Lunasol XL LUNA MACHINERY

LUNA MACHINERY	Chemwatch Hazard Alert Code: 0
Chemwatch: 5544-76 Version No: 3.1	Issue Date: 02/08/2023 Print Date: 02/08/2023
Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements	S.GHS.AUS.EN.E

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

Product Identifier

i louuot luonanoi	
Product name	Lunasol XL
Chemical Name	Not Applicable
Synonyms	High-Duty Coolant Liquid 604
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Details of the manufacturer or supplier of the safety data sheet

Registered company name	LUNA MACHINERY
Address	5/24 GARLING RD, KINGS PARK NSW 2148 Australia
Telephone	029 676 5114
Fax	Not Available
Website	www.lunamachineryaustralia.com.au
Email	sales@lunamac.com.au

Emergency telephone number

Association / Organ	nisation	LUNA MACHINERY	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency tel n	ephone umbers	000	+61 1800 951 288
Other emergency tel	ephone umbers	Not Available	+61 3 9573 3188

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture Poisons Schedule Not Applicable Classification [1] Not Applicable Label elements Vot Applicable

Hazard pictogram(s) Not Applicable Signal word Not Applicable

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Continued...

Mixtures

CAS No	%[weight]	Name
Not Available	100	Ingredients determined not to be hazardous
Legend: 1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available		• • • •

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	 If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. 	
Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.	
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. 	
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. 	

Indication of any immediate medical attention and special treatment needed

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 None known.

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. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
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 irritating/ toxic fumes. May emit acrid smoke. Mists containing combustible materials may be explosive.
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. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
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. Prevent, by any means available, spillage from entering drains or water course.

No smoking, naked lights or ignition sources.
 Increase ventilation.
Stop leak if safe to do so.
Contain spill with sand, earth or vermiculite.
Collect recoverable product into labelled containers for recycling.
Absorb remaining product with sand, earth or vermiculite.
Collect solid residues and seal in labelled drums for disposal.
Wash area and prevent runoff into drains.
If contamination of drains or waterways occurs, advise emergency services.

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

SECTION 7 Handling and storage

	 Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources.
	 Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked.
	DO NOT enter confined spaces until atmosphere has been checked.
	Avoid smoking, naked lights or ignition sources.
	Avoid contact with incompatible materials.
Safe handling	When handling, DO NOT eat, drink or smoke.
	Keep containers securely sealed when not in use.
	Avoid physical damage to containers.
	Always wash hands with soap and water after handling.
	Work clothes should be laundered separately.
	 Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS.
	 Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
	Store in original containers.
	Keep containers securely sealed.
	No smoking, naked lights or ignition sources.
Other information	Store in a cool, dry, well-ventilated area. Store in a cool, dry, mell-ventilated area.
	 Store away from incompatible materials and foodstuff containers. Protect containers against physical demogra and shack regularly for looks
	 Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

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 contamination of water, foodstuffs, feed or seed.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
Lunasol XL	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
Lunasol XL	Not Available		Not Available	

Exposure controls

	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level. 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 ven "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed proper 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.	of protection. tilation that strategically
Appropriate engineering controls	General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved resp essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contamin workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air re remove the contaminant.	nants generated in the
	Type of Contaminant:	Air Speed:
	solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)
	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)

