

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ShellSol 15

Product code : Q3555

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

Flammable liquids : Category 3
Aspiration hazard : Category 1
Skin irritation : Category 3
Specific target organ toxicity - single exposure : Category 3 (Respiratory Tract, Narcotic effects)
Short-term (acute) aquatic hazard : Category 2
Long-term (chronic) aquatic hazard : Category 2

GHS-Labeling

Hazard pictograms :



Signal word : Danger

Hazard statements : PHYSICAL HAZARDS:

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

H226 Flammable liquid and vapour.

HEALTH HAZARDS:

H304 May be fatal if swallowed and enters airways.

H316 Causes mild skin irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

ENVIRONMENTAL HAZARDS:

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P271 Use only outdoors or in a well-ventilated area.

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

P273 Avoid release to the environment.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P370 + P378 In case of fire: Use appropriate media to extinguish.

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

P331 Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/ doctor if you feel unwell.

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

P391 Collect spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P235 Keep cool.

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

This material is a static accumulator.

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur.

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65°C to 230°C (149°F to 446°F).

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Naphtha (petroleum), hydrotreated heavy	64742-48-9	80 - 90 %
Solvent naphtha (petroleum), light arom.	64742-95-6	10 - 20 %

Further information

Contains:

4. FIRST-AID MEASURES

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

If inhaled : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

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.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

	<p>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.</p>
Most important symptoms and effects, both acute and delayed	<p>: Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.</p> <p>Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.</p> <p>Skin irritation signs and symptoms may include a burning sensation, redness, or swelling.</p> <p>No specific hazards under normal use conditions.</p> <p>Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.</p> <p>If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.</p> <p>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.</p> <p>Auditory system effects may include temporary hearing loss and/or ringing in the ears.</p> <p>Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.</p>
Protection of first-aiders	<p>: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.</p>
Notes to physician	<p>: Call a doctor or poison control center for guidance.</p> <p>Potential for chemical pneumonitis.</p> <p>Treat symptomatically.</p>

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.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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.
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	: For small liquid spills (< 1 drum), transfer by mechanical

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

containment and cleaning up	<p>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.</p> <p>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.</p> <p>Ventilate contaminated area thoroughly.</p> <p>If contamination of site occurs remediation may require specialist advice.</p>
Additional advice	<p>: For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.</p> <p>For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.</p>

7. HANDLING AND STORAGE

General Precautions	<p>: 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.</p> <p>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.</p> <p>Ensure that all local regulations regarding handling and storage facilities are followed.</p>
Advice on safe handling	<p>: Avoid inhaling vapour and/or mists.</p> <p>Avoid contact with skin, eyes and clothing.</p> <p>Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks.</p> <p>Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.</p> <p>Bulk storage tanks should be diked (bunded).</p> <p>When using do not eat or drink.</p> <p>The vapour is heavier than air, spreads along the ground and distant ignition is possible.</p>
Avoidance of contact	<p>: Strong oxidising agents.</p>
Product Transfer	<p>: 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</p>

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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.

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

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	200 mg/m3	ACGIH

Contains no components with occupational exposure limit values.

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>

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

Protective measures

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

Engineering measures

: Use sealed systems as far as possible.
Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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

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 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

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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.
- Thermal hazards : Not applicable
- Hygiene measures : Wash hands before eating, drinking, smoking and using the toilet.
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.
Information on accidental release measures are to be found in section 6.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid.
Colour	: clear
Odour	: Hydrocarbon
Odour Threshold	: Data not available
pH	: Not applicable
Melting / freezing point	: Data not available
Boiling point/boiling range	: 157 - 206 °C / 315 - 402 °F
Flash point	: 43 °C / 109 °F
Upper explosion limit	: 6 %(V)
Lower explosion limit	: 0.5 %(V)
Vapour pressure	: 29.3 Pa (20 °C / 68 °F)
Relative vapour density	: 4.7
Relative density	: 0.793
Density	: Data not available
Solubility(ies)	
Water solubility	: 0.05 g/l negligible
Solubility in other solvents	: Data not available
Partition coefficient: n-octanol/water	: Data not available
Auto-ignition temperature	: 230 °C / 446 °F
Decomposition temperature	: Data not available
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: Data not available
Explosive properties	: Not applicable
Oxidizing properties	: Not applicable
Conductivity	: Low conductivity: < 100 pS/m, The conductivity of this material

