# Ultra Shine Auto Klene Solutions

 Chemwatch: 5159-73
 Issue

 Version No: 6.1.1.1
 Print

 Safety Data Sheet according to WHS and ADG requirements
 Print

# SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier	
Product name	Ultra Shine
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains heptane)
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses Automotive tyre rejuvenator.

# Details of the supplier of the safety data sheet

Registered company name	Auto Klene Solutions
Address	1/83 Merrindale Drive Croydon VIC 3136 Australia
Telephone	+61 3 8761 1900
Fax	+61 3 8761 1955
Website	http://www.autoklene.com/msds/
Email	Not Available

# Emergency telephone number

Association / Organisation	Auto Klene Solutions
Emergency telephone numbers	131 126 (Poisons Information Centre)
Other emergency telephone numbers	0800 764 766 (New Zealand Poisons Information Centre)

# **SECTION 2 Hazards identification**

# Classification of the substance or mixture

# HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

#### ChemWatch Hazard Ratings

	Min	Max	
Flammability	3	-	
Toxicity	1		0 = Minimum
Body Contact	2	1	1 = Low
Reactivity	1		2 = Moderate
Chronic	0	1	$3 = \pi i g n$ 4 = Extreme

Poisons Schedule	S5
Classification <sup>[1]</sup>	Flammable Liquid Category 2, Skin Corrosion/Irritation Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 1
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

# Label elements Hazard pictogram(s) Image: Colspan="2">Image: Colspan="2" Hazard pictogram(s) Image: Colspan="2">Image: Colspan="2" Signal word Danger

# Hazard statement(s)

Issue Date: 09/09/2020 Print Date: 05/02/2021 S.GHS.AUS.EN

Causes skin irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Very toxic to aquatic life with long lasting effects.

# Precautionary statement(s) Prevention

· · · · · · · · · · · · · · · · · · ·	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing mist/vapours/spray.

# Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P312	Call a POISON CENTER/doctor/ if you feel unwell.
P391	Collect spillage.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.

# Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

# Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

# **SECTION 3 Composition / information on ingredients**

P501

# Substances

See section below for composition of Mixtures

# Mixtures

CAS No	%[weight]	Name
142-82-5	>60	heptane
63148-62-9	10-30	polydimethylsiloxane

# **SECTION 4 First aid measures**

#### Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>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.</li> <li>Seek medical attention without delay: if pain persists or recurs seek medical attention.</li> </ul>
	<ul> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	If skin contact occurs: <ul> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
Inhalation	<ul> <li>If fumes 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.</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.
- Arrhythmias 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.
- Epinephrine (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. Treat symptomatically.

# **SECTION 5 Firefighting measures**

#### Extinguishing media

Foam.

- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

# Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Consider evacuation (or protect in place).</li> <li>Fight fire from a safe distance, with adequate cover.</li> <li>If safe, switch off electrical equipment until vapour fire hazard removed.</li> </ul>
Fire/Explosion Hazard	<ul> <li>High temperature decomposition products include silicon dioxide, small amounts of formaldehyde, formic acid, acetic acid and traces of silicon polymers.</li> <li>These gases may ignite and, depending on circumstances, may cause the resin/polymer to ignite.</li> <li>An outer skin of silica may also form. Extinguishing of fire, beneath the skin, may be difficult.</li> <li>Liquid and vapour are highly flammable.</li> <li>Severe fire hazard when exposed to heat, flame and/or oxidisers.</li> <li>Vapour may travel a considerable distance to source of ignition.</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:</li> <li>carbon dioxide (CO2)</li> <li>silicon dioxide (SiO2)</li> <li>other pyrolysis products typical of burning organic material.</li> <li>Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.</li> <li>May emit clouds of acrid smoke</li> </ul>
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#### **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> <li>Contain and absorb small quantities with vermiculite or other absorbent material.</li> <li>Wipe up.</li> <li>Collect residues in a flammable waste container.</li> </ul>
Major Spills	<ul> <li>Silicone fluids, even in small quantities, may present a slip hazard.</li> <li>It may be necessary to rope off area and place warning signs around perimeter.</li> <li>Clean up area from spill, with suitable absorbant, as soon as practically possible.</li> <li>Final cleaning may require use of steam, solvents or detergents.</li> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Consider evacuation (or protect in place).</li> </ul>

Page 4 of 10

No smoking, naked lights or ignition sources.