	direct spray, spray painting in shallow booths, drum filling, generation into zone of rapid air motion)	conveyer loading, crusher dusts, gas discharge (active	1-2.5 m/s (200-500 f/min)	
	grinding, abrasive blasting, tumbling, high speed wheel ge very high rapid air motion).	nerated dusts (released at high initial velocity into zone of	2.5-10 m/s (500-2000 f/min.)	
	Within each range the appropriate value depends on:			
	Lower end of the range Upper end of the range			
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents		
	2: Contaminants of low toxicity or of nuisance value only			
	3: Intermittent, low production.	3: High production, heavy use		
	4: Large hood or large air mass in motion	4: Small hood - local control only		
	Simple theory shows that air velocity falls rapidly with distance with the square of distance from the extraction point (in simp accordingly, after reference to distance from the contaminati 1-2 m/s (200-400 f/min.) for extraction of solvents generated considerations, producing performance deficits within the ex factors of 10 or more when extraction systems are installed	le cases). Therefore the air speed at the extraction point sho ng source. The air velocity at the extraction fan, for example, in a tank 2 meters distant from the extraction point. Other m traction apparatus, make it essential that theoretical air veloc	uld be adjusted, should be a minimum of echanical	
Individual protection measures, such as personal protective equipment				
Eye and face protection	 Safety glasses with side shields Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] 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. 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]. 			
Skin protection	See Hand protection below			
Hands/feet protection	manufacturer. Where the chemical is a preparation of severa and has therefore to be checked prior to the application. The exact break through time for substances has to be obtait making a final choice. Personal hygiene is a key element of effective hand care. Gif washed and dried thoroughly. Application of a non-perfumed Suitability and durability of glove type is dependent on usage frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN When prolonged or frequently repeated contact may occur, minutes according to EN 374, AS/NZS 2161.10.1 or nationa When only brief contact is expected, a glove with a protecti 374, AS/NZS 2161.10.1 or national equivalent) is recomment Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gloves are Excellent when breakthrough time > 20 min Good when breakthrough time > 20 min Poor when glove material degrades For general applications, gloves with a thickness typically gr It should be emphasised that glove thickness is not necessa efficiency of the glove will be dependent on the exact compo consideration of the task requirements and knowledge of bra Glove thickness may also vary depending on the glove manu data should always be taken into account to ensure selection Note: Depending on the activity being conducted, gloves of v Thinner gloves (down to 0.1 mm or less) may be required we likely to give short duration protection and would normally be Thicker gloves (up to 3 mm or more) may be required when puncture potential Gloves must only be worn on clean hands. After using glove	ned from the manufacturer of the protective gloves and has to oves must only be worn on clean hands. After using gloves, moisturiser is recommended. a. Important factors in the selection of gloves include: 374, US F739, AS/NZS 2161.1 or national equivalent). a glove with a protection class of 5 or higher (breakthrough equivalent) is recommended. on class of 3 or higher (breakthrough time greater than 60 m ded. and this should be taken into account when considering glov rated as: atter than 0.35 mm, are recommended. rily a good predictor of glove resistance to a specific chemicar sition of the glove material. Therefore, glove selection should hakthrough times. ufacturer, the glove type and the glove model. Therefore, the n of the most appropriate glove for the task. rarying thickness may be required for specific tasks. For exa where a high degree of manual dexterity is needed. However i just for single use applications, then disposed of. e there is a mechanical (as well as a chemical) risk i.e. wher	o be observed when hands should be time greater than 240 inutes according to EN es for long-term use. If, as the permeation d also be based on manufacturers technical mple: these gloves are only e there is abrasion or	
	moisturiser is recommended.		- Ferranda	
Body protection	See Other protection below			
	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Barrier cream. • Eyewash unit.			

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid with characteristic odour; does not mix water.		
Physical state	Liquid	Relative density (Water = 1)	0.838
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 (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	20
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>150	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	<0.00	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	Product is considered stable and hazardous polymerisation will not occur.
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	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.		
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.		
Skin Contact	The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.		
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).		
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.		
	ΤΟΧΙCITY	IRRITATION	
Lunasol XL	Not Available	Not Available	
Legend:	 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 		

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 r	not available or does not fill the criteria for classification

genu.

Data entrier not available or does not nill the criteria for classification
 Data available to make classification

SECTION 12 Ecological information

Lunasol XL

	Endpoint	Test Duration (hr)	Species	Value	Source
Lunasol XL	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Ecotox databa	n 1. IUCLID Toxicity Data 2. Europe ECHA Registe ase - Aquatic Toxicity Data 5. ECETOC Aquatic He ation Data 8. Vendor Data	0	, ,	,

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	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:

SECTION 14 Transport information

Labels Required	
Marine Pollutant	NO
HAZCHEM	Not Applicable

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

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

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

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

Not Applicable

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

Product name	Group
Transport in bulk in accordance	e with the IGC Code
Product name	Ship Type

SECTION 15 Regulatory information

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

National Inventory Status National Inventory Status Australia - AIIC / Australia Non-Industrial Use Not Available

National Inventory	Status		
Canada - DSL	Not Available		
Canada - NDSL	Not Available		
China - IECSC	Not Available		
Europe - EINEC / ELINCS / NLP	Not Available		
Japan - ENCS	Not Available		
Korea - KECI	Not Available		
New Zealand - NZIoC	Not Available		
Philippines - PICCS	Not Available		
USA - TSCA	Not Available		
Taiwan - TCSI	Not Available		
Mexico - INSQ	Not Available		
Vietnam - NCI	Not Available		
Russia - FBEPH	Not Available		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.		

SECTION 16 Other information

Revision Date	02/08/2023
Initial Date	02/09/2022

SDS Version Summary

Version	Date of Update	Sections Updated
3.1	02/08/2023	Identification of the substance / mixture and of the company / undertaking - Synonyms, Name

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 ES: Exposure Standard 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 AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.