

2779 ENGINE DETOX 500ML LIQUI MOLY Australia Pty Limited

Chemwatch: 47-8928

Version No: 8.1.1.1

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	2779 ENGINE DETOX 500ML
Synonyms	Item No. 2779
Other means of identification	Not Available

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

Relevant identified uses Cleaner.

Details of the supplier of the safety data sheet

······································	
Registered company name	LIQUI MOLY Australia Pty Limited
Address	Level 6 1 Chifley Square Sydney NSW 2000 Australia
Telephone	1300 318 961
Fax	Not Available
Website	www.liqui-moly.com.au
Email	Not Available

Emergency telephone number

Association / Organisation	LIQUI MOLY Australia Pty Limited
Emergency telephone numbers	13 11 26 (Poisons Information Centre)
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

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

COMBUSTIBLE LIQUID, regulated for storage purposes only

ChemWatch Hazard Ratings

	Min	Max	
Flammability	1 📃		
Toxicity	0		0 = Minimum
Body Contact	2	1	1 = Low
Reactivity	1 📃		2 = Moderate
Chronic	2		3 = ⊓ign 4 = Extreme

Poisons Schedule	S5
Classification ^[1]	Flammable Liquid Category 4, Eye Irritation Category 2A, Skin Sensitizer Category 1, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Aspiration Hazard Category 1, Chronic Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements



Signal word Danger

Chemwatch Hazard Alert Code: 2

lssue Date: 01/11/2019 Print Date: 12/08/2020 S.GHS.AUS.EN

(5)

Hazard statement(s)

H227	Combustible liquid.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing mist/vapours/spray.

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.
P363	Wash contaminated clothing before reuse.

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
64742-48-9.	>60	Naphtha (petroleum), hydrotreated heavy
69011-36-5	1-5	tridecanol, branched, ethoxylated
85940-28-9	1-5	zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate
722503-68-6	1-5	methyl-C20-24-alkylbenzenesulfonic acid. branched. calcium

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	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. 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. Transport to hospital, or doctor, without delay. 	
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. 	

Indication of any immediate medical attention and special treatment needed

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. For petroleum distillates

- In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption decontamination (induced emesis or lavage) is controversial and should be considered on the merits of each individual case; of course the usual precautions of an endotracheal tube should be considered prior to lavage, to prevent aspiration.
- Individuals intoxicated by petroleum distillates should be hospitalized immediately, with acute and continuing attention to neurologic and cardiopulmonary function.
- · Positive pressure ventilation may be necessary.
- Acute central nervous system signs and symptoms may result from large ingestions of aspiration-induced hypoxia.
- After the initial episode, individuals should be followed for changes in blood variables and the delayed appearance of pulmonary oedema and chemical pneumonitis. Such
 patients should be followed for several days or weeks for delayed effects, including bone marrow toxicity, hepatic and renal impairment Individuals with chronic pulmonary
 disease will be more seriously impaired, and recovery from inhalation exposure may be complicated.
- Gastrointestinal symptoms are usually minor and pathological changes of the liver and kidneys are reported to be uncommon in acute intoxications.
- Chlorinated and non-chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur. Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators.

BP America Product Safety & Toxicology Department

SECTION 5 Firefighting measures

Extinguishing media

- Foam.
- Drv chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

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	 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. 	
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) phosphorus oxides (POx) sulfur oxides (SOx) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. 	
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	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
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

	DO NOT allow clothing wet with material to stay in contact with skin
	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.
	Store in original containers
	Keep containers securely sealed.
Other information	No smoking, naked lights or janition 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.
Storage incompatibility	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), hydrotreated heavy	Oil mist, refined minera	al	5 mg/m3	Not Available	Not Ava	ilable	Not Available
Emergency Limits								
Ingredient	Material name		TE	EL-1	TEEL-2		TEEL-	3
Naphtha (petroleum), hydrotreated heavy	Naphtha, hydrotreated heavy; (Isopar L-rev 2)		350 mg/m3		1,800 mg/m3		40,000 mg/m3	
Ingredient	Original IDLH		R	evised IDLH				
Naphtha (petroleum), hydrotreated heavy	2,500 mg/m3		N	Not Available				
tridecanol, branched, ethoxylated	Not Available		Not Available					
zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate	Not Available		Not Available					
methyl-C20-24- alkylbenzenesulfonic acid, branched, calcium	Not Available		N	ot Available				

Occupational Exposure Banding				
Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit		
tridecanol, branched, ethoxylated	E	≤ 0.1 ppm		
zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate	E	≤ 0.01 mg/m³		
methyl-C20-24- alkylbenzenesulfonic acid, branched, calcium	D	> 0.01 to ≤ 0.1 mg/m³		
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.			

