

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version	Revision Date:	SDS Number:	Print Date: 11/08/2023
1.1	11/01/2023	800010058751	Date of last issue: 01/24/2023

SECTION 1. IDENTIFICATION

Product name : NEODENE 24+

CAS-No. : 131459-42-2

Manufacturer or supplier's details

Company	: Shell Chemical LP PO Box 576 HOUSTON TX 77001 USA
SDS Request	: 1-800-240-6737
Customer Service	: 1-855-697-4355

Emergency telephone number

Chemtrec Domestic (24 hr)	: 1-800-424-9300
Chemtrec International (24 hr)	: 1-703-527-3887

Recommended use of the chemical and restrictions on use

Recommended use	: Research and development product., Wax.
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 registered trademark of Shell trademark Management BV.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

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. HEALTH HAZARDS: Not classified as a health hazard under GHS criteria.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

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.

The classification of this material is based on OSHA HCS 2012 criteria.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

:

Substance

Hazardous components

Chemical name	Synonyms	CAS-No.	Concentration (% w/w)
Alkenes, C24-54-branched and linear α	Alkenes, C24-54-branched and linear .alpha.-	131459-42-2	≤ 100

SECTION 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 flushing or immersing the affected area with water for at least 15 to 20 minutes. Do not attempt to remove anything from the

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

	<p>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.</p> <p>Do not attempt to remove anything from the burn area.</p> <p>Do apply burn creams or ointments.</p> <p>Cover the burn area loosely with a sterile dressing, if available.</p> <p>Transport to the nearest medical facility for additional treatment.</p> <p>All burns should receive medical attention.</p> <p>It should be noted this product contracts on cooling.</p> <p>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.</p>
In case of eye contact	<p>: Flush eye with copious quantities of water.</p> <p>Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>If persistent irritation occurs, obtain medical attention.</p> <p>If contact with hot product, immediately cool the burn area by flushing with large amounts of water.</p> <p>Do not attempt to remove anything from the burn area.</p> <p>Do not apply burn creams or ointments.</p> <p>Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>Cover the burn area loosely with a sterile dressing, if available.</p> <p>Transport to the nearest medical facility for additional treatment.</p> <p>All burns should receive medical attention.</p>
If swallowed	<p>: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.</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>Hot product - Contact with the skin can cause severe burns, redness, swelling, blisters and/or tissue damage.</p> <p>Hot product - Contact with the eye can cause severe burns, redness, swelling, blurred vision, and may result in permanent loss of vision.</p> <p>No specific hazards under normal use conditions.</p> <p>Ingestion may result in nausea, vomiting and/or diarrhoea.</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>
Indication of any immediate medical attention and special treatment needed	<p>: IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!</p> <p>Call a doctor or poison control center for guidance.</p> <p>Treat symptomatically.</p>

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

SECTION 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 fire-fighting : Clear fire area of all non-emergency personnel.
Hazardous combustion products may include:
A complex mixture of airborne solid and liquid particulates and gases (smoke).
Carbon monoxide.
Unidentified organic and inorganic compounds.
Flammable vapours may be present even at temperatures below the flash point.
The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Will float and can be reignited on surface water.
- Specific extinguishing methods : Standard procedure for chemical fires.
- Further information : Keep adjacent containers cool by spraying with water.
- Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 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 : Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Use appropriate containment to avoid environmental contamination.
Ventilate contaminated area thoroughly.
- Methods and materials for : Slippery when spilt. Avoid accidents, clean up immediately.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

containment and cleaning up

Prevent from spreading by making a barrier with sand, earth or other containment material.

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.

U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity (refer to Section 15) to the National Response Center at (800) 424-8802.

SECTION 7. HANDLING AND STORAGE

Technical measures

: 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.
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

The vapour is heavier than air, spreads along the ground and distant ignition is possible.

Avoidance of contact

: Oxidizing 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

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

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.

Conditions for safe storage : Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.
Keep tightly closed in a dry and cool place.

Further information on storage stability : 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.

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

Ensure that all local regulations regarding handling and storage facilities are followed.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances 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>

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 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.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

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 the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

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 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

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

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).
- Protective measures : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
- 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : solid
- Colour : white
- Odour : mild
- Odour Threshold : Data not available
- pH : Not applicable
- Melting point/range : 54 °C / 129 °F
Method: ASTM D127
- Boiling point/boiling range : 349 - 450 °C / 660 - 842 °F
- Flash point : 235 °C / 455 °F
Method: ASTM D92 (COC)
- Evaporation rate : Data not available

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

Flammability

Flammability (solid, gas) : Not classified as flammable but will burn.

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / upper flammability limit : Data not available

Lower explosion limit / Lower flammability limit : Data not available

Vapour pressure : < 80 Pa (25 °C / 77 °F)

Relative density : 0.9 (23 °C / 73 °F)
Method: ASTM D4052

Density : 0.78 g/cm³ (80 °C / 176 °F)
Method: ASTM D4052

906 kg/m³ (23 °C / 73 °F)
Method: ASTM D4052

Solubility(ies)

Water solubility : < 0.002 g/l (25 °C / 77 °F)

Partition coefficient: n-octanol/water : log Pow: > 5.4

Auto-ignition temperature : Data not available

Decomposition temperature : Data not available

Viscosity

Viscosity, kinematic : 3.5 mm²/s (100 °C / 212 °F)
Method: ASTM D445

Explosive properties : Not applicable

Oxidizing properties : Not applicable

Surface tension : Data not available

Conductivity : Low conductivity: < 100 pS/m

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

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version	Revision Date:	SDS Number:	Print Date: 11/08/2023
1.1	11/01/2023	800010058751	Date of last issue: 01/24/2023

Molecular weight : Data not available

SECTION 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	: None known.
Conditions to avoid	: Avoid heat, sparks, open flames and other ignition sources. In certain circumstances product can ignite due to static electricity. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing 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.

