

# n-hexadecane

**Novachem Pty Ltd** 

Version No: **2.2** Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: **12/09/2018** Print Date: **12/09/2018** S.GHS.AUS.EN

# SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

## **Product Identifier**

Product name	n-hexadecane
Chemical Name	hexadecane
Synonyms	DRE-C14191500
Chemical formula	C16H34
Other means of identification	Not Available
CAS number	544-76-3*

## Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Reference material for laboratory use only
--------------------------	--

### Details of the supplier of the safety data sheet

Registered company name	Novachem Pty Ltd
Address	25 Crissane Road, Heidelberg West Victoria 3081 Australia
Telephone	+61384151255
Fax	+61386250088
Website	www.novachem.com.au
Email	novachem@novachem.com.au

# Emergency telephone number

Association / Organisation	Victorian Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

# **SECTION 2 HAZARDS IDENTIFICATION**

### Classification of the substance or mixture

Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - single exposure Category 3 (narcotic effects), Aspiration Hazard Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

# Label elements

Hazard pictogram(s)





SIGNAL WORD

DANGER

## Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.

Chemwatch: 9-493987 Page 2 of 8

n-hexadecane

Issue Date: 12/09/2018 Version No: 2.2 Print Date: 12/09/2018

## Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

### Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
P331	Do NOT induce vomiting.	
P362	Take off contaminated clothing and wash before reuse.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	

### Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

### Precautionary statement(s) Disposal

Dispose of contents/container in accordance with local regulations.

## **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

### **Substances**

CAS No	%[weight]	Name
544-76-3	100	<u>hexadecane</u>

#### **Mixtures**

See section above for composition of Substances

## **SECTION 4 FIRST AID MEASURES**

# Description of first aid measures

Eye Contact	If this product comes in contact with the eyes:  Wash out immediately with fresh running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Seek medical attention without delay; if pain persists or recurs seek medical attention.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs:  Immediately remove all contaminated clothing, including footwear.  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.
Inhalation	<ul> <li>If furnes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>

## Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- rhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Figure (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

Chemwatch: **9-493987** Page **3** of **8**Version No: **2.2** 

n-hexadecane

Issue Date: **12/09/2018**Print Date: **12/09/2018** 

## **SECTION 5 FIREFIGHTING MEASURES**

### **Extinguishing media**

- ► Foam.
- ► Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility	<ul> <li>Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result</li> </ul>
----------------------	--

### Advice for firefighters

Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> </ul>
Fire/Explosion Hazard	<ul> <li>▶ Combustible.</li> <li>▶ Slight fire hazard when exposed to heat or flame.</li> <li>▶ Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>▶ On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>Combustion products include: carbon dioxide (CO2) other pyrolysis products typical of burning organic material.</li> <li>May emit poisonous fumes.</li> <li>May emit corrosive fumes.</li> </ul>
HAZCHEM	Not Applicable

### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

### Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

### Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> </ul>
Major Spills	Moderate hazard.  ► Clear area of personnel and move upwind.  ► Alert Fire Brigade and tell them location and nature of hazard.  ► Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## **SECTION 7 HANDLING AND STORAGE**

# Precautions for safe handling

The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive 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.

Lead of the contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

Do NOT cut, drill, grind, weld or perform similar operations on or near containers.

Electrostatic discharge may be generated during pumping - this may result in fire.

Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec).

Avoid splash filling.

Avoid all personal contact, including inhalation.

- ▶ Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- ▶ Prevent concentration in hollows and sumps.
- ▶ DO NOT allow clothing wet with material to stay in contact with skin

# Other information

- ► Store in original containers.
- ► Keep containers securely sealed.
- ► No smoking, naked lights or ignition sources.
- ► Store in a cool, dry, well-ventilated area.

