

Safety Data Sheet

Cascoset™ MCAT 9131

Revision Date 12.12.2011

1. Product and company identification

Product name	Cascoset™ MCAT 9131
MSDS Number	300000020476
Product type	Slurry
Product use	Catalyst - Wood Products
Manufacturer, Importer, Supplier	MOMENTIVE SPECIALTY CHEMICALS (N.Z.) LTD 165 Totara Street Mt. Maunganui, Tauranga, 3116 New Zealand
Contact person	4information@momentive.com
Telephone	General information: +64 07 547 4130

Emergency telephone number**Emergency telephone:**
0800 734 607**2. Hazards identification****HSNO Classification****Hazard Class**

6.1 - ACUTE TOXICITY:ORAL
6.3 - SKIN IRRITATION
8.3 - CORROSIVE TO OCULAR TISSUE
6.5 - SENSITIZATION
6.6 - MUTAGENICITY
6.7 - CARCINOGENICITY
6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE):ORAL [kidneys,]
6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE):ORAL [adrenal, arms bladder, blood system bone marrow bones brain, cardiovascular system central nervous system (CNS), conjunctiva digestive system ears endocrine, endothelium eyes, feet finger gall bladder ganglia gastrointestinal tract glands hands head heart, hypothalamus immune system legs liver, lungs, lymphatic system mucous membranes, muscle tissue nervous system nose/sinuses optic nerve ovary pancreas peripheral nervous system pituitary gland placenta prostate reproductive organs respiratory tract, skin, spinal column spleen, stomach teeth testes throat thyroid, tongue trachea and uterus/cervix]
9.1 - AQUATIC ECOTOXICITY
9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY

Category

Category D
Category A
Category A
Category B (Skin)
Category B
Category A
Category A


Category B

Category D
Category C

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous

Substances (Classifications) Regulations 2001. This material is not classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

GHS label elements

Signal word	Danger
Hazard statements	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. Suspected of causing genetic defects. Causes damage to organs if swallowed. kidneys, May cause damage to organs if swallowed. adrenal, arms bladder, blood system bone marrow bones brain, cardiovascular system central nervous system (CNS), conjunctiva digestive system ears endocrine, endothelium eyes, feet finger gall bladder ganglia gastrointestinal tract glands hands head heart, hypothalamus immune system legs liver, lungs, lymphatic system mucous membranes, muscle tissue nervous system nose/sinuses optic nerve ovary pancreas peripheral nervous system pituitary gland placenta prostate reproductive organs respiratory tract, skin, spinal column spleen, stomach teeth testes throat thyroid, tongue trachea uterus/cervix Harmful to aquatic life. Harmful to terrestrial vertebrates.
Symbol	
Precautionary statements	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye/face protection. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	<p>Immediately call a POISON CENTER or doctor/physician.</p> <p>IF SWALLOWED: Rinse mouth.</p> <p>IF ON SKIN: Take off contaminated clothing and wash before re-use. Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/attention.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>IF exposed or concerned: Call a POISON CENTER or doctor/physician.</p>
Storage	Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/Information on ingredients

Substance/mixture : Mixture

Hazardous ingredient name

CAS number

WT %

1,2-ethandiol	107-21-1	50 - 70
Paraformaldehyde	30525-89-4	15 - 20
Formaldehyde	50-00-0	0.2 - 1

Other ingredients are non hazardous or below cut-off levels and make up the product concentration to 100%.

4. First aid measures

Description of necessary first aid measures

Eye contact	Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Skin contact	Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation	Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Indication of immediate medical attention and special treatment needed, if necessary

Protection of first aid personnel	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Notes to physician	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Flammability of the product	In a fire or if heated, a pressure increase will occur and the container may burst.
<u>Extinguishing media</u> Suitable	Use an extinguishing agent suitable for the surrounding fire.
Special exposure hazards	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous combustion products	Decomposition products may include the following materials: carbon dioxide, carbon monoxide,
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Large spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation.
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Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

