

Issue Date:21/03/2016

Revision Date: 22/01/2021 L.GHS.AUS.EN

# Shine 'n' Bright Nowchem

# Version No: 2.5

Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier	
Product name	Shine n Bright
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Other means of identification	Not Available

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

Relevant identified uses A silicone protective coating designed for vehicle interiors, tyres and bumpers.

Details of the supplier of the safety data sheet		
Registered company name	Nowchem	
Address	112A Albatross Road NSW Australia	
Telephone	(02) 4421 4099	
Fax	(02) 4421 4932	
Website	www.nowchem.com.au	
Email	sales@nowchem.com.au	

#### Emergency telephone number

Association / Organisation	Nowchem
Emergency telephone numbers	(02) 4421 4099
Other emergency telephone numbers	0413 809 255

### **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			1
Toxicity	1			0 = Minimum
Body Contact	2			1 = Low
Reactivity	1			2 = Moderate
Chronic	0			3 = High 4 = Extreme

Poisons Schedule	Not Applicable
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
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI



Signal word Danger

### Hazard statement(s)

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.

### Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

# Precautionary statement(s) Prevention

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P271	Use only outdoors or in a well-ventilated area.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
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.
P321	Specific treatment (see advice on this label).
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.

# Precautionary statement(s) Storage

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

# Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

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

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
64742-48-9.	30-60	naphtha petroleum, isoparaffin, hydrotreated
64742-49-0.	30-60	naphtha petroleum, light, hydrotreated
42557-10-8	10-30	Baysilone oil

Page 3 of 12

Shine n Bright

### 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> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin contact occurs:</li> <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.

### **SECTION 5 Firefighting measures**

#### Extinguishing media

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	
Fire/Explosion Hazard	<ul> <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> </ul>
HAZCHEM	•3YE

### **SECTION 6 Accidental release measures**

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

## Page 4 of 12

# Shine n Bright

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>						
	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services. Chemical Class: aromatic hydrocarbons For release onto land: recommended sorbents listed in order of priority. SORBENT RANK APPLICATION COLLECTION LIMITATIONS LAND SPILL - SMALL Feathers - pillow 1 throw 1					ient before storing and re-using.	
	aross linked polymor pillow	2	throw	nitabfark			
	sorbent clay - particulate	2	shovel	shovel	R, I. P.		
Major Spills	treated clay/ treated natural organic - particulate	3	shovel	shovel	R, I		
	wood fibre - pillow	4	throw	pitchfork	R, P, DGC, RT		
	LAND SPILL - MEDIUM			I			
	cross-linked polymer -particulate	1	blower	skiploade	er R, W, SS		
	treated clay/ treated natural organic - particulate	2	blower	skiploade	er R, I		
	sorbent clay - particulate	3	blower	skiploade	er R, I, P		
	polypropylene - particulate	3	blower	skiploade	er W, SS, DGC		
	feathers - pillow	3	throw	skiploade	er DGC, RT		
	expanded mineral - particulate	4	blower	skiploade	er R, I, W, P, DG		
Legend DGC: Not effective where ground cover is dense R; Not reusable I: Not incinerable P: Effectiveness reduced when rainy RT:Not effective where terrain is rugged SS: Not for use within environmentally sensitive sites W: Effectiveness reduced when windy Reference: Sorbents for Liquid Hazardous Substance Cleanup and Control; R.W Melvold et al: Pollution Technology Review No. 150: Noyes Data Corporation 1988							

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

# **SECTION 7 Handling and storage**

## Precautions for safe handling

i recoucions for sale flanding	
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>Ensure electrical continuity by bonding and grounding (earthing) all equipment.</li> <li>Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (&lt;=1 m/sec until fill pipe submerged to twice its diameter, then &lt;= 7 m/sec).</li> <li>Avoid splash filling.</li> <li>Do NOT use compressed air for filling discharging or handling operations.</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 feat, drink or smoke.</li> </ul>

