NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NEODENE 1540 Internal Olefin

Product code : V1373, V1480

Synonyms : Internal Olefin

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 : +65 6384 8269 : +65 6384 8454

Contact for Safety Data

Emergency telephone

Sheet

Telefax

Telephone

: +800 2537 8747 (ALERT SGS- toll Free) or +65 6542 9595

number (ALERT SGS)

Recommended use of the chemical and restrictions on use

Recommended use : Chemical intermediate.

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

above without first seeking the advice of the supplier.

Other information : NEODENE is a trademark owned by Shell Trademark

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

of Shell plc.

2. HAZARDS IDENTIFICATION

GHS Classification

Based on available data this substance / mixture does not meet the classification criteria.

GHS label elements

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : PHYSICAL HAZARDS:

Not classified as a physical hazard under GHS criteria.

1 / 18 800001034223 SG

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

HEALTH HAZARDS:

Not classified as a health hazard under GHS criteria.

ENVIRONMENTAL HAZARDS:

Not classified as an environmental hazard under GHS criteria.

Precautionary statements

Prevention:

No precautionary phrases.

Response:

No precautionary phrases.

Storage:

No precautionary phrases.

Disposal:

No precautionary phrases.

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. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Contact with hot material can cause thermal burns which may result in permanent skin damage. Hot product may cause severe eye and skin burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture Substance

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%
			w/w)
Alkenes, C>8	68411-00-7		<= 100

4. FIRST-AID MEASURES

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

conditions.

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

symptoms persist, obtain medical advice.

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

> water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

If contact with hot product, immediately cool the burn area by

NEODENE 1540 Internal Olefin

Version 2.2	Payleion Data 01 11 2022 Print Data 09 11 2022
Version 2.2	flushing or immersing the affected area with water for at least 15 to 20 minutes. Do not attempt to remove anything from the burn area or apply burn creams or ointments. During transport do not cover the wound with dressing or sheet since these may adhere to the product. Do not attempt to remove anything from the burn area. Do apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available. Transport to the nearest medical facility for additional treatment. All burns should receive medical attention. It should be noted this product contracts on cooling. Where a limb is encased, care should be taken to avoid the development of a tourniquet effect. In the event of this occurring, the adhering product must be softened and/or split to prevent restriction of blood flow.
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 contact with hot product, immediately cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area. Do not apply burn creams or ointments. Remove contact lenses, if present and easy to do. Continue rinsing. Cover the burn area loosely with a sterile dressing, if available. Transport to the nearest medical facility for additional treatment. All burns should receive medical attention.
If swallowed	: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Most important symptoms and effects, both acute and delayed	: Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.
	Hot product - Contact with the skin can cause severe burns, redness, swelling, blisters and/or tissue damage.
	Hot product - Contact with the eye can cause severe burns, redness, swelling, blurred vision, and may result in permanent loss of vision.
	No specific hazards under normal use conditions. Ingestion may result in nausea, vomiting and/or diarrhoea.
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.

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Notes to physician : IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

Call a doctor or poison control center for guidance.

Treat symptomatically.

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.

Environmental precautions : Shut off leaks, if possible without personal risks. Remove all

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

> possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Monitor area with combustible gas indicator.

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

contaminated soil and dispose of safely.

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

Ventilate contaminated area thoroughly.

If contamination of site occurs remediation may require

specialist advice.

Additional advice

: For guidance on selection of personal protective equipment

see Section 8 of this Safety Data Sheet.

For guidance on disposal of spilled material see Section 13 of

this Safety Data Sheet.

7. HANDLING AND STORAGE

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

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

Section 8 of this Safety Data Sheet.

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

appropriate controls for safe handling, storage and disposal of

this material.

Ensure that all local regulations regarding handling and

storage facilities are followed.

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

Avoid contact with skin, eyes and clothing.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Bulk storage tanks should be diked (bunded).

When using do not eat or drink.

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

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:

If wax is molten, store at a temperature not more than 10 deg.

above melting point and with a nitrogen blanket.

If wax is solid store at least 20°C below the melting point.

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.

