In accordance with Occupational Safety and Health Act's Standard of Classification and Labelling of Chemical Substances and MSDS

SBP 100/140

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name SBP 100/140

Product code Q5811

: Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Synonyms

CAS-No. : 64742-49-0

Recommended use of the chemical and restrictions on use

Recommended use : Industrial Solvent.

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

above without first seeking the advice of the supplier.

Manufacturer or supplier's details

Supplier

SHELL EASTERN CHEMICALS (S)

A REGISTERED BUSINESS OF SHELL EASTERN

TRADING (PTE) LTD (UEN:198902087C)

9 North Buona Vista Drive, #07-01

The Metropolis Tower 1 Singapore 138588

Singapore

: +82 2 360 1169 Telephone Telefax : +82 2 393 6196 Contact for Safety Data : sccmsds@shell.com

Sheet

Emergency telephone

number

: + (65) 6542 9595 (Alert-SGS)

Organization that prepared

the SDS

JOIN International Ltd. (JIL) Samsung Cheil Bldg., 18th Fl, 309, Tereran-ro, Gangnam-gu,

Seoul, 06151, Republic of Korea

+82 (0)2 527 4317

+82 (0)2 527 4314 (FAX)

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2 Aspiration hazard : Category 1

Specific target organ toxicity -: Category 3 (Narcotic effects)

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single exposure

Long-term (chronic) aquatic

hazard

: Category 2

GHS label elements

Hazard pictograms









Signal word Danger

PHYSICAL HAZARDS: Hazard statements

H225 Highly flammable liquid and vapour.

HEALTH HAZARDS:

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

ENVIRONMENTAL HAZARDS:

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.

P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. 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.

P391 Collect spillage.

Storage:

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

tightly closed. P235 Keep cool.

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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.

NFPA Rating (Health, Fire, : 1, 3, 0

Reactivity)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	Common Name	CAS-No.	Concentration (% w/w)
naphtha (petroleum), hydrotreated light	Naphtha (petroleum), hydrotreated light	64742-49-0	<= 100

4. FIRST-AID MEASURES

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

conditions.

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.

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.

If inhaled : Remove to fresh air. If rapid recovery does not occur,

transport to nearest medical facility for additional treatment.

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If swallowed	If swallowed, do not induce vo medical facility for additional tr spontaneously, keep head bel If any of the following delayed within the next 6 hours, transp facility: fever greater than 101°	: 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	 Breathing of high vapour conc nervous system (CNS) depres headedness, headache, nause Continued inhalation may resu death. 	ssion resulting in dizziness, lightea and loss of coordination.	
	Skin irritation signs and sympt sensation, redness, swelling, a		
	No specific hazards under nor Eye irritation signs and sympto sensation, redness, swelling, a	oms may include a burning	
	If material enters lungs, signs coughing, choking, wheezing, congestion, shortness of breat If any of the following delayed within the next 6 hours, transp facility: 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 protective incident, injury and surroundin 		
Notes to physician	 Call a doctor or poison control Potential for chemical pneumon Treat symptomatically. 		

5. FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media

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.

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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 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

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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.

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

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> 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.

Safe storage methods (including conditions to be avoided)

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 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).

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

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Aliphatic dearom. solvents 100 - 140	Not Assigned	TWA	1,300 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/

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

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> 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

boiling point >65°C (149°F)].

: If material is handled such that it could be splashed into eyes, Eye protection

protective eyewear is recommended.

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

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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.

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid.

Colour : colourless
Odour : Paraffinic

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Odour Threshold : Data not available

pH : Not applicable

Melting point/freezing point : Data not available

Initial boiling point and boiling

range

: Typical 107 - 137 °C / 225 - 279 °F

Flash point : Typical 1 °C / 34 °F

Method: IP 170

Evaporation rate : 6

Method: DIN 53170, di-ethyl ether=1

1.9

Method: ASTM D 3539, nBuAc=1

Flammability (solid, gas) : Not applicable

Upper/Lower explosion limit

Upper explosion limit : upper flammability limit

6.8 %(V)

Lower explosion limit : Lower flammability limit

0.9 %(V)

Vapour pressure : Typical 3.500 Pa (20 °C / 68 °F)

Typical 1.500 Pa (0 °C / 32 °F)

Typical 12.000 Pa (50 °C / 122 °F)

Solubility(ies)

Water solubility : insoluble

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

Density : Typical 728 kg/m3 (15 °C / 59 °F)

Method: ASTM D4052

Partition coefficient: n-

octanol/water

: log Pow: 4 - 5.7

Auto-ignition temperature : 310 °C / 590 °F

Method: ASTM E-659

Auto-ignition temperature 260 °C / 500 °F

Method: DIN 51794

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Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : Data not available

Viscosity, kinematic : 0.76 mm2/s (25 °C / 77 °F)

Method: ASTM D445

Typical 1 mm2/s (0 °C / 32 °F)

Method: ASTM D445

Explosive properties : Not applicable

Oxidizing properties : Data not available

Surface tension : Data not available

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 : 112 g/mol

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions:

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 according to provisions, Stable under normal

conditions of use.

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.

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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.

Health hazard information

Acute toxicity

Components:

naphtha (petroleum), hydrotreated light:

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

Remarks: Low toxicity:

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

Acute inhalation toxicity : LC50 : > 20 mg/l

Remarks: Low toxicity by inhalation.

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

Remarks: Low toxicity:

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

Skin corrosion/irritation

Components:

naphtha (petroleum), hydrotreated light:

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

Serious eye damage/eye irritation

Components:

naphtha (petroleum), hydrotreated light:

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Components:

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naphtha (petroleum), hydrotreated light:

Remarks: Not a sensitiser.