Page 5 of 12

### Shine n Bright

	<ul> <li>Vapour may ignite on pumping or pouring due to static electricity.</li> <li>DO NOT use plastic buckets.</li> <li>Earth and secure metal containers when dispensing or pouring product.</li> <li>Use spark-free tools when handling.</li> <li>Avoid contact with incompatible materials.</li> <li>Keep containers securely sealed.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</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>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> </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	naphtha petroleum, isoparaffin, hydrotreated	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available		Not Available
Emergency Limits							
Ingredient	Material name				TEEL-1	TEEL-2	TEEL-3
naphtha petroleum, isoparaffin, hydrotreated	Naphtha, hydrotreated heavy; (Isopar L-rev 2)				350 mg/m3	1,800 mg/m3	40,000 mg/m3
naphtha petroleum, isoparaffin, hydrotreated	ffin, Petroleum distillates; petroleum ether; includes clay-treated light naphthenic [64742-45-6]; low boiling [68477-31-6]; petroleum extracts [64742-06-9]; petroleum base oil [64742-46-7]; petroleum 50 thinner, petroleum spirits [64475-85-0], Soltrol, VM&P naphtha [8032-32-4]; Ligroine, and paint solvent; petroleum paraffins C5-C20 [64771-72-8]; hydrotreated light naphthenic [64742-53-6]; solvent refined light naphthenic [64741-97-5]; and machine coolant 1			ow boiling 50 thinner, ent; nt refined	1,100 mg/m3	1,800 mg/m3	40,000 mg/m3
naphtha petroleum, light, hydrotreated	Naphtha (petroleum),hydrotreated light				1,000 mg/m3	11,000 mg/m3	66,000 mg/m3
Ingredient	Original IDLH Revised IDLH						
naphtha petroleum, isoparaffin, hydrotreated	2,500 mg/m3 Not Available						
naphtha petroleum, light, hydrotreated	Not Available Not Available						
Baysilone oil	Not Available Not Available						

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit		
naphtha petroleum, light, hydrotreated	E	≤ 0.1 ppm		
Notes:	Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro range of exposure concentrations that are expected to protect worker hea	ding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the sociated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a ations that are expected to protect worker health.		

### MATERIAL DATA

#### for heptane (all isomers)

The TLV-TWA is protective against narcotic and irritant effects which are greater than those of pentane or n-hexane but less than those of octane. The TLV-TWA applies to all isomers. Inhalation by humans of 1000 ppm for 6 minutes produced slight dizziness. Higher concentrations for shorter periods produce marked vertigo, incoordination and hilarity. Signs of central nervous system depression occur in the absence of mucous membrane irritation. Brief exposures to high levels (5000 ppm for 4 minutes) produce nausea, loss of appetite and a 'gasoline-like' taste in the mouth that persists for many hours after exposure ceases as octane CAS 111-65-9

The TLV-TWA is thought to be protective against narcotic effects produced at higher concentrations

#### Odour threshold: 0.25 ppm.

The TLV-TWA is protective against ocular and upper respiratory tract irritation and is recommended for bulk handling of gasoline based on calculations of hydrocarbon content of gasoline vapour. A STEL is recommended to prevent mucous membrane and ocular irritation and prevention of acute depression of the central nervous system. Because of the wide variation in molecular weights of its components, the conversion of ppm to mg/m3 is approximate. Sweden recommends hexane type limits of 100 ppm and heptane and octane type limits of 300 ppm. Germany does not assign a value because of the widely differing compositions and resultant differences in toxic properties. Odour Safety Factor (OSF)

OSF=0.042 (gasoline)

NOTE P: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0.01% w/w benzene (EINECS No 200-753-7). Note E shall also apply when the substance is classified as a carcinogen. This note applies only to certain complex oil-derived substances in Annex VI. European Union (EU) List of harmonised classification and labelling hazardous substances, Table 3.1, Annex VI, Regulation (EC) No 1272/2008 (CLP) - up to the latest ATP

#### 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 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. Appropriate engineering Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically controls '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. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Personal 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. 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 Eye and face protection 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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent] Skin protection See Hand protection below Wear chemical protective gloves, e.g. PVC. Hands/feet protection Wear safety footwear or safety gumboots, e.g. Rubber Neoprene rubber gloves **Body protection** See Other protection below Overalls. Evewash unit. Ensure there is ready access to a safety shower. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. Other protection For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). 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.