NEODENE 1540 Internal Olefin

Version 2.2	Revision Date 01.11.2023	Print Date 08.11.2023	
Packaging material	steel, stainless steel., For containe zinc silicate paint.	Unsuitable material: Avoid prolonged contact with natural,	
Container Advice	 Do not cut, drill, grind, weld or perf near containers. 	orm similar operations on or	
Specific use(s)	: Not applicable		
	See additional references that prove for liquids that are determined to be American Petroleum Institute 2003 Ignitions Arising out of Static, Light National Fire Protection Agency 77 on Static Electricity). IEC/TS 60079-32-1: Electrostatic h	e static accumulators: (Protection Against thing and Stray Currents) or (Recommended Practices	

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

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 : Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Eye washes and showers for emergency use.

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

> 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

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 the combination of organic gases and vapours and particles [Type A/Type P 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 or neoprene rubber gloves. When handling heated product wear heat resistant gloves. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

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 : Wear safety glasses and face shield (preferably with a chin

guard) if splashes are likely to occur.

Skin and body protection : For normal operations with hot material wear chemical and

heat resistant boots and overalls (with cuffs over gloves and

legs over boots).

Thermal hazards : When handling heated product, wear heat resistant gloves,

safety hat with chin strap, face shield (preferably with a chin guard), safety glasses, heat resistant coveralls (with cuffs over gloves and legs over boots), neck protection and heavy duty

boots, e.g. leather for heat resistance.

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 : solid

Colour : Data not available

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Odour Mild hydrocarbon

Odour Threshold Data not available pΗ Not applicable pour point 41 °C / 106 °F

Melting point/freezing point Data not available Boiling point/boiling range : > 270 °C / > 518 °F : 163 °C / 325 °F Flash point

Evaporation rate : Data not available

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : Data not available Lower explosion limit : Data not available

Vapour pressure : Data not available (50 °C / 122 °F)

Relative vapour density : > 5

: 0.8387Method: ASTM D4052 Relative density

: 0.777 g/cm3 (80 °C / 176 °F) Density

Method: ASTM D4052

Solubility(ies)

Water solubility : Data not available Partition coefficient: n-: Data not available

octanol/water

Auto-ignition temperature : Data not available Decomposition temperature : Data not available

Viscosity

: 8.3 mPa.s (70 °C / 158 °F) Viscosity, dynamic

Method: ASTM D445

Viscosity, kinematic 7.0 mm2/s (80 °C / 176 °F)

Method: ASTM D445

Explosive properties : Not applicable Oxidizing properties Data not available

Surface tension Data not available

Conductivity : Low conductivity: < 100 pS/m

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

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 : Data not available

10. STABILITY AND REACTIVITY

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

addition to those listed in the following sub-paragraph.

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

according to provisions Stable under normal conditions of use.

Possibility of hazardous

reactions

s : 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.

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

individual component(s).

Information on likely routes of

exposure

Exposure may occur via inhalation, ingestion, skin absorption,

skin or eye contact, and accidental ingestion.

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Acute toxicity

Components:

Alkenes, C>8:

Acute oral toxicity : LD50 : > 5000 mg/kg

Remarks: Low toxicity

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

Acute inhalation toxicity : Remarks: Low toxicity by inhalation.

Acute dermal toxicity : LD50 : > 5000 mg/kg

Remarks: Low toxicity

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

Skin corrosion/irritation

Components:

Alkenes, C>8:

Remarks: Not irritating to skin.

Serious eye damage/eye irritation

Components:

Alkenes, C>8:

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Components:

Alkenes, C>8:

Remarks: Not a sensitiser.

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

Germ cell mutagenicity

Components:

Alkenes, C>8:

: Remarks: Non mutagenic

Carcinogenicity

Components:

Alkenes, C>8:

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

Material	GHS/CLP Carcinogenicity Classification	
Alkenes, C>8	No carcinogenicity classification.	

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Reproductive toxicity

Components:

Alkenes, C>8:

:

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

fertility.

STOT - single exposure

Components:

Alkenes, C>8:

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

STOT - repeated exposure

Components:

Alkenes, C>8:

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

Aspiration toxicity

Components:

Alkenes. C>8:

Not an aspiration hazard.

Further information

Components:

Alkenes, C>8:

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.

