

Section 1 - Identification of the Material and Supplier

FMC New Zealand Limited
6 Clayton Street
Newmarket, Auckland 1023

24 Hour Medical Emergency: 0800 111 174
Transport Emergency: 0800 387 668
Technical Query & Customer Service: 0800 658 080
(business hours)
www.fmccrop.nz

Chemical nature: Triazolinones
Trade Name: **Magister® CS Herbicide**
Product Use: Herbicide
Creation Date: **Original Issue Date: 31 November 2007**
This version issued: **November, 2018** and is valid for 5 years from this date.
Poisons Information Centre: Phone 0800 764766 from anywhere in New Zealand

Section 2 - Hazards Identification



GHS Signal word: ECOTOXIC

HAZARD CLASSIFICATION: 9.1A, 9.2A

HAZARD STATEMENTS

H400: Very toxic to aquatic life.

H421: Very toxic to the soil environment.

PRECAUTIONARY STATEMENTS – PREVENTION

P103: Read label before use.

P273: Avoid release to the environment.

PRECAUTIONARY STATEMENTS – RESPONSE

P391: Collect spillage.

PRECAUTIONARY STATEMENTS – DISPOSAL

P501 - Dispose of contents/container to an approved waste disposal plant

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	%
Clomazone	81777-89-1	360 g/L
Sodium nitrate	7631-99-4	1 - 5%
Calcium chloride	10043-52-4	1 – 5%

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 in New Zealand and is available at all times. Have this SDS with you when you call.

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Effects from overexposure from either swallowing, inhaling or coming into contact with the eyes or skin. Symptoms of overexposure include decreased activity, tearing eyes, bleeding from the nose and inco-ordination.

Inhalation: Remove to fresh air. If breathing difficulty or discomfort occurs and persists.

Skin Contact: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

Eye Contact: Flush with water for at least 15 minutes. If irritation occurs and persists, contact a medical doctor.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Notes to a physician: Treat symptomatically.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards

HAZCHEM Code: 3 [Y]

Extinguishing Media: Suitable extinguishing media: Foam, Carbon dioxide (CO₂) Powders

Hazardous thermal

(de)composition products:

Specific hazards: Toxic fumes are released

Specific fire fighting methods: Isolate fire area. Evacuate downwind

Do not dispose of fire-fighting water in the environment

Protection of fire-fighters:

Do not attempt to fight the fire without suitable protective equipment

Do not breathe fumes

Protection of fire-fighters : Self-contained breathing apparatus

Complete protective clothing

Flash point:

>93°C

Upper Flammability Limit:

No data.

Lower Flammability Limit:

No data.

Autoignition temperature:

392 °C

Section 6 - Accidental Release Measures

Personal Precautions Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see Section 8.

Other For further clean-up instructions, call FMC Transport Emergency number listed in the SDS.

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods for Containment Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Clean and neutralize spill area, tools and equipment by washing with water and soap.

Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

Section 7 - Handling and Storage

Handling: Technical measures: Vapour extraction at source Precautions : Avoid any direct contact with the product Work in a well-ventilated area.

Storage: Recommended: Store:

- in a cool, dry area

- in a well-ventilated area

- protected from frost

- away from food and drinks and animal foodstuffs

- out of reach of children.

Packaging materials: 1,5 litre HDPE plastic bottle.

Section 8 - Exposure Controls and Personal Protection

Workplace Exposure Guidelines

Workplace exposure standards: NOT ESTABLISHED NZ

Exposure Standards outside the workplace: Not available

Engineering measures

Exposure control measures: Ensure good ventilation of the work station. Extraction to remove vapours at their source.

Personal Protective Equipment

Detail specifications for equipment:

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Respiratory system: If the ventilation is suitable, it is not essential to wear respiratory equipment.

Eye Protection: For splash, mist or spray exposures, wear safety goggles.

Skin & Body Protection: Wear protective clothing.

Hands: Wear chemical resistant gloves.

General hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking or using tobacco. Shower at the end of the workday.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Brown coloured liquid.
Odour:	Slightly Aromatic.
Boiling Point:	Not available.
Freezing/Melting Point:	Not available.
Volatiles:	No data.
Vapour Pressure:	No data.
Vapour Density:	1021 –1024 g/L
Specific Gravity or Density:	1.16 g/cm ³ at 20 °C
Water Solubility:	Disperses in water
pH:	8.87 (Aqueous dispersion - 1 %)
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	Clomazone:2.5
Autoignition temp:	392 °C
Explosion properties:	Not Explosive
Oxidation properties:	Not an Oxidising Agent

Section 10 - Stability and Reactivity

Reactivity Not applicable

Chemical Stability Stable.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks

Incompatible materials None known.

Hazardous Decomposition Products Carbon oxides (COx), Nitrogen oxides (NOx), Chlorine, Hydrogen chloride. **Section 11 -**

Toxicological Information

Toxicity:

LD50 Oral > 5000 mg/kg (rat)

LD50 Dermal > 5000 mg/kg (rat)

LC50 Inhalation > 3.86 mg/L 4 hr - Maximum attainable concentration (zero mortality)

Serious eye damage/eye irritation Non-irritating.

Skin corrosion/irritation Non-irritating.

Sensitization Mild sensitiser

Information on toxicological effects

Symptoms Large dosages of clomazone ingested by laboratory animals produced signs of toxicity including ataxia, decreased activity, oral discharge, lacrimation, bloody tears, and nasal discharge.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity Clomazone: Long-term exposure caused slight liver weight increase and hepatocyte enlargement in animal studies.

Mutagenicity Clomazone: Not genotoxic in animal studies.

Carcinogenicity Clomazone: No evidence of carcinogenicity from animal studies.

Neurological effects Clomazone: Not neurotoxic.

Reproductive toxicity Clomazone: No toxicity to reproduction in animal studies.

Developmental toxicity Clomazone: Not teratogenic in animal studies.

Section 12 - Ecological Information

Ecotoxicity Aquatic: Harmful to aquatic organisms. Risk of bioaccumulation in an aquatic species is low.

Log Octanol/Water Partition Coefficient: 2.5

48hr LC50 (Daphnia magna): 5.2 mg/L.

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96hr LC50 (rainbow trout): 19 mg/L.

96hr LC50 (bluegill sunfish): 34 mg/L.

Birds: Oral LD50 (mallard duck): >2,510 mg/kg.

Dietary LD50 (mallard duck): >5,620 ppm in diet (8 days).

Water: Field studies showed that clomazone does not significantly leach below 15cm in soil and is, therefore, not expected to enter groundwater.

Persistence/degradability Soil: Clomazone is degraded in soils under aerobic and anaerobic conditions with half-lives ranging between 1 to 4.5 months depending upon soil conditions.

Bioaccumulative potential: Low, log Pow of 2.5, measured bio-concentration factor (BCF) of 27 –40.

Section 13 - Disposal Considerations

Methods of disposal: Triple rinse container and add residue to spray tank. Burn if permitted and circumstances, especially wind direction permit, otherwise bury in landfill.

Section 14 - Transport Information

NZS 5433*

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains clomazone)
Class	9
Packing group	III
Matters needing attention for transportation:	Magister®1 and 5 L can be shipped under Limited Quantity provisions in NZS 5433 as a non-dangerous good.

IMDG*

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains clomazone)
Class	9
Packing group	III

IATA*

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains clomazone)
Class	9
Packing group	III

* Matters needing attention for transportation:

Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product meets these special provisions, it may be shipped in New Zealand as a non-dangerous goods under provisions in NZS 5433 code which accepts IMDG and IATA classification and/or Limited quantity volumes.

Section 15 - Regulatory Information

ACVM Registered Number:	P004142
HSNO Approval Code:	HSR007804

Section 16 - Other Information

Additional Information:

Original Issue Date: 31 November 2007

Revision Date: Nov 2014

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Replaces: ES232

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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