New Zealand

Hazardous ingredient name

1,2-ethandiol

Occupational exposure limits

Ceiling Limit Value

127 mg/m³ 50 ppm
(VAP_MIST)

Formaldehyde

Ceiling Limit Value

1.2 mg/m³ 1 ppm

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state	: Liquid
Color	: Dark brown
Odor	: Formaldehyde
Odor threshold	: Not determined
pH	: 3.5 - 4.3
Initial boiling point and boiling range	: 100 °C (212 °F)
Flash point	: 100 °C (212 °F)
Evaporation rate	: Not determined
Flammability	: Not determined
Explosion limits	
Upper:	: Not determined
Lower:	: Not determined
Vapor pressure	: Not determined
Vapor density	: Not determined
Relative density	: Not determined
Solubility	: Not determined
Partition coefficient: n-octanol/water	: Not determined
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Viscosity	: Kinematic-Not determined Dynamic- 2,400 - 4,000 cPs

Other information

Not applicable.

10. Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy.
Materials to avoid	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Most important health effects

Potential acute health effects

- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye damage.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye damage.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : Suspected of causing genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following: stomach pains,
- Skin contact** : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
- Eye contact** : Adverse symptoms may include the following: pain, watering, redness,

Acute toxicity

Hazardous ingredient name

1,2-ethandiol

LD50 Oral	Mouse	5,500 mg/kg
LD50 Oral	Dog	5,500 mg/kg
LD50 Oral	Cat	1,650 mg/kg

	LD50 Oral	Rat	4,700 mg/kg
	LD50 Oral	Guinea pig	6,600 mg/kg
	LC50 Inhalation	Rat	> 3.95 mg/l/7 h
Paraformaldehyde	LD50 Dermal	Rabbit	> 22,270 mg/kg
	LD50 Oral	Rat	800 mg/kg
Formaldehyde	LD50 Oral	Rat	800 mg/kg
	LC50 Inhalation	Rat	0.578 mg/l 250 ppm/2 h
	LD50 Dermal	Rabbit	270 mg/kg

Other Toxicological Information

Carcinogenicity

Classification

Hazardous ingredient name

1,2-ethandiol

ACGIH	Not classifiable as to its carcinogenicity to humans.
IARC	Not classified.
NTP	Not listed
OSHA	Not classified

Paraformaldehyde

ACGIH	Not classified.
IARC	Not classified.
NTP	Not listed
OSHA	Not classified

Formaldehyde

ACGIH	Suspected human carcinogen.
IARC	IARC Group 1, carcinogenic to humans
NTP	Proven.
OSHA	OSHA cancer potential

12. Ecological information

Environmental effects

This material is harmful to aquatic life.

Aquatic ecotoxicity

Hazardous ingredient name

1,2-ethandiol

Fresh water	Acute LC50 8,050 mg/l/96 h	Fathead minnow
Fresh water	Acute LC50 > 18,500 mg/l/96 h	Rainbow trout,donaldson trout

Paraformaldehyde

Fresh water	Acute LC50 60 mg/l/96 h	Rainbow trout,donaldson trout
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Formaldehyde

Fresh water	Acute LC50 1.41 mg/l/4 d	Rainbow trout,donaldson trout
Fresh water	Acute LC50 1.51 mg/l/4 d	Bluegill

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste

disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/Packing group
NZ Standard 5433: 1999		Non-regulated	
IMO/IMDG		Non-regulated	
IATA (Cargo)		Non-regulated	

15. Regulatory information

National regulations

ERMA Group Standard Number : Additives, Process Chemicals and Raw Materials (HSR002512)

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

International regulations

Chemical inventories

Australia inventory (AICS) All components are listed or exempted.
 Canada inventory All components are listed or exempted.
 Japan inventory Not determined.
 China inventory (IECSC) Not determined.
 Korea inventory Not determined.
 New Zealand Inventory (NZIoC) All components are listed or exempted.
 Philippines inventory (PICCS) Not determined.
 United States inventory (TSCA 8b) All components are listed or exempted.

16. Other information

Date of issue 12-DEC-2011

Date of printing 26.04.2012

Version 1.0

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