### **SECTION 9** Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Very Pale Straw Liquid				
Physical state	Liquid	Relative density (Water = 1)	0.750		
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available		
pH (as supplied)	Not Available	Decomposition temperature	Not Available		
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available		
Initial boiling point and boiling range (°C)	80 - 150	Molecular weight (g/mol)	Not Available		
Flash point (°C)	30	Taste	Not Available		
Evaporation rate	Not Available	Explosive properties	Not Available		

Flammability	Flammable	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)	80
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
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 Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo 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. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract Inhaled irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of co-ordination Central nervous system (CNS) depression may include nonspecific 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 The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Ingestion Signs and symptoms of chemical (aspiration) pneumonitis may include coughing, gasping, choking, burning of the mouth, difficult breathing, and bluish coloured skin (cyanosis) Accidental ingestion of the material may be damaging to the health of the individual. Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. Skin Contact The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual: systemic effects may result following absorption. The liquid may be miscible 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 . Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds 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. Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental Eye animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Chronic

#### Page 8 of 12

#### Shine n Bright

Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.

Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Repeated or prolonged exposure to mixed hydrocarbons may produce narcosis with dizziness, weakness, irritability, concentration and/or memory loss, tremor in the fingers and tongue, vertigo, olfactory disorders, constriction of visual field, paraesthesias of the extremities, weight loss and anaemia and degenerative changes in the liver and kidney. Chronic exposure by petroleum workers, to the lighter hydrocarbons, has been associated with visual disturbances, damage to the central nervous system, peripheral neuropathies (including numbness and paraesthesias), psychological and neurophysiological deficits, bone marrow toxicities (including hypoplasia possibly due to benzene) and hepatic and renal involvement. Chronic dermal exposure to petroleum hydrocarbons may result in defatting which produces localised dermatoses. Surface cracking and erosion may also increase susceptibility to infection by microorganisms. One epidemiological study of petroleum refinery workers has reported elevations in standard mortality ratios for skin cancer along with a dose-response relationship indicating an association between routine workplace exposure to petroleum or one of its constituents and skin cancer, particularly melanoma. Other studies have been unable to confirm this finding.

Hydrocarbon solvents are liquid hydrocarbon fractions derived from petroleum processing streams, containing only carbon and hydrogen atoms, with carbon numbers ranging from approximately C5-C20 and boiling between approximately 35-370 deg C. Many of the hydrocarbon solvents have complex and variable compositions with constituents of 4 types, alkanes (normal paraffins, isoparaffins, and cycloparaffins) and aromatics (primarily alkylated one- and two-ring species). Despite the compositional complexity, most hydrocarbon solvent constituents have similar toxicological properties, and the overall toxicological hazards can be characterized in generic terms. Hydrocarbon solvents can cause chemical pneumonitis if aspirated into the lung, and those that are volatile can cause acute CNS effects and/or ocular and respiratory irritation at exposure levels exceeding occupational recommendations. Otherwise, there are few toxicologically important effects. The exceptions, n-hexane and naphthalene, have unique toxicological properties

#### Animal studies:

No deaths or treatment related signs of toxicity were observed in rats exposed to light alkylate naphtha (paraffinic hydrocarbons) at concentrations of 668, 2220 and 6646 ppm for 6 hrs/day, 5 days/wk for 13 weeks. Increased liver weights and kidney toxicity (male rats) was observed in high dose animals. Exposure to pregnant rats at concentrations of 137, 3425 and 6850 ppm did not adversely affect reproduction or cause maternal or foetal toxicity. Lifetime skin painting studies in mice with similar naphthas have shown weak or no carcinogenic activity following prolonged and repeated exposure. Similar

naphthas/distillates, when tested at nonirritating dose levels, did not show any significant carcinogenic activity indicating that this tumorigenic response is likely related to chronic irritation and not to dose. The mutagenic potential of naphthas has been reported to be largely negative in a variety of mutagenicity tests. The exact relationship between these results and human health is not known. Some components of this product have been shown to produce a species specific, sex hormonal dependent kidney lesion in male rats from repeated oral or inhalation exposure. Subsequent research has shown that the kidney damage develops via the formation of a alpha-2u-globulin, a mechanism unique to the male rat. Humans do not form alpha-2u-globulin, therefore, the kidney effects resulting from this mechanism are not relevant in human.