## Conditions for safe storage, including any incompatibilities

### Suitable container

- Metal can or drum
- ▶ Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

# n-hexadecane

Issue Date: 12/09/2018 Print Date: 12/09/2018

Low molecular weight alkanes:

- May react violently with strong oxidisers, chlorine, chlorine dioxide, dioxygenyl tetrafluoroborate.
- ▶ May react with oxidising materials, nickel carbonyl in the presence of oxygen, heat.
- Are incompatible with nitronium tetrafluoroborate(1-), halogens and interhalogens Storage incompatibility
  - ▶ may generate electrostatic charges, due to low conductivity, on flow or agitation.
  - Avoid flame and ignition sources

Redox reactions of alkanes, in particular with oxygen and the halogens, are possible as the carbon atoms are in a strongly reduced condition.

► Avoid reaction with oxidising agents

### **SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hexadecane	Hexadecane	35 mg/m3	380 mg/m3	2,800 mg/m3
Ingredient	Original IDLH		Revised IDLH	
hexadecane	Not Available		Not Available	

#### **Exposure controls**

### Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

#### Personal protection









## Eve and face protection

- ► Safety glasses with side shields.
- Chemical goggles
  - Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task

## Skin protection

### See Hand protection below

- ▶ Wear chemical protective gloves, e.g. PVC.
- ▶ Wear safety footwear or safety gumboots, e.g. Rubber

# Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care

▶ Neoprene gloves **Body protection** See Other protection below

Overalls.

Other protection

▶ P.V.C. apron. Barrier cream.

# Respiratory protection

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

### Information on basic physical and chemical properties

and the second of the second o					
Appearance	Not Available				
Physical state	Liquid Relative density (Water = 1) 0.773				
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	201		
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available		

Page 5 of 8 Issue Date: 12/09/2018 Version No: 2.2 Print Date: 12/09/2018 n-hexadecane

Melting point / freezing point (°C)	17-19	Viscosity (cSt)	2.68
Initial boiling point and boiling range (°C)	283-286	Molecular weight (g/mol)	226.45
Flash point (°C)	135.00	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	0.13 @ 105.3	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	7.8	VOC g/L	Not Available

# **SECTION 10 STABILITY AND REACTIVITY**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

# **SECTION 11 TOXICOLOGICAL INFORMATION**

# Information on toxicological effects

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation hazard is increased at higher temperatures. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Nerve damage can be caused by some non-ring hydrocarbons. Symptoms are temporary, and include weakness, tremors, increased saliva, some convulsions, excessive tears with discolouration and inco-ordination lasting up to 24 hours.
Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)  Accidental ingestion of the material may be damaging to the health of the individual.  Isoparaffinic hydrocarbons cause temporary lethargy, weakness, inco-ordination and diarrhoea.
The material may accentuate any pre-existing dermatitis condition Skin exposure to isoparaffins may produce slight to moderate irritation in animals and humans. Rare sensitisation reactions in humans have occurred.  Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.  The material may cause severe inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
This material can cause eye irritation and damage in some persons.  Instillation of isoparaffins into rabbit eyes produces only slight irritation.
Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems.  Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.  Implantation studies in rats show that paraffin oils may cause tumours. As a general rule, the highly refined paraffins are believed to contain less suspect polyaromatic hydrocarbons than less refined grades or waxes derived from napthenic base-stocks.  Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

n-hexadecane	9

TOXICITY	IRRITATION
dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	Not Available
dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	
dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	
dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	
Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>	
Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>	

Chemwatch: 9-493987 Page 6 of 8 Issue Date: 12/09/2018
Version No: 2.2 Print Date: 12/09/2018

#### n-hexadecane

	Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>		
	Oral (rat) LD50: >5000 mg/kg <sup>[1]</sup>		
	TOXICITY	IRRITATION	
	dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	Skin (g.pig): 100 mg/24h-SEVERE	
hexadecane	dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	Skin (man): 50 mg/48h-SEVERE	
	dermal (rat) LD50: >1700 mg/kg <sup>[1]</sup>	Skin (pig): 50 mg/24h-SEVERE	
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Skin (rabbit): 100 mg/24h-SEVERE	
	Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>	Skin (rat): 100 mg/24h - SEVERE	
	Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>		
	Oral (rat) LD50: >4150 mg/kg <sup>[1]</sup>		
	Oral (rat) LD50: >5000 mg/kg <sup>[1]</sup>		

#### Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

#### HEXADECANE

The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

# n-hexadecane & HEXADECANE

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins.

