.

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

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:

IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Select a filter suitable for organic gases and vapours [Type A 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: butylrubber Nitrile rubber gloves.

Incidental contact/Splash protection: 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 shortterm/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,

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.

and provide employee skin care programmes.

Do not ingest. If swallowed, then seek immediate medical

assistance.

Environmental exposure controls

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

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.

Information on accidental release measures are to be found in

section 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid.

Colour : colourless
Odour : Paraffinic

Odour Threshold : Data not available pH : Not applicable Melting / freezing point : < -30 °C / -22 °F

Boiling point/boiling range : Typical 238 - 257 °C / 460 - 495 °F

Flash point : Typical 105 °C / 221 °F

Method: ASTM D-93 / PMCC

Evaporation rate : 0.01

Method: ASTM D 3539, nBuAc=1

3.900

Method: DIN 53170, di-ethyl ether=1

Flammability (solid, gas) : Data not available

Upper explosion limit : 5.5 %(V)

Lower explosion limit : 0.5 %(V)

Vapour pressure : < 4 Pa (20 °C / 68 °F)

< 1 Pa (0 °C / 32 °F)

Relative vapour density : Data not available
Relative density : Data not available

Density : Typical 797 kg/m3 (15 °C / 59 °F)

10 / 18 800001007479

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Method: ASTM D4052

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

: log Pow: 7 - 8.7

Auto-ignition temperature : 232 °C / 450 °F

Method: ASTM E-659

Auto-ignition temperature 215 °C / 419 °F

Method: DIN 51794

Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : Data not available

Viscosity, kinematic : Typical 3.2 mm2/s (25 °C / 77 °F)

Method: ASTM D445

Explosive properties : Not classified

Oxidizing properties : Data not available

Surface tension : Typical 38 mN/m, 20 °C / 68 °F, ASTM D-971

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 semiconductive 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 : 206 g/mol

10. STABILITY AND REACTIVITY

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

addition to those listed in the following sub-paragraph.

11 / 18 800001007479 PUBLIC

IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

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

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

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

products, and/or components.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for

individual component(s).

exposure

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

skin or eye contact, and accidental ingestion.

Acute toxicity

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

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

Remarks: Low toxicity

Acute inhalation toxicity : Rat: Exposure time: 4 hrs

Remarks: Low toxicity by inhalation.

LC50 greater than near-saturated vapour concentration.

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

Remarks: Low toxicity

Skin corrosion/irritation

12 / 18 800001007479 **PUBLIC**

IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

Remarks: Causes mild skin irritation., Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Serious eye damage/eye irritation

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

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

Germ cell mutagenicity

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

: Remarks: Not mutagenic.

Carcinogenicity

Components:

Distillates (petroleum), hydro- treated light; Kerosine — unspecified:

Remarks: Repeated exposure causes skin tumour promotion in experimental animals., Not a carcinogen., Based on available data, the classification criteria are not met.

Material	GHS/CLP Carcinogenicity Classification
Distillates (petroleum), hydro- treated light; Kerosine — unspecified	No carcinogenicity classification.

Reproductive toxicity

Components:

Distillates (petroleum), hydro- treated light; Kerosine — unspecified:

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

STOT - single exposure

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified:

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

STOT - repeated exposure

Components:

Distillates (petroleum), hydro- treated light; Kerosine — unspecified:

Remarks: Kidney: caused kidney effects in male rats which are not considered relevant to humans

Aspiration toxicity

Components:

Distillates (petroleum), hydro- treated light; Kerosine — unspecified:

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

Further information

Components:

Distillates (petroleum), hydro- treated light; Kerosine — unspecified:

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

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.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for

individual component(s).

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified :

Toxicity to fish (Acute : Remarks: LC/EC/IC50 > 100 mg/l

toxicity) Practically non toxic:

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

Toxicity to daphnia and other

aquatic invertebrates (Acute Practica

: Remarks: LC/EC/IC50 > 100 mg/l Practically non toxic:

toxicity)

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

Toxicity to algae (Acute : Remarks: LC/EC/IC50 > 100 mg/l

14 / 18 800001007479

PUBLIC IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

toxicity) Practically non toxic:

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

Toxicity to bacteria : Remarks: LC/EC/IC50 > 100 mg/l

Practically non toxic:

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

Toxicity to fish (Chronic

toxicity)

: Remarks: Data not available

Toxicity to daphnia and other : Remarks: Data not available

aquatic invertebrates (Chronic toxicity)

Persistence and degradability

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified :

Biodegradability : Remarks: Readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

Remarks: Not Persistent per IMO criteria.

International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F)

and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."

Major constituents are inherently biodegradable, but contains

components that may persist in the environment.

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

Bioaccumulative potential

Product:

Partition coefficient: n-: log Pow: 7 - 8.7

octanol/water Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified :

Bioaccumulation : Remarks: Has the potential to bioaccumulate.

Mobility in soil

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified :

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

particles and will not be mobile.

Other adverse effects

Components:

Distillates (petroleum), hydro-treated light; Kerosine — unspecified :

Additional ecological : In view of the high rate of loss from solution, the product is

15 / 18 800001007479 PUBLIC

IMO

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

information unlikely to pose a significant hazard to aquatic life.

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

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

contamination.

courses.

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.

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

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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.

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1 Revision Date 23.11.2023 Print Date 30.11.2023

Additional Information

: This product is being carried under the scope of MARPOL

Annex I.

15. REGULATORY INFORMATION

Other regulations : The regulatory information is not intended to be

comprehensive. Other regulations may apply to this material.

International Convention for the Safety of Life at Seas (SOLAS) Regulation VI/5-1.RESOLUTION MSC.286(86); RECOMMENDATIONS FOR MATERIAL SAFETY DATA SHEETS (MSDS) FOR MARPOL ANNEX I OIL CARGO AND

OIL FUEL.

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

AIIC : Listed DSL Listed **IECSC** Listed KECI Listed **PICCS** Listed TSCA Listed **NZIoC** Listed TCSI : Listed

16. OTHER INFORMATION

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this

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

scientific dictionaries) and/or websites.

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.

IMO (International Maritime Organization) SDS per SOLAS regulation VI/5-1

ShellSol D 100

Version 2.1

Revision Date 23.11.2023

Print Date 30.11.2023