Shine a Drivit	TOXICITY		IRRITATION	IRRITATION		
Shine n Bright	Not Available		Not Available			
new letter and the law of	Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>				
isoparaffin, hydrotreated	Inhalation(Rat) LC50; 8.5 mg/L4hrs <sup>[2]</sup>	Skin: adverse effect observed (irritating) <sup>[1]</sup>				
	Oral(Rat) LD50; >4500 mg/kg <sup>[1]</sup>					
	ΤΟΧΙCITY	IRF				
	Dermal (rabbit)   D50: >1900 mg/kg <sup>[1]</sup>		Eve: no adverse effect observed (not irritating) <sup>[1]</sup>			
hydrotreated	Inhelation/Bat)   CE0; 72860 nm (http://					
·			Skin. adverse enect observed (initialing).			
	Oral(Rat) LD50; >2000 mg/kg[ <sup>1</sup> ]					
Baysilone oil	TOXICITY		IRRITATION			
Baysholic on	Not Available Not Available					
Legend:	<ul> <li>I. 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</li> </ul>					
Acute Toxicity	×		Carcinogenicity	×		
Skin Irritation/Corrosion	×		Reproductivity	×		
Serious Eye Damage/Irritation	×	STOT	Single Exposure	✓		
Respiratory or Skin	×	STOT - Re	epeated Exposure	×		

Legend: X – Data either not available or does not fill the criteria for classification – Data available to make classification

~

**Aspiration Hazard** 

#### **SECTION 12 Ecological information**

Toxicity

sensitisation

Mutagenicity

×

Shine n Bright	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

naphtha petroleum, isoparaffin, hydrotreated	Endpoint	Test	Duration (hr)	Spec	ies		Value		Source
	LC50	96		Fish	Fish			I/L	2
	EC50	48	48		Crustacea			ı/L	2
	EC50	72	72		Algae or other aquatic plants			ı/L	2
	NOEL	72		Alga	e or other aquatic plan	its	0.1mg	ı/L	2
	Endpoint	Test	Duration (hr)	Spec	ies		Value		Source
naphtha petroleum, light,	LC50	96		Fish	Fish			_	2
	EC50	48		Crust	Crustacea			/L	2
nyurotroutou	EC50	72		Algae	Algae or other aquatic plants			-	2
	NOEL	72		Algae	Algae or other aquatic plants		0.1mg/L	-	2
			1		1				
Povoilono oil	Endpoint		Test Duration (hr)		Species	Value		Source	
Baysilone on	Not Available		Not Available		Not Available	Not Available		Not Ava	ilable
Legend:	Extracted from 1 V3.12 (QSAR) -	. IUCLID 1 Aquatic To	Foxicity Data 2. Europe	ECHA Regis	tered Substances - Ec Ecotox database - Aqu	otoxicological Informa latic Toxicity Data 5. E	tion - Aqua CETOC Ad	ntic Toxicity quatic Haz	/ 3. EPIWII ard Assess

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.

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

# For siloxanes:

#### Environmental fate:

It is well accepted that polydimethylsiloxane (PDMS) fluids become permanent residents of sediment but should not exert adverse environmental effects. PDMS in intimate contact with many soils undergo siloxane bond redistribution and hydrolysis Therefore, it is highly likely that substituted polymethylsiloxanes will undergo similar reactions, and this reactivity may prevent suitable adsorption data being obtained.

Silicone fluids are very surface active because the flexible siloxane linkages permit alignment of the hydrophobic methyl substituents towards the non-polar phase, and of the polysiloxane backbone towards the polar phase. The polar medium is generally water, and a polar media to which polydimethylsiloxanes become attached may be textiles, sewage sludge, hair, algae, sediment etc. In aqueous environments, polydimethylsiloxanes are adsorbed onto sedimenting particles. Also, in the presence of nitrate ions, which exist at various concentrations in the environment, short chain siloxanes are photodegraded to the level of silicate within days

The stability of the siloxanes, desirable from a technical point of view, makes the siloxanes very persistent, and once released to the environment the siloxanes remain for many years. The main source of releases of siloxanes to the air is volatile siloxanes used in cosmetics, wax, polishes, and to a minor extent in several other applications. the volatile siloxanes may account for a significant part of the siloxanes used for cosmetics.

Non-volatile silicone fluids used in cosmetics, wax, polishes, cleaning products and for textile applications (softeners) will to a large extent end up in wastewater and be directed to wastewater treatment plants.