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

# **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Containers, even those that have been emptied, may contain explosive vapours.</li> <li>Do NOT cut, drill, grind, weld or perform similar operations on or near containers.</li> <li>Contains low boiling substance:</li> <li>Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.</li> <li>Check for bulging containers.</li> <li>Vent periodically</li> <li>Always release caps or seals slowly to ensure slow dissipation of vapours</li> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>Avoid smoking, naked lights, heat or ignition sources.</li> <li>When handling, DO NOT eat, drink or smoke.</li> </ul>
Other information	<ul> <li>Store in original containers in approved flame-proof area.</li> <li>No smoking, naked lights, heat or ignition sources.</li> <li>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</li> <li>Keep containers securely sealed.</li> <li>Store away from incompatible materials in a cool, dry well ventilated area.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

# Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Packing as supplied by manufacturer.</li> <li>Plastic containers may only be used if approved for flammable liquid.</li> <li>Check that containers are clearly labelled and free from leaks.</li> <li>For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.</li> <li>For materials with a viscosity of at least 2680 cSt. (23 deg. C)</li> <li>For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)</li> <li>Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.</li> <li>Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages</li> <li>In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.</li> </ul>
Storage incompatibility	Traces of benzene, a carcinogen, may form when silicones are heated in air above 230 degrees C. Concentrated acids and bases cause degradation of polymer. Boiling water may soften and weaken material. ► Avoid reaction with oxidising agents

# **SECTION 8 Exposure controls / personal protection**

# **Control parameters**

# Occupational Exposure Limits (OEL)

# INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL		Peak	Notes
Australia Exposure Standards	heptane	Heptane (n-Heptane)	400 ppm / 1640 mg/m3	2050 mg/m3 / 50	00 ppm	Not Available	Not Available
Emergency Limits							
Ingredient	Material name				TEEL-1	TEEL-2	TEEL-3
heptane	Heptane				500 ppm	830 ppm	5000* ppm
polydimethylsiloxane	Dimethyl siloxa	ne; (Dimethylpolysiloxane; S	yltherm XLT; Syltherm 800; Si	licone 360)	65 mg/m3	720 mg/m3	4,300 mg/m3
Ingredient	Original IDLH			Revised IDLH			
heptane	750 ppm			Not Available			
polydimethylsiloxane	Not Available			Not Available			

# Exposure controls

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur could require increased ventilation and/or protective gear
Appropriate engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls car 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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

Page 5 of 10

Ultra Shine

Personal protection	
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>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.</li> <li>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.</li> <li>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 moisturiser is recommended.</li> <li>Neoprene rubber gloves</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>PVC Apron.</li> <li>PVC protective suit may be required if exposure severe.</li> <li>Eyewash unit.</li> <li>Ensure there is ready access to a safety shower.</li> <li>Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li> <li>For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).</li> <li>Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.</li> </ul>

#### Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Ultra	Sn	ine

Material	СРІ
NITRILE+PVC	A
HYPALON	В
NITRILE	В
NATURAL RUBBER	С
NEOPRENE	С
PVC	С

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion  ${\bf NOTE}:$  As a series of factors will influence the actual performance of the glove, a final

selection must be based on detailed observation. -  $^{\ast}$  Where the glove is to be used on a short term, casual or infrequent basis, factors such

as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

#### **Respiratory protection**

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	Air-line*	A-2 P2	A-PAPR-2 P2 ^
up to 20 x ES	-	A-3 P2	-
20+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand ^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- 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

information on basic physical and chemical properties			
Appearance	Purple coloured liquid with strawberry fragrance; does not mix with water.		
Physical state	Liquid	Relative density (Water = 1)	0.71

			(
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	>80	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	20	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	6	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1	Volatile Component (%vol)	80
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

# **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Silicone fluids are stable under normal storage conditions.</li> <li>Hazardous polymerisation will not occur.</li> <li>At temperatures &gt; 150 C, silicones can slowly react with the oxygen in air.</li> <li>When heated &gt; 300 C, silicones can slowly depolymerise to volatile siloxanes whether or not air is present.</li> <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