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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

: Not applicable

10. STABILITY AND REACTIVITY

- | | |
|------------------------------------|--|
| Reactivity | : The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph. |
| 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

- | | |
|--|---|
| Basis for assessment | : Information given is based on product testing, and/or similar products, and/or components. |
| Information on likely routes of exposure | : Inhalation is the primary route of exposure although absorption may occur through skin contact or following accidental ingestion. |

Acute toxicity

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Product:

- Acute oral toxicity : LD50 : > 5,000 mg/kg
Remarks: Low toxicity
Based on available data, the classification criteria are not met.
- Acute inhalation toxicity : Remarks: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea.
Low toxicity if inhaled.
Based on available data, the classification criteria are not met.
- Acute dermal toxicity : LD50 : > 5,000 mg/kg
Remarks: Low toxicity
Based on available data, the classification criteria are not met.

Components:

Solvent naphtha (petroleum), light arom.:

- Acute oral toxicity : LD 50 Rat, male and female: > 2000 - <= 5000
Method: Acceptable non-standard method.
Remarks: May be harmful if swallowed.
- Acute inhalation toxicity : LC 50 Rat, male and female: > 2 -<= 10 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Test(s) equivalent or similar to OECD Test Guideline 403
Remarks: LC50 greater than near-saturated vapour concentration.
Based on available data, the classification criteria are not met.
- Acute dermal toxicity : LD 50 Rabbit, male and female: > 2,000 mg/kg
Method: Test(s) equivalent or similar to OECD Test Guideline 402
Remarks: Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Causes mild skin irritation., Repeated exposure may cause skin dryness or cracking.

Components:

Solvent naphtha (petroleum), light arom.:

Species: Rabbit
Method: OECD Test Guideline 404
Remarks: Moderately irritating to skin (but insufficient to classify)., Repeated exposure may cause skin dryness or cracking.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Serious eye damage/eye irritation

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

Species: Rabbit

Method: Test(s) equivalent or similar to OECD Test Guideline 405

Remarks: Slightly irritating., Insufficient to classify.

Respiratory or skin sensitisation

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

Species: Guinea pig

Method: OECD Test Guideline 406

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

Germ cell mutagenicity

Product:

: Remarks: No evidence of mutagenic activity.

Components:

Solvent naphtha (petroleum), light arom.:

Genotoxicity in vitro : Method: Test(s) equivalent or similar to OECD Guideline 471
Remarks: Based on available data, the classification criteria are not met.

: Method: Test(s) equivalent or similar to OECD Test Guideline 473
Remarks: Based on available data, the classification criteria are not met.

: Method: Test(s) equivalent or similar to OECD Test Guideline 476
Remarks: Based on available data, the classification criteria are not met.

: Test species: RatMethod: Test(s) equivalent or similar to OECD Test Guideline 475
Remarks: Based on available data, the classification criteria are not met.

Germ cell mutagenicity- : This product does not meet the criteria for classification in

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Assessment

categories 1A/1B.

Carcinogenicity

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

Remarks: Tumours produced in animals are not considered relevant to humans., Not a carcinogen., Based on available data, the classification criteria are not met.

Carcinogenicity - Assessment : This product does not meet the criteria for classification in categories 1A/1B.

Material	GHS/CLP Carcinogenicity Classification
Naphtha (petroleum), hydrotreated heavy	No carcinogenicity classification.
Solvent naphtha (petroleum), light arom.	No carcinogenicity classification.

Material	Other Carcinogenicity Classification
Solvent naphtha (petroleum), light arom.	IARC: Group 3: Not classifiable as to its carcinogenicity to humans

Reproductive toxicity

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

: Species: Rat
Sex: male and female
Application Route: Inhalation

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Method: Other guideline method.

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

Effects on foetal development

: Species: Rat, female

Application Route: Inhalation

Method: Other guideline method.

Remarks: Based on available data, the classification criteria are not met., Causes foetotoxicity in animals at doses which are maternally toxic.