The cyclic siloxanes and small-chain linear siloxanes are bioconcentrated (bioconcentration factors for long-chained siloxanes have not been assessed). The estimated bioconcentration factors (BCF) of the small siloxanes range from 340 for HMDS to 40,000 for a phenylated trisiloxane (phenyl trimethicone). The small phenylated siloxanes seem to have very high BCF, and model estimates indicate that these substances are the most toxic for aquatic organisms.

#### PBT profiler screening

In order to make a first comparison between the substances as to persistence, bioaccumulation and toxicity, the substances were screened using the PBT profiler developed by U.S. EPA (U.S. EPA 2003). The profiler uses a procedure to predict persistence, bioaccumulation, and toxicity of organic chemicals on the basis of the chemical structure and physical parameters of the substances combined with experimental parameters for substance with a similar structure, using a QSAR approach.

The results for six members of the siloxane family predict the highest bioconcentration factors for the two phenyl siloxanes, one order of magnitudes higher than the values for the cyclic siloxanes and two orders of magnitudes higher than the values for the small linear methyl siloxanes. The predicted toxicity is as well significantly higher (lowest ChV values) for the phenyl siloxanes. The predicted half-life is nearly the same for all substances.

Using U.S. EPA's criteria, the screening indicates that all substances are of high concern as to environmental toxicity, and that the phenyl siloxanes are considered very bioaccumulative.

#### Ecotoxicity:

The environmental fate and effects of volatile methylsiloxanes (mainly cyclosiloxanes) and polydimethylsiloxane (PDMS) have been reported:

For octamethylcyclosiloxane:

Fish acute LC50 (14 day):: rainbow trout 10 ug/l; sheepshead minnow >6.3 ug/l Daphnia magna acute EC50 (48 h): >15 ug/l; NOEC 15 ug/l

Mysid shrimp acute LC50 (96 h): >9.1 ug/l; NOEC 9.1 ug/l

For PDMS

Daphnia magna NOEC 572 mg/kg

Physical effects such as surface entrapment have been observed when testing aquatic invertebrates in clean laboratory water, but similar effects are not expected in natural environments where a large variety of other surfaces provide opportunities for deposition

For n-heptane:

log Kow : 4.66

Koc : 2400-8100

Half-life (hr) air : 52.8 Half-life (hr) H2O surface water : 2.9-312 Henry's atm m3 /mol: 2.06

BOD 5 if unstated: 1.92 COD : 0.06

BCF : 340-2000

log BCF : 2.53-3.31

### Environmental fate:

Photolysis or hydrolysis of n-heptane are not expected to be important environmental fate processes. Biodegradation of n-heptane may occur in soil and water, however volatilisation and adsorption are expected to be more important fate processes. A high Koc (2400-8200) indicates n-heptane will be slightly mobile to immobile in soil. In aquatic systems n-heptane may partition from the water column to organic matter in sediments and suspended solids. The bioconcentration of n-heptane may be important in aquatic environments, the Henry's Law constant suggests rapid volatilisation from environmental waters and surface soils. The volatilisation half-lives from a model river and a model pond (the latter considers the effect of adsorption) have been estimated to be 2.9 hr and 13 days, respectively.

n-Heptane is expected to exist entirely in the vapour phase in ambient air. Reactions with photochemically produced hydroxyl radicals in the atmosphere have been shown to be important (estimated half-life of 2.4 days calculated from its rate constant of 7.15x10-12 cu cm/molecule-sec at 25 deg C). Data also suggests that night-time reactions with nitrate radicals may contribute to the atmospheric transformation of n-heptane, especially in urban environments. n-Heptane does not contain chromophores that absorb at wavelengths >290 nm and therefore is not expected to be susceptible to direct photolysis by sunlight

An estimated BCF of 2,000 using log Kow suggests the potential for bioconcentration in aquatic organisms is very high. Based on 100% degradation after 4 days in water inoculated with gasoline contaminated soil and 100% degradation after 25 days in water inoculated with activated sewage sludge, biodegradation is expected to be an important fate process for n-heptane in water.