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

Carcinogenicity

Components:

naphtha (petroleum), hydrotreated light:

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

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

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

Germ cell mutagenicity

Components:

naphtha (petroleum), hydrotreated light:

: Remarks: Not mutagenic.

Reproductive toxicity

Components:

naphtha (petroleum), hydrotreated light:

:

Remarks: Not a developmental toxicant., Does not impair fertility.

STOT - single exposure

Components:

naphtha (petroleum), hydrotreated light:

Remarks: May cause drowsiness and dizziness., High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea.

STOT - repeated exposure

Components:

naphtha (petroleum), hydrotreated light:

Remarks: Central nervous system: repeated exposure affects the nervous system., Kidney: caused kidney effects in male rats which are not considered relevant to humans

Aspiration toxicity

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Components:

naphtha (petroleum), hydrotreated light:

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

Further information

Components:

naphtha (petroleum), hydrotreated light:

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.

Ecotoxicity

Components:

naphtha (petroleum), hydrotreated light:

Toxicity to fish (Acute : Remarks: LC/EC/IC50 >1 - <=10 mg/l

toxicity) Toxic

Toxicity to crustacean (Acute : Remarks: LC/EC/IC50 >1 - <=10 mg/l

toxicity) Tox

Toxicity to algae/aquatic : Remarks: LL/EL/IL50 >10 <= 100 mg/l

plants (Acute toxicity) Harmful

Toxicity to microorganisms : Remarks: Data not available

(Acute toxicity)

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

Toxicity to : Remarks: NOEC/NOEL expected to be > 0.1 - <= 1.0 mg/l

crustacean(Chronic toxicity)

Persistence and degradability

Components:

naphtha (petroleum), hydrotreated light:

Biodegradability : Remarks: Readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

Bioaccumulative potential

Product:

Partition coefficient: n- : log Pow: 4 - 5.7

octanol/water

Components:

naphtha (petroleum), hydrotreated light:

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Bioaccumulation : Remarks: Has the potential to bioaccumulate.

Mobility in soil

Components:

naphtha (petroleum), hydrotreated light:

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

particles and will not be mobile.

Other adverse effects

no data available

Components:

naphtha (petroleum), hydrotreated light:

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. 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 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,

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cut or weld uncleaned drums.

Send to drum recoverer or metal reclaimer.

Comply with any local recovery or waste disposal regulations.

Disposal considerations

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

National Regulations

Refer to section 15 for specific national regulation.

International Regulations

ADR

UN number : 1268

Proper shipping name : PETROLEUM DISTILLATES, N.O.S.

Class : 3
Packing group : II
Labels : 3
Hazard Identification Number : 33
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 1268

Proper shipping name : Petroleum distillates, n.o.s.

Class : 3
Packing group : II
Labels : 3

IMDG-Code

UN number : UN 1268

Proper shipping name : PETROLEUM DISTILLATES, N.O.S.

(NAPHTHA)

Class : 3
Packing group : II
Labels : 3
Marine pollutant : yes

Maritime transport in bulk according to IMO instruments

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.

Additional Information: This product may be transported under nitrogen blanketing.

In accordance with Occupational Safety and Health Act's Standard of Classification and Labelling of Chemical Substances and MSDS

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	Nitrogen is an odourless and invisible nitrogen enriched atmospheres dispublich may cause asphyxiation or dobserve strict safety precautions who confined space entry.	places available oxygen eath. Personnel must

15. REGULATORY INFORMATION

National regulatory information

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

	manufacturing, etc., Not applicable Hazardous substances subject to authorization, Not applicable
	Hazardous substances subject to control, Not applicable
	Substances established for exposure limits, Not applicable
	Hazardous factor subject to keep below permissible limit, Not applicable
	Hazardous Factors Subject to Working Environment Monitoring, Not applicable
	J. 11
	Hazardous Factors Subject to Special Medical Examination, Not applicable
	· · · · · · · · · · · · · · · · · · ·
CHEMICALS CONTROL ACT:	Toxic chemical substances, Not applicable
	Authorization chemical substances, Not applicable
	Restricted chemical substances, Not applicable
	Prohibited chemical substances, Not applicable
	1
	Accident precaution chemical substance, Not applicable
DANGEROUS GOODS SAFE CONTROL ACT:	Category/Classification of dangerous material:,
	Category 4 Dangerous Goods (Flammable

In accordance with Occupational Safety and Health Act's Standard of Classification and Labelling of Chemical Substances and MSDS

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		Liquids), Grade	1 petroleum chemicals
	WASTES MANAGEMENT ACT:	Treat with Artic	cle 4/5/24/25 of Disposal
		Considerations	s Section.

Other requirements in domestic and other countries

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

DSL : Listed

IECSC Listed

ENCS Listed

KECI Listed

PICCS Listed

TSCA Listed

TCSI Listed

AIIC Listed

NZIoC : Listed

16. OTHER INFORMATION

Full text of other abbreviations

Aquatic Chronic Long-term (chronic) aquatic hazard

Asp. Tox. Aspiration hazard Flam. Lig. Flammable liquids

STOT SE Specific target organ toxicity - single exposure

Abbreviations and Acronyms

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -

In accordance with Occupational Safety and Health Act's Standard of Classification and Labelling of Chemical Substances and MSDS

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International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration: NO(A)EL - No Observed (Adverse) Effect Level: NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC -New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG -Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

: Provide adequate information, instruction and training for Training advice

operators.

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).

: 2012.10.01 Issuing date

Revision number and date

Number of Revision : 3.2

Revision Date : 2022.08.04

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

from the previous version.

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