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

individual component(s).

Ecotoxicity

Components:

Alkenes, C>8:

Toxicity to fish (Acute

toxicity)

: Remarks: Not toxic at limit of water solubility:

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Toxicity to crustacean (Acute

toxicity)

: Remarks: Not toxic at limit of water solubility:

Toxicity to algae/aquatic

plants (Acute toxicity)

: Remarks: Not toxic at limit of water solubility:

Toxicity to microorganisms

(Acute toxicity)

: Remarks: Not toxic at limit of water solubility:

Toxicity to fish (Chronic

toxicity)

: Remarks: Data not available

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

Persistence and degradability

Components: Alkenes, C>8:

Biodegradability : Remarks: Inherently biodegradable.

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 expected to be inherently

biodegradable, but contains components that may persist in

the environment.

Bioaccumulative potential

Product:

Partition coefficient: n-

octanol/water

: Remarks: Data not available

Components: Alkenes, C>8 :

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

Mobility in soil

Components: Alkenes, C>8:

Mobility : Remarks: If it enters soil, it will adsorb to soil particles and will

not be mobile.

Other adverse effects

no data available

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

14 / 18 800001034223 SG

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

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.

Waste product should not be allowed to contaminate soil or

water.

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.

Contaminated packaging : Drain container thoroughly.

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

cut or weld uncleaned drums.

Send to drum recoverer or metal reclaimer.

Comply with any local recovery or waste disposal regulations.

14. TRANSPORT INFORMATION

International Regulations

ADR

UN number : 3257

Proper shipping name : ELEVATED TEMPERATURE LIQUID, N.O.S.

(Alkenes, C>8)

Class : 9
Packing group : III
Labels : 9
Hazard Identification Number : 99
Environmentally hazardous : no

IATA-DGR

UN/ID No. : UN 3257 (Not permitted for transport)

Proper shipping name : ELEVATED TEMPERATURE LIQUID, N.O.S.

(Alkenes, C>8)

Class : 9

Packing group : Not Assigned

Remarks : IATA - Forbidden for transport on passenger and cargo

aircraft in molten state.

IMDG-Code

UN number : UN 3257

Proper shipping name : ELEVATED TEMPERATURE LIQUID, N.O.S.

(Alkenes, C>8)

Class : 9
Packing group : III
Labels : 9

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

Marine pollutant : no

Maritime transport in bulk according to IMO instruments

Pollution category : Not applicable
Ship type : Not applicable
Product name : Not applicable

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.

Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a

confined space entry.

IATA - Forbidden for transport on passenger and cargo

aircraft in molten state.

Not dangerous for conveyance under UN, IMO, ADR/RID,

IATA codes if transported at ambient temperature.

15. REGULATORY INFORMATION

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

Local Regulations

Workplace Safety and Health Act & Workplace Safety and Health (General Provision) Regulations	This product is subject to the SDS, Labelling, PEL and other requirements in the Act/ Regulations.
Fire Safety Act and Fire Safety (Petroleum & Flammable Materials) Regulations	This product is not subject to the requirements in the Act/Regulations.
Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations	This product is subject to the requirements of this regulation.
Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations	This product is not subject to the requirements in the Act/Regulations.

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

Other international regulations

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

AIIC : Listed DSL : Listed

NEODENE 1540 Internal Olefin

Version 2.2 Revision Date 01.11.2023 Print Date 08.11.2023

EINECS : Listed TSCA : Listed

16. OTHER INFORMATION

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 -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

Training advice : Provide adequate information, instruction and training for

operators.

NEODENE 1540 Internal Olefin

Version 2.2	Revision Date 01.11.2023	Print Date 08.11.2023
Other information	A vertical bar () in the left margin indicates an amendment from the previous version.	
Other information		
Other information	There has been a significant char information in section 2 & 3.	ge in compositional
Other information		
Other information	There has been a significant char in section 14.	ige in transport classification
Other information		
Sources of key data used to compile the Safety Data Sheet	: The quoted data are from, but not sources of information (e.g. toxico Health Services, material supplier IUCLID date base, EC 1272 regul	ological data from Shell s' data, CONCAWE, EU

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SG / EN