Inhaled	<ul> <li>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.</li> <li>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.</li> <li>Inhalation hazard is increased at higher temperatures.</li> <li>Vapours of silicones are generally fairly well tolerated, however very high concentrations can cause death within minutes due to respiratory failure. At high temperatures, the fumes and oxidation products can be irritating and toxic and can cause depression leading to death in very high doses.</li> <li>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.</li> <li>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.</li> <li>Inhalation, by humans, of 1000 parts per million (0.1%) heptanes for 6 minutes was associated with slight dizziness; inhalation of higher</li> </ul>
	concentrations for shorter periods, resulted in vertigo and inco-ordination, and hilarity. Central nervous system involvement occurs very early, even before mucous membrane irritation. Animal testing showed exposure to 1.5-2% for 30 minutes may be fatal. Brief exposure (4 minutes) to 0.5% caused nausea, loss of appetite, and a "gasoline taste" that persisted for several hours after exposure ended.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Silicone fluids do not have a high acute toxicity. They may have a laxative effect and produce central nervous system depression. Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Low molecular weight silicone fluids may exhibit solvent action and may produce skin irritation. 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.
Eye	Eye exposure to silicone fluids causes temporary irritation of the conjunctiva. Injection into the specific structures of the eye, however, causes corneal scarring, permanent eye damage, allergic reactions and cataract, and may lead to blindness. Limited evidence or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals. Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).
Chronic	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

Continued...

	ΤΟΧΙΟΙΤΥ	IRRITATION	
Ultra Shine	Not Available Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse	e effect observed (not irritating) <sup>[1]</sup>
heptane	Inhalation(Rat) LC50; 103 mg/L4hrs <sup>[2]</sup>	Skin: no adverse	e effect observed (not irritating) <sup>[1]</sup>
	Oral(Rat) LD50; >5000 mg/kg <sup>[1]</sup>		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
polydimethylsiloxane	Dermal (rabbit) LD50: >0.002 mg/kg <sup>[2]</sup>	Eye (rabbit): 100	0 mg/1h - mild
	Oral(Rat) LD50; >0.017 mg/kg <sup>[2]</sup>		
Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - specified data extracted from RTECS - Register of Toxic Effect (</li> </ol>	Acute toxicity 2.* Value obt f chemical Substances	ained from manufacturer's SDS. Unless otherwise
	No toxic response noted during 90 day subchronic inhalation tox	isity studios The ne observ	
POLYDIMETHYLSILOXANE	non-sensitising in numan patch test. [Xerox] <sup>2</sup> Siloxanes may impair liver and hormonal function, as well as the They may potentially cause cancer (tumours of the womb in fem The material may be irritating to the eye, with prolonged contact conjunctivitis.	lung and kidney. They hav ales) and may cause impa causing inflammation. Rep	vable effect level is 450 mg/m3. Non-irritating and ve not been found to be irritating to the skin and eyes. ired fertility or infertility. beated or prolonged exposure to irritants may produce
POLYDIMETHYLSILOXANE	Non-sensitising in numan patch test. [Aerox] <sup>2</sup> Siloxanes may impair liver and hormonal function, as well as the They may potentially cause cancer (tumours of the womb in fem The material may be irritating to the eye, with prolonged contact conjunctivitis.	lung and kidney. They hav ales) and may cause impa causing inflammation. Rep Carcinogenicity	vable effect level is 450 mg/m3. Non-irritating and ve not been found to be irritating to the skin and eyes. ired fertility or infertility. seated or prolonged exposure to irritants may produce
POLYDIMETHYLSILOXANE Acute Toxicity Skin Irritation/Corrosion	Non-sensitising in numan patch test. [Aerox] <sup>2</sup> Siloxanes may impair liver and hormonal function, as well as the They may potentially cause cancer (tumours of the womb in fem The material may be irritating to the eye, with prolonged contact conjunctivitis.	lung and kidney. They hav ales) and may cause impai causing inflammation. Rep Carcinogenicity Reproductivity	<ul> <li>able effect level is 450 mg/m3. Non-irritating and</li> <li>ve not been found to be irritating to the skin and eyes.</li> <li>ired fertility or infertility.</li> <li>beated or prolonged exposure to irritants may produce</li> </ul>
POLYDIMETHYLSILOXANE Acute Toxicity Skin Irritation/Corrosion Serious Eye Damage/Irritation	Non-sensitising in numan patch test. [Aerox] <sup>2</sup> Siloxanes may impair liver and hormonal function, as well as the They may potentially cause cancer (tumours of the womb in fem The material may be irritating to the eye, with prolonged contact conjunctivitis.       X       X	lung and kidney. They hav ales) and may cause impa causing inflammation. Rep Carcinogenicity Reproductivity STOT - Single Exposure	<ul> <li>vable effect level is 450 mg/m3. Non-irritating and</li> <li>ve not been found to be irritating to the skin and eyes.</li> <li>irred fertility or infertility.</li> <li>veated or prolonged exposure to irritants may produce</li> </ul>
POLYDIMETHYLSILOXANE Acute Toxicity Skin Irritation/Corrosion Serious Eye Damage/Irritation Respiratory or Skin sensitisation	Non-sensitising in numan patch test. [Aerox] <sup>r</sup> Siloxanes may impair liver and hormonal function, as well as the They may potentially cause cancer (tumours of the womb in fem The material may be irritating to the eye, with prolonged contact conjunctivitis.       X       X       X       X       Siloxanes       Siloxanes       Siloxanes	lung and kidney. They hav ales) and may cause impa causing inflammation. Rep Carcinogenicity Reproductivity STOT - Single Exposure T - Repeated Exposure	<ul> <li>vable effect level is 450 mg/m3. Non-irritating and</li> <li>ve not been found to be irritating to the skin and eyes.</li> <li>ired fertility or infertility.</li> <li>veated or prolonged exposure to irritants may produce</li> </ul>