SECTION 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.

Acute toxicity

Components:

Alkenes, C24-54-branched and linear α :

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.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

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, C24-54-branched and linear α :

Remarks: Not irritating to skin.

Serious eye damage/eye irritation

Components:

Alkenes, C24-54-branched and linear α :

Remarks: Not irritating to eye.

Respiratory or skin sensitisation

Components:

Alkenes, C24-54-branched and linear α :

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

Germ cell mutagenicity

Components:

Alkenes, C24-54-branched and linear α :

Genotoxicity in vivo : Remarks: Non mutagenic

Carcinogenicity

Components:

Alkenes, C24-54-branched and linear α :

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

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

Reproductive toxicity

Components:

Alkenes, C24-54-branched and linear α :

Effects on fertility :

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

STOT - single exposure

Components:

Alkenes, C24-54-branched and linear α :

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

STOT - repeated exposure

Components:

Alkenes, C24-54-branched and linear α :

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

Aspiration toxicity

Components:

Alkenes, C24-54-branched and linear α :

Not an aspiration hazard.

Further information

Components:

Alkenes, C24-54-branched and linear α :

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

SECTION 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, C24-54-branched and linear α :

Toxicity to fish (Acute toxicity) : Remarks: Not toxic at limit of water solubility:

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version	Revision Date:	SDS Number:	Print Date: 11/08/2023
1.1	11/01/2023	800010058751	Date of last issue: 01/24/2023

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) : Remarks: Not toxic at limit of water solubility:

Toxicity to algae (Acute toxicity) : Remarks: Not toxic at limit of water solubility:

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

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

Toxicity to microorganisms (Acute toxicity) : Remarks: Not toxic at limit of water solubility:

Persistence and degradability

Components:

Alkenes, C24-54-branched and linear α :

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, distills 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

Components:

Alkenes, C24-54-branched and linear α :

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

Mobility in soil

Components:

Alkenes, C24-54-branched and linear α :

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

Other adverse effects

no data available

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

SECTION 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.
Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.
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 : Remove all packaging for recovery or waste disposal.
Comply with any local recovery or waste disposal regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Maritime transport in bulk according to IMO instruments

- Pollution category : Y
Ship type : 2
Product name : Olefins, (C13+, all isomers)

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.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

*: This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Other regulations:

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

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

DSL : Listed

IECSC : Listed

ISHL : Listed

KECI : Listed

NZIoC : Listed

PICCS : Listed

TSCA : Listed

TCSI : Listed

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

SECTION 16. OTHER INFORMATION

Further information

NFPA Rating (Health, Fire, Reactivity) 0, 1, 0

Full text of other abbreviations

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.

ACGIH = American Conference of Governmental Industrial Hygienists
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
AICS = Australian Inventory of Chemical Substances
ASTM = American Society for Testing and Materials
BEL = Biological exposure limits
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
CAS = Chemical Abstracts Service
CEFIC = European Chemical Industry Council
CLP = Classification Packaging and Labelling
COC = Cleveland Open-Cup
DIN = Deutsches Institut für Normung
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
DSL = Canada Domestic Substance List
EC = European Commission
EC50 = Effective Concentration fifty
ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals
ECHA = European Chemicals Agency
EINECS = The European Inventory of Existing Commercial Chemical Substances
EL50 = Effective Loading fifty
ENCS = Japanese Existing and New Chemical Substances Inventory
EWC = European Waste Code
GHS = Globally Harmonised System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IC50 = Inhibitory Concentration fifty
IL50 = Inhibitory Level fifty
IMDG = International Maritime Dangerous Goods
INV = Chinese Chemicals Inventory
IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables
KECI = Korea Existing Chemicals Inventory
LC50 = Lethal Concentration fifty
LD50 = Lethal Dose fifty per cent.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

NEODENE 24+

Version
1.1

Revision Date:
11/01/2023

SDS Number:
800010058751

Print Date: 11/08/2023
Date of last issue: 01/24/2023

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading
LL50 = Lethal Loading fifty
MARPOL = International Convention for the Prevention of
Pollution From Ships
NOEC/NOEL = No Observed Effect Concentration / No Ob-
served Effect Level
OE_HPVS = Occupational Exposure - High Production Volume
PBT = Persistent, Bioaccumulative and Toxic
PICCS = Philippine Inventory of Chemicals and Chemical
Substances
PNEC = Predicted No Effect Concentration
REACH = Registration Evaluation And Authorisation Of
Chemicals
RID = Regulations Relating to International Carriage of Dan-
gerous Goods by Rail
SKIN_DES = Skin Designation
STEL = Short term exposure limit
TRA = Targeted Risk Assessment
TSCA = US Toxic Substances Control Act
TWA = Time-Weighted Average
vPvB = very Persistent and very Bioaccumulative

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).

Revision Date : 11/01/2023

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.

US / EN