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	
Eye 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
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. 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. Polyethylene gloves
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream.

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	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - 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

Appearance Yellow brown liquid with characteristic odour; not miscible with water.

Physical state	Liquid	Relative density (Water = 1)	0.81
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)	<7
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	63	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Combustible.	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)	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	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7

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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

branched, calcium	Not Available	Not Available		
methyl-C20-24-	ΤΟΧΙCITY	IRRITATION		
		Skin: adverse effect observed (irritating) ^[1]		
iso-Bu, iso-Pr) dithiophosphate		Eye: adverse effect observed (irritating) ^[1]		
zinc 0,0-bis(2-ethylhexyl,	Oral (rat) LD50: >2000 mg/kg ^[2]	Eye (human):SEVERE [Manufacturer]		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
		Skin: no adverse effect observed (not irritating) ^[1]		
cilloxylated		Skin (rabbit): non-irritating *		
tridecanol, branched, ethoxylated		Eye: no adverse effect observed (not irritating) ^[1]		
	Oral (rat) LD50: 1080 mg/kg ^[2]	Eye (rabbit): irritant *		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
	Oral (rat) LD50: >4500 mg/kg ^[1]			
hydrotreated heavy	Inhalation (rat) LC50: 8.5 mg/l/4H ^[2]	Skin: adverse effect observed (irritating) ^[1]		
Naphtha (petroleum).	Dermal (rabbit) LD50: >1900 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
2113 ENGINE DETUX SUUML	Not Available	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
Chronic	and anaemia, and reduced liver and kidney function. Ski Prolonged or repeated skin contact may cause drying wi	h exposure may result in drying and cracking and redness of the skin. h cracking, irritation and possible dermatitis following.		
	Skin contact with the material is more likely to cause a se	ensitisation reaction in some persons compared to the general population.		
Eye	This material can cause eye irritation and damage in some persons.			
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material The material may accentuate any pre-existing dermatitis condition 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			
Ingestion	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.			
Inhaled	Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor. 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. 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. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.			

for C10-12-isoparaffins:

NAPHTHA (PETROLEUM),

HYDROTREATED HEAVY

The safety of isoparaffins as used in cosmetic products was reviewed by the Cosmetic Ingredient Review (CIR) Expert Panel. These ingredients function mostly as solvents and also function as emollients in the 0001% to 90% concentration range. The CIR Expert Panel has reviewed relevant animal and clinical data and concluded that these ingredients are safe in the present practices of use and concentration The CIR Expert Panel noted that most of the available data related to oral or inhalation exposure to isoparaffins, but the dermal and ocular exposure data that were available, suggested mild ocular irritation, mild-to-severe irritation, no sensitization or photosensitization, and no phototoxicity. No significant toxicity was identified in oral or inhalation exposure studies of the following end points: genotoxicity, reproductive and developmental toxicity, or carcinogenicity.Nephrotoxicity, however, was a concern. The Expert Panel noted the involvement of a2u-globulin in the mechanism for isoparaffin-induced nephrotoxicity/renal tubule cell proliferation in male rats of various strains in oral and inhalation exposure studies.

