

<b>Section 1: Identification</b>	
Product name:	Lucid®
Other names:	Soluble concentrated cleaning solution.
Recommended use:	For dilution with water for use as a cleaning solution of agricultural / horticultural application equipment.
Manufacturer/Importer details:	AgNova Technologies NZ Ltd PO Box 301488, Albany Auckland 0752 Phone: 0800 500 599
24 hour emergency contact:	0800 CHEMCALL (0800 243 622)
National Poisons Centre:	0800 POISON (0800 764 766)
<b>Section 2: Hazard identification</b>	
	Product is classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996.
HSNO Approval:	HSR002530
Hazardous classification:	Skin irritation Category 2, Eye damage Category 1,
Pictograms:	
Signal word:	<b>DANGER</b>
Hazard statements:	H318 Causes serious eye damage. H315 Causes skin irritation
Prevention statements:	P102 Keep out of reach of children. P103 Read label before use. P264 Wash hands, arms and face thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/clothing and eye/face protection.
Response statements:	P302+ P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313: If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 If eye irritation persists: Get medical advice/attention P310 Immediately call a POISON CENTER or doctor
Storage statements:	=

Disposal statement: P501 Dispose of product and containers in accordance with local Regulations. See Section 13 for details.

Additional Label Requirements: -

### Section 3: Composition/information on ingredients

Chemical identity of ingredients with health or environmental hazards:	Ingredient	CAS No.	Proportion %w/w
	Alcohols, ethoxylated C9-11, (6 EO)	68439-46-3	10 - <30
	Alcohols, C12-14 ethoxylated, sulphate, sodium salt	68891-38-3	<10
	Benzenesulfonic acid C10-13 alkyl derivs., sodium salts	68411-30-3	<10
	Potassium hydroxide	1310-58-3	<10
	Other ingredients	-	To balance

### Section 4: First-aid measures

First aid measures: If medical advice is needed, have product container or label at hand. For advice contact National Poisons Centre 0800 POISON [0800 764 766] or a doctor.

Ingestion: Do NOT induce vomiting. Rinse mouth. Call a POISON CENTRE or doctor.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if person is unwell or symptoms persist.

Skin contact: Wash area with plenty of water. Wash contaminated clothing before reuse. If irritation occurs call a POISON CENTRE or doctor for advice.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

First aid facilities: Provide eye baths and safety showers close to areas where product contact or splashing may occur.

Advice to doctor: Treat symptomatically.

### Section 5: Fire-fighting measures

Flammability: Non-flammable.

Appropriate extinguishing media: Extinguish fire with dry powder (ABC powder), foam, carbon dioxide or water spray.

Hazardous decomposition products: Irritant and toxic fumes may be generated.

Special protective equipment and precautions for fire-fighters:	In the event of fire, wear self-contained breathing apparatus. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Prevent run-off from contaminating drains, sewers or waterways. Inform appropriate authorities immediately if product or run-off enters waterways.			
HAZCHEM code:	-			
<b>Section 6: Accidental release measures</b>				
Personal precautions:	Wear protective equipment; chemical resistant coveralls, boots, gloves, eye protection. Do not touch or walk through spilled material. Stop leak when safe to do so. Exclude all bystanders from the vicinity.			
Environmental precautions:	Contain spill. Prevent product entering drains or waterways by activating emergency shut-off valves or using bunding. Inform appropriate authorities immediately if spill enters sewers or waterways. Prevent chemical contaminating soil.			
Procedure for clean up:	Contain and recover liquid into a suitable labelled container for disposal. Absorb residue. For small spills use suitable inert material, e.g. sand, vermiculite. Do NOT use combustible materials such as sawdust. Wash contaminated area with water, absorb and put in container for disposal. Dispose of contaminated waste at an approved facility.			
<b>Section 7: Handling and storage</b>				
Safe handling:	Read label before use. Wear personal protective equipment. Do not eat, drink or smoke while handling or using. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges.			
Safe storage:	Keep out of reach of children. Store at temperature of 2 to 40 °C. Keep container tightly closed when not in use. Store in a secure well-ventilated area away from foodstuffs, seeds, fertilisers and human/animal health products. Storage must be in accordance with the current version NZS 8409 Management of Agrichemicals.			
<b>Section 8: Exposure controls/personal protection</b>				
Occupational exposure limits:	<i>Ingredient</i>	<i>CAS No.</i>	<i>WES-TWA</i>	<i>WES-STEL</i>
	Dipropylene glycol methyl ether [skin]	34590-94-8	100 ppm (606 mg/m <sup>3</sup> )	150 ppm (909 mg/m <sup>3</sup> )
Biological limit value:	None set as of WorkSafe's 14 <sup>th</sup> edition of WES and BEI values, published November 2023.			