# **SECTION 12 Ecological information**

#### Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Ultra Shine	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	5.738mg/L	2
heptane	EC50	48	Crustacea	0.64mg/L	2
	EC50	72	Algae or other aquatic plants	4.338mg/L	2
	NOEC	504	Crustacea	0.17mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
polydimethylsiloxane	NOEL	1512	Not Available	13.60-mg/L	4
Legend:	Extracted from	n 1. IUCLID Toxicity Data 2. Europe ECHA Register	ed Substances - Ecotoxicological Information - Aqua	atic Toxicity 3. E	PIWIN Suite

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

# Persistence and degradability

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

# **Bioaccumulative potential**

Ingredient Bio	Bioaccumulation
heptane HIG	HIGH (LogKOW = 4.66)

# Mobility in soil

Ingredient	Mobility
heptane	LOW (KOC = 274.7)

# **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>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.</li> <li>A Hierarchy of Controls seems to be common - the user should investigate: <ul> <li>Reduction</li> <li>Recycling</li> <li>Disposal (if all else fails)</li> </ul> </li> <li>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</li> <li>Recycle wherever possible.</li> <li>Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).</li> <li>Decontaminate empty containers. Observe all label safeauards until containers are cleaned and destroyed.</li> </ul>

# **SECTION 14 Transport information**

# Labels Required Marine Pollutant HAZCHEM

# Land transport (ADG)

UN number	1993		
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (contains heptane)		
Transport hazard class(es)	Class     3       Subrisk     Not Applicable		
Packing group	II		
Environmental hazard	Environmentally hazardous		
Special precautions for user	Special provisions     274       Limited quantity     1 L		

# Air transport (ICAO-IATA / DGR)

UN number	1993	1993		
UN proper shipping name	Flammable liquid, n.o.s.	Flammable liquid, n.o.s. * (contains heptane)		
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	3 Not Applicable 3H		
Packing group	II			
Environmental hazard	Environmentally hazardous			
	Special provisions Cargo Only Packing Ir Cargo Only Maximum	nstructions Qty / Pack	A3 364 60 L	
Special precautions for user	Passenger and Cargo Packing Instructions		353	
	Passenger and Cargo Maximum Qty / Pack		5 L	
	Passenger and Cargo Limited Quantity Packing Instructions		Y341	
	Passenger and Cargo Limited Maximum Qty / Pack		1 L	

# Ultra Shine

UN number	1993	193		
UN proper shipping name	FLAMMABLE LIQU	FLAMMABLE LIQUID, N.O.S. (contains heptane)		
Transport hazard class(es)	IMDG Class IMDG Subrisk	3 Not Applicable		
Packing group	П	l		
Environmental hazard	Marine Pollutant			
Special precautions for user	EMS Number Special provisions Limited Quantities	F-E, S-E       5       274       5       1 L		

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

# Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
heptane	Not Available
polydimethylsiloxane	Not Available

# Transport in bulk in accordance with the ICG Code

Product name	Ship Type
heptane	Not Available
polydimethylsiloxane	Not Available

# **SECTION 15 Regulatory information**

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

# heptane is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC)

# polydimethylsiloxane is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4	
Australian Inventory of Industrial Chemicals (AIIC)	

# **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (heptane; polydimethylsiloxane)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (polydimethylsiloxane)
Japan - ENCS	No (polydimethylsiloxane)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

# **SECTION 16 Other information**

Revision Date	09/09/2020
Initial Date	16/12/2014

#### SDS Version Summary

Version	Issue Date	Sections Updated
6.1.1.1	03/09/2020	Appearance, Name
6.1.1.1	09/09/2020	Appearance

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chernwatch 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.