Reproductive toxicity - Assessment

: This product does not meet the criteria for classification in categories 1A/1B.

STOT - single exposure

Product:

Remarks: May cause respiratory irritation., May cause drowsiness and dizziness.

Components:

Solvent naphtha (petroleum), light arom.:

Exposure routes: Inhalation

Target Organs: Lungs, Central nervous system

Remarks: May cause drowsiness and dizziness., May cause respiratory irritation.

STOT - repeated exposure

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

Remarks: Based on available data, the classification criteria are not met., Auditory system: prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. , Kidney: caused kidney effects in male rats which are not considered relevant to humans

Repeated dose toxicity

Components:

Solvent naphtha (petroleum), light arom.:

Rat, male and female:

Application Route: Oral

Method: Test(s) equivalent or similar to OECD Test Guideline 408

Target Organs: No specific target organs noted

Rat, male and female:

Application Route: Inhalation

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Test atmosphere: vapour

Method: Test(s) equivalent or similar to OECD Test Guideline 452

Target Organs: No specific target organs noted

Aspiration toxicity

Product:

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

Components:

Solvent naphtha (petroleum), light arom.:

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.

Remarks: Prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss., Kidney: caused kidney effects in male rats which are not considered relevant to humans

Components:

Solvent naphtha (petroleum), light arom.:

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Product:

Toxicity to fish (Acute toxicity) :
Remarks: LL/EL/IL50 >10 <= 100 mg/l
Harmful

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) :
Remarks: LL/EL/IL50 >10 <= 100 mg/l
Harmful

Toxicity to algae (Acute toxicity) :
Remarks: LL/EL/IL50 > 1 <= 10 mg/l

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Toxic

Toxicity to bacteria : Remarks: Data not available

Components:

Solvent naphtha (petroleum), light arom. :

Toxicity to fish (Acute toxicity) : LC50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Toxic
LC/EC/IC50 >1 - <=10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) : EL50 (Daphnia magna (Water flea)): 3.2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Toxic
LC/EC/IC50 >1 - <=10 mg/l

Toxicity to algae (Acute toxicity) : ErL50 (Pseudokirchneriella subcapitata (algae)): 2.9 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Toxic
LC/EC/IC50 >1 - <=10 mg/l

Toxicity to bacteria : NOEC (Activated sludge): > 99 mg/l
Exposure time: 0.16 h
Method: OECD Test Guideline 209
Remarks: Practically non toxic:
LC/EC/IC50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Data not available

Persistence and degradability

Product:

Biodegradability : Remarks: Inherently 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, distills at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."

Components:

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Solvent naphtha (petroleum), light arom. :

Biodegradability : Biodegradation: 78 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Readily biodegradable.
Oxidises rapidly by photo-chemical reactions in air.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Has the potential to bioaccumulate.

Partition coefficient: n-octanol/water : Remarks: Data not available

Components:

Solvent naphtha (petroleum), light arom. :

Bioaccumulation : Remarks: Contains components 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:

Solvent naphtha (petroleum), light arom. :

Mobility : Remarks: Floats on water., If it enters soil, it will adsorb to soil particles and will not be mobile.

Other adverse effects

Components:

Solvent naphtha (petroleum), light arom. :

Results of PBT and vPvB assessment : The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Additional ecological information : Does not have ozone depletion potential.

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.
Do not dispose into the environment, in drains or in water courses.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

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

UN/ID No. : UN 1268
Proper shipping name : Petroleum distillates, n.o.s.
Class : 3
Packing group : III
Labels : 3

IMDG-Code

UN number : UN 1268
Proper shipping name : PETROLEUM DISTILLATES, N.O.S.
(Naphtha (Petroleum) Hydrotreated Heavy)
Class : 3
Packing group : III
Labels : 3
Marine pollutant : yes

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.

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.

SAFETY DATA SHEET

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

ShellSol 15

Version 1.5

Revision Date 23.11.2023

Print Date 30.11.2023

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:

AICS	: Listed
DSL	: Listed
IECSC	: Listed
KECI	: Listed
PICCS	: Listed
EINECS	: Listed
TSCA	: 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 data 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.