Engineering controls:	Control process conditions to avoid contact. Use only in well-ventilated areas or outdoors. If necessary, use local exhaust ventilation to keep airborne concentration below the exposure limits.
Respiratory protection:	Wear half or full mask fitted with gas/vapour filter when mixing or applying.
Hand protection:	Elbow length, chemical resistant gloves, e.g. nitrile.
Eye protection:	Safety glasses with side shields or face shield.
Skin protection:	Overalls and chemical resistant boots/footwear. Disposable overalls recommended.
General hygiene:	Do not eat, drink or smoke while using. Wash hands and exposed skin thoroughly with soap and water before rest breaks, meals and after work. Wash protective clothing daily after work.
Personal Protection:	Further information on specific types of personal protective gear and related standards is available in Section 16.

### Section 9: Physical and chemical properties

(a)	Appearance:	Amber liquid.
(b)	Odour:	Characteristic.
(c)	Odour threshold:	Not available.
(d)	pH:	9.5 – 10.5 (neat)
(e)	Melting point / freezing point:	Not applicable.
(f)	Initial boiling point and boiling range:	Not determined.
(g)	Flash point:	>95°C
(h)	Flammability (solid, gas):	Not applicable.
(i)	Upper / lower flammability or explosive limits:	Not applicable.
(j)	Vapour pressure:	Not applicable.
(k)	Vapour density:	Not applicable.
(l)	Relative density:	1.055 – 1.075
(m)	Solubility:	Soluble in water.
(n)	Partition coefficient: n-octanol / water:	Not available.
(o)	Auto-ignition temperature:	Not determined.
(p)	Decomposition temperature:	Not available.
(q)	Kinematic viscosity:	Not available.
(r)	Particle characteristics:	Not applicable.

**Section 10: Stability and reactivity**

Stability of the substance:	Product is unlikely to react or decompose under normal conditions of storage and use. If you have any doubts, contact the supplier for advice on shelf-life properties.
Conditions to avoid:	No specific information.
Incompatible materials:	Avoid contact with strong acids, alkalis or strong bases, strong oxidising agents.
Hazardous decomposition products:	In a fire, oxides of carbon and other organic compounds may be emitted.

**Section 11: Toxicological information**

	Toxicity classifications determined by assessment of the components in the formulated mixture.
(a) Acute toxicity:	May be harmful if ingested. May also cause irritation to throat, abdominal pain, nausea and vomiting.
(b) Aspiration hazard:	Not classified.
(c) Respiratory irritation:	Not classified.
(d) Skin corrosion / irritation:	Classified as skin irritant. Causes skin inflammation.
(e) Serious eye damage / irritation:	Causes serious eye damage.
(f) Respiratory or skin sensitisation:	Not classified.
(g) Germ cell mutagenicity:	Not classified.
(h) Carcinogenicity:	Not classified.
(i) Reproductive toxicity:	Not classified.
(j) Specific organ toxicity:	Not classified.
(k) Narcotic effects:	Not classified.
(l) Other adverse effects:	No information.
(m) Toxicological information for product:	ATE (mixture), oral LD50 2312.96 mg/kg bw, Dermal >5000 mg/kg bw, Inhalation >20mg/L (4h)

