



SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **Algex**
Product Use: Biocide for industrial and/or commercial use.
Restriction of Use: Refer to Section 15

New Zealand Supplier: **Power Up Lubricants NZ Ltd**
Address: 41 Hororata Road
RD 2 Darfield, 7572
Canterbury
New Zealand

Telephone: +64 3 962 9990 / 0800 33 66 66
Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 25 March 2021

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: Additives, process Chemicals and Raw Materials (Corrosive) – HSR002491

Pictograms



Allergic Corrosive Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
8.2C	H314	Causes severe skin burns and eye damage.	Skin Corr. 1C
8.3A	H318	Causes serious eye damage.	Eye Corr. 1
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.

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P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no.247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1);	0 - 3	55965-84-9
Non hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Remove/Take off immediately all contaminated clothing and wash before reuse. Wash skin with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
If Swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms: Allergic skin reactions. Corrosive damage to gastro-intestinal tract. Skin reaction like itching, reddening, blistering may appear after hours.

Treatment: Treat skin and mucous membrane with antihistamine and corticoid preparations. Rinse eyes thoroughly with physiological saline.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Under certain fire conditions, traces of toxic gases cannot be excluded, e.g: Nitrogen oxides (NOx) - Sulphur dioxide (SO2) - Hydrogen chloride (HCl) - Carbon monoxide (CO).
Suitable Extinguishing media	Water spray jet, extinguishing powder, CO2, foam.
Precautions for firefighters and special protective clothing	Wear self - contained breathing apparatus. Additional information: Collect contaminated firefighting water separately. It must not enter drains.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Evacuate all unnecessary personnel. Avoid breathing dust or vapors and contact with skin and eyes.

Contain all spills. Isolate leaking containers and stop leak if safe to do so. Use absorbent (soil or sand, sawdust, inert material, vermiculite). Collect and seal in properly labelled drums for disposal. Empty containers must be decontaminated and destroyed.

Dispose of in compliance with local and/or national regulations as detailed in Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Keep containers closed at all times.
- Store in a well ventilated area.
- Store in a cool place.
- Protect against temperatures >80°C
- Minimum shelf Life: 18 months from production date, if stored at a temperature of about 20°C.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m³	STEL ppm mg/m³
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No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working

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day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

Engineering Controls

Ensure adequate ventilation.

Personal Protection Equipment



Eyes	Face shield, Body protection, Apron, Full head, face & neck protection:
Hands	Chemical protective gloves according to DIN EN 374 with CE-labelling. Gloves made of leather are not suitable
Respiratory	Is recommended in example substance concentrations exceeding the air limited value. Filter A/P2
General	Use skin cream for skin protection. Avoid contact with the eyes and the skin. Wash hands during work breaks and at the end of the shift. Provide skin protection plan.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Colourless to slightly yellowish
Odour	Mild
Odour Threshold	Not available
pH	Not available
Boiling Point	228 ^o C
Melting Point	Not available
Freezing Point	Not available
Flash Point	121 ^o C
Flammability	Not available
Upper and Lower Explosive Limits	2.9% - 12.6% Vol
Vapour Pressure	0.1 hPa @ 20 ^o C
Vapour Density	ca. 1.05 g/cm ³ @ 20 ^o C
Specific Gravity	Not available
Water Solubility	Fully miscible
Partition Coefficient:	Not available
Auto-ignition Temperature	310 ^o C
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Protect against temperatures >80 ^o C. Before handling, the product should not be diluted or mixed with other chemicals, in order to avoid any negative influences on the active ingredient(s).
Incompatible Materials	Alkalis, Reducing agents, Strong oxidizing agents, Nucleophils
Hazardous Decomposition Products	None if storage and handling is done according to specification.

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Not applicable. LD50 = 4467 mg/kg (rat)
Dermal	Not applicable. LD50 = >5000 mg/kg (rat)
Inhalation	Not applicable.
Eye	Causes eye damage.
Skin	Causes skin burns. Causes an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no.247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1);	66 mg/kg (rat)	87.12 mg/kg (Rabbit)	0.33 mg/L(Rat) d/m

Section 12. Ecotoxicological Information

HSNO Classes: 9.1B Toxic to aquatic life with long lasting effects.

Product:	
Persistence and degradability	The active substance CIT/MIT proved to be biodegradable in the simulation test OECD 301 D (Closed Bottle Test) O2-consumption: >60%
Bioaccumulation	No data available
Mobility in Soil	Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected. Log Kow -0.71 +- 0.75; CIT/MIT Depending on concentration, toxic effects on activated sludge organisms are possible. AOX-indication: Can affect the AOX- value: 0.26% Contains no heavy metals
Other adverse effects	The product ingredients can be readily eliminated in the sewage system.

Do not allow to enter waterways.

Section 13. Disposal Considerations**Disposal Method:**

Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Corrosive" and that the label also has the appropriate pictograms from Section 2, waste type identifier, and the business name, address, and phone number.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	1760
Class - Primary	8
Packing Group	III
Proper Shipping Name	CORROSIVE, LIQUID N.O.S (Mixture containing 5-Chloro-2-methyl-2H-isothiazol-3-one and 2- Methyl-2H-isothiazol-3-one (3: 1))
Marine Pollutant	No
Special Provisions	If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Additives, process Chemicals and Raw Materials (Corrosive) – HSR002491

HSNO Classification: 6.5B, 8.2C, 8.3A, 9.1D

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L (8.1C, 8.3A)
Emergency Response Plan	10 000L (8.1C, 8.3A, 9.1D)
Secondary Containment	10 000L (8.1C, 8.3A, 9.1D)
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.

TLV Threshold Limit Value-an exposure limit set by responsible authority.
UEL Upper Explosive Level
WES Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the Power Up Lubricants, if further information is required.

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