### Ecotoxicity:

Fish LC50 (48 h): goldfish (Carrasius auratus) 4 mg/l; golden orfe (Idus melanotus) 2940 mg/l; western mosquitofish (Gambusia affinis) 4924 mg/l

Daphnia LC50 (24 h): >10 mg/l

Daphnia EC50 (96 h): 82 mg/l (immobilisation) Opposum shrimp (Mysidopsis bahia) LC50 (96 h): 0.1 mg/l

Snail EC50 (96 h): 472 mg/l DO NOT discharge into sewer or waterways.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air				
	No Data available for all ingredients	No Data available for all ingredients				
Bioaccumulative potential						
Ingredient	Bioaccumulation					
	No Data available for all ingredients					
Mobility in soil						
Ingredient	Mobility					
	No Data available for all ingredients					

### **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</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 safeguards until containers are cleaned and destroyed.</li> </ul>

## **SECTION 14 Transport information**

# Labels Required

Marine Pollutant	NO
HAZCHEM	•3YE

### Land transport (ADG)

UN number	1993			
UN proper shipping name	LAMMABLE LIQUID, N.O.S.			
Transport hazard class(es)	Class3SubriskNot Applicable			
Packing group	H			
Environmental hazard	Not Applicable			
Special precautions for user	Special provisions274Limited quantity1 L			

## Air transport (ICAO-IATA / DGR)

UN number	1993	1993			
UN proper shipping name	Flammable liquid, n.o.s.	lammable liquid, n.o.s. *			
Transport hazard class(es)	ICAO/IATA Class	3			
	ICAO / IATA Subrisk	Not Applicable			
	ERG Code	ЗН			

Packing group	Ш					
Environmental hazard	Not Applicable					
	Special provisions	A3				
Special precautions for user	Cargo Only Packing Instructions	364				
	Cargo Only Maximum Qty / Pack					
	Passenger and Cargo Packing Instructions					
	Passenger and Cargo Maximum Qty / Pack	5 L				
	Passenger and Cargo Limited Quantity Packing Instructions					
	Passenger and Cargo Limited Maximum Qty / Pack	1 L				

### Sea transport (IMDG-Code / GGVSee)

UN number	1993				
UN proper shipping name	FLAMMABLE LIQU	FLAMMABLE LIQUID, N.O.S.			
Transport hazard class(es)	IMDG Class IMDG Subrisk	IMDG Class     3       IMDG Subrisk     Not Applicable			
Packing group	Ш				
Environmental hazard	Not Applicable	Not Applicable			
Special precautions for user	EMS Number Special provision: Limited Quantities	F-E, S-E       s     274       s     1 L			

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

#### lot , pproable

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

Product name	Group
naphtha petroleum, isoparaffin, hydrotreated	Not Available
naphtha petroleum, light, hydrotreated	Not Available
Baysilone oil	Not Available

### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
naphtha petroleum, isoparaffin, hydrotreated	Not Available
naphtha petroleum, light, hydrotreated	Not Available
Baysilone oil	Not Available

### **SECTION 15 Regulatory information**

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

### naphtha petroleum, isoparaffin, hydrotreated is found on the following regulatory lists

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

### naphtha petroleum, light, hydrotreated is found on the following regulatory lists

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

### Baysilone oil is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

### **National Inventory Status**

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

National Inventory	Status			
Australia - AIIC / Australia Non-Industrial Use	Yes			
Canada - DSL	No (Baysilone oil)			
Canada - NDSL	No (naphtha petroleum, isoparaffin, hydrotreated; naphtha petroleum, light, hydrotreated; Baysilone oil)			
China - IECSC	No (Baysilone oil)			
Europe - EINEC / ELINCS / NLP	No (Baysilone oil)			

National Inventory	Status
Japan - ENCS	No (naphtha petroleum, isoparaffin, hydrotreated; naphtha petroleum, light, hydrotreated; Baysilone oil)
Korea - KECI	No (Baysilone oil)
New Zealand - NZIoC	No (Baysilone oil)
Philippines - PICCS	No (Baysilone oil)
USA - TSCA	No (Baysilone oil)
Taiwan - TCSI	No (Baysilone oil)
Mexico - INSQ	No (Baysilone oil)
Vietnam - NCI	No (Baysilone oil)
Russia - ARIPS	No (Baysilone oil)
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	22/01/2021
Initial Date	27/01/2016

#### 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**

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 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.