**Section 12: Ecological information**

	Ecotoxicological classifications determined by assessment of the active ingredient.
(a) Aquatic ecotoxicity:	Not classified.
(b) Soil ecotoxicity:	Not classified
(c) Terrestrial vertebrate ecotoxicity:	Not classified.
(d) Terrestrial invertebrate ecotoxicity:	Not classified.
(e) Persistence and degradability:	This product is expected to be biodegradable.
(f) Potential to be bioaccumulative:	This product is not expected to be bioaccumulative.

(g)	Mobility in soil:	Not available
(h)	Ecotoxicological information for product:	Not available
<b>Section 13: Disposal considerations</b>		
Product disposal:	Dispose of this product only by using according to the label or through Agrecovery chemical disposal or similar approved service. Do not allow material to contaminate ground water system or surface water.	
Container disposal:	Triple rinse container and use residue in cleaning mixture. Recycle clean, empty container through Agrecovery if possible or crush and bury in an approved landfill. Do not use container for any other purpose. Avoid contamination of any water supply or stream with product or empty container.	
<b>Section 14: Transport information</b>		
UN number:	N/A	
UN proper shipping name:	N/A	
UN class:	N/A	
Packing group:	N/A	
HAZCHEM:	N/A	
Marine pollutant:	No	
Special precautions:	-	
<b>Section 15: Regulatory information</b>		
HSNO:	Approved substance under the HSNO Act 1996.	
Substance approval number:	HSR002530; Cleaning Products Subsidiary Hazard Group Standard 2020.	
Tolerable exposure limit / environmental exposure limit:	None set.	
HSNO controls:	See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>	
Additional controls:	Qualifications	No
	Tracking:	No
	Safety Data Sheet:	Any quantity
	Restricted to workplace only:	No
	Quantity that must be secured when unattended:	-
	Fire extinguishers:	-
	Quantity for secondary containment and emergency response plan:	-
	Quantity for signage:	-
	Quantity for location certificate:	-
	Records of use (3 kg or more applied to area within 24 hours):	-
	Quantity that requires	

	management in accordance with HSW HS Regulations: Hazardous Substances (Packaging) Notice 2017; Clause 9	1000 L UN Pack Group III
Additional information:	Refer to WorkSafe for additional information on controls in the workplace; <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .	
ACVM:	Not required to be registered under the Agricultural Compounds Veterinary Medicines Act 1997.	
Registration number:	-	
Conditions of registration:	See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a>	
<b>Section 16: Other information</b>		
Date of issue:	12/9/2024	
Reason for reissue:	Formulation change and change to HSNO Group Standard number.	
Replaces:	SDS dated May 2024.	
Information references:	Supplier Safety Data Sheet NZ EPA Approved hazardous substances databases. Workplace Exposure Standards and Biological Exposure Indices	
Abbreviations:	ACVM: Agricultural Chemicals and Veterinary Medicines Group Bw: Bodyweight. HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act) EPA: Environmental Protection Authority of New Zealand CAS Number: Chemical Abstracts Service Number LD50: Lethal Dose 50% (Population) LC50: Lethal Concentration 50% (Population) WES-TWA: Workplace exposure standards – Time-weighted average WES-STEL: Workplace exposure standards – Short-term exposure limit	
Personal Protection Standards:	The following Standards provide general advice regarding safety clothing and equipment: Respiratory equipment: <b>AS/NZS 1715</b> , Protective Gloves: <b>AS 2161</b> , Occupational Protective Clothing: <b>AS/NZS 4501</b> , Industrial Eye Protection: <b>AS1336</b> and <b>AS/NZS 1337</b> , Occupational Protective Footwear: <b>AS/NZS2210</b>	

The data provided in this safety data sheet is based on current knowledge and experience. The purpose of this document is to describe the product in terms of its safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.

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