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 ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell.				
TRIDECANOL, BRANCHED, ETHOXYLATED	* [BASF Canada] Humans have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents and other cleaning products. Exposure to these chemicals can occur through swallowing, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that relatively high volumes would have to occur to produce any toxic response. No death due to poisoning with alcohol ethoxylates has ever been reported. Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed.				
ZINC O,O-BIS(2-ETHYLHEXYL, ISO-BU, ISO-PR) DITHIOPHOSPHATE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Dithiophosphate alkyl esters is corrosive and toxic to the tissues on skin or oral exposure depending on its concentration. Symptoms included diarrhoea, skin and gastrointestinal irritation, lethargy, reduced food intake, staining about the nose and eye; occasionally, there was drooping of the eyelid, hair standing up, inco-ordination and salivation. Toxicity is reduced following inhalation (due to vapour pressure and high viscosity). It may produce reproductive, developmental and genetic toxicity on experimental animals, but no substantive data is available to establish effect on humans. * Lanxess				
METHYL-C20-24- ALKYLBENZENESULFONIC ACID, BRANCHED, CALCIUM	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. For alkaryl sulfonate petroleum additives: Acute toxicity: Existing data indicates relatively low acute toxicity. Animal testing suggested diarrhea and reduced food intake, which is consistent with the detergents in an oil-based vehicle having an irritating effect on the gastrointestinal tract. Subchronic toxicity: Existing data suggests minimal toxicity after chronic exposure by mouth. Repeated skin contact and inhalation in animals caused injury to the skin and the lungs, respectively. Reproductive and Developmental Toxicity: Existing data did not show this group of substances to cause reproductive or developmental toxicity. No significant acute toxicological data identified in literature search. Linear alkyl benzene sulfonates are derived from strong corrosive acids. Animal testing has shown they can cause skin reactions, eye irritation, sluggishness, passage of frequent watery stools, weakness and may lead to death. They may also react with surfaces of the mouth and intestines, depending on the concentration exposed to. There is no evidence of harm to the unborn baby or tendency to cause cancer.				
Acute Toxicity	×	Carcinogenicity	×		
Skin Irritation/Corrosion	×	Reproductivity	×		
Serious Eye Damage/Irritation	×	STOT - Single Exposure	✓		
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure	×		
Mutagenicity	×	Aspiration Hazard	✓		

Legend:

Data either not available or does not fill the criteria for classification
 Data available to make classification

SECTION 12 Ecological information

	Endpoint	Test Duration (hr)	Species	Value	Source
779 ENGINE DETOX 500ML	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
Naphtha (petroleum),	LC50	96	Fish	4.1mg/L	2
hydrotreated heavy	EC50	48	Crustacea	4.5mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
tridecanol, branched, ethoxylated	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	2.5mg/L	2
	EC50	48	Crustacea	1.5mg/L	2
	EC50	72	Algae or other aquatic plants	2.3mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
zinc O O-bis(2-ethylberyl	LC50	96	Fish	4.5mg/L	2
iso-Bu, iso-Pr) dithiophosphate	EC50	48	Crustacea	5.4mg/L	2
	EC50	96	Algae or other aquatic plants	2mg/L	2
	NOEC	504	Crustacea	0.4mg/L	2
methyl-C20-24- alkylbenzenesulfonic acid, branched, calcium	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

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

Harmful 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. **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	 Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. 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: Recycling Disposal (if all else fails) 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 sever 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

	COMBUSTIBLE LIQUID, regulated for storage purposes only
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 Not Applicable

SECTION 15 Regulatory information

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

Naphtha (petroleum), hydrotreated heavy is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

tridecanol, branched, ethoxylated is found on the following regulatory lists Australian Inventory of Industrial Chemicals (AIIC) Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate 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)

methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium is found on the following regulatory lists Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Australia Non-Industrial Use	No (Naphtha (petroleum), hydrotreated heavy; tridecanol, branched, ethoxylated; zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate; methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Canada - DSL	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Canada - NDSL	No (Naphtha (petroleum), hydrotreated heavy; tridecanol, branched, ethoxylated; zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate; methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
China - IECSC	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Europe - EINEC / ELINCS / NLP	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Japan - ENCS	No (Naphtha (petroleum), hydrotreated heavy; tridecanol, branched, ethoxylated; zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate; methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Korea - KECI	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
New Zealand - NZIoC	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Philippines - PICCS	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
USA - TSCA	No (methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Taiwan - TCSI	Yes
Mexico - INSQ	No (tridecanol, branched, ethoxylated; zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate; methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
Vietnam - NCI	No (zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate)
Russia - ARIPS	No (zinc O,O-bis(2-ethylhexyl, iso-Bu, iso-Pr) dithiophosphate; methyl-C20-24-alkylbenzenesulfonic acid, branched, calcium)
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	01/11/2019
Initial Date	16/02/2015

SDS Version Summary

Version	Issue Date	Sections Updated
7.1.1.1	19/06/2019	Acute Health (inhaled), Acute Health (skin), Advice to Doctor, Chronic Health, Classification, Disposal, Environmental, Fire Fighter (fire/explosion hazard), First Aid (inhaled), Handling Procedure, Ingredients, Physical Properties
8.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

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 TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index This document is copyright.

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