The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are incested in association with fats in the diet.

Animal testing showed exposure to high concentrations (over 3500 parts per million) of C9 to C13 alkanes in air caused inco-ordination, seizures and spasms. Cerebellar damage was found on autopsy in some animals. It appears that exposure may possibly damage the central nervous system.

Acute Toxicity	×	Carcinogenicity	0
Skin Irritation/Corrosion	✓	Reproductivity	0
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	✓

Legend:

★ - Data available but does not fill the criteria for classification

✓ – Data available to make classification
 N – Data Not Available to make classification

# **SECTION 12 ECOLOGICAL INFORMATION**

### Toxicity

n-hexadecane	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	BCF	12	Fish	3.39mg/L	4
hexadecane	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
		,			4
	BCF	12	Fish	3.39mg/L	4
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12				
	(QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE				

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the

(Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

oxygen transfer between the air and the water

Oils of any kind can cause:

- to drowning of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility
- lethal effects on fish by coating gill surfaces, preventing respiration
- asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and
- adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation. When released in the environment, alkanes don't undergo rapid biodegradation, because they have no functional groups (like hydroxyl or carbonyl) that are needed by most organisms in order to metabolize the compound.

However, some bacteria can metabolise some alkanes (especially those linear and short), by oxidizing the terminal carbon atom. The product is an alcohol, that could be next oxidised to an aldehyde, and finally to a carboxylic acid. The resulting fatty acid could be metabolised through the fatty acid degradation pathway.

Version No: 2.2 n-hexadecane

Issue Date: **12/09/2018**Print Date: **12/09/2018** 

For Hydrocarbons: log Kow 1. BCF~10. For Aromatics: log Kow 2-3. BCF 20-200.

Drinking Water Standards: hydrocarbon total: 10 ug/l (UK max.).

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hexadecane	LOW	LOW

### **Bioaccumulative potential**

Ingredient	Bioaccumulation
hexadecane	LOW (LogKOW = 8.199)

## Mobility in soil

Ingredient	Mobility
hexadecane	LOW (KOC = 67860)

### **SECTION 13 DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ▶ Reduction
- ► Reuse
- ▶ Recycling
- ► Disposal (if all else fails)

# Product / Packaging disposal

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- ▶ Recycle wherever possible or consult manufacturer for recycling options.
  - Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- ► Recycle containers if possible, or dispose of in an authorised landfill.

# **SECTION 14 TRANSPORT INFORMATION**

### Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

### Transport in bulk according to Annex II of MARPOL and the IBC code

SOURCE	PRODUCT NAME	POLLUTION CATEGORY	SHIP TYPE
	n-Alkanes (C10+) Alkanes(C10-C26), linear and branched, (flashpoint >60°C)	Y Y	3 3

# **SECTION 15 REGULATORY INFORMATION**

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

HEXADECANE(544-76-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

# **National Inventory Status**

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (hexadecane)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	Υ

 Chemwatch: 9-493987
 Page 8 of 8
 Issue Date: 12/09/2018

 Version No: 2.2
 Print Date: 12/09/2018

### n-hexadecane

Korea - KECI	Y
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory  N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

# **SECTION 16 OTHER INFORMATION**

Revision Date	12/09/2018
Initial Date	06/12/2017

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### **Definitions and abbreviations**

 ${\sf PC-TWA: Permissible \ Concentration-Time \ Weighted \ Average}$ 

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

Powered by AuthorITe, from Chemwatch.