

GRANOSITE GRANOSHIELD MATT MCR

Chemwatch Independent Material Safety Data Sheet

Issue Date: 23-Feb-2010

XC9317EC

CHEMWATCH 4746-21

Version No:2.0

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

GRANOSITE GRANOSHIELD MATT MCR

SYNONYMS

"Product Code: 862101, 862102, 862103, 862104", 862109

PRODUCT USE

■ Used according to manufacturer's directions.
Membrane coating.

SUPPLIER

Company: Granosite

Address:

4 Steel Street

Blacktown

NSW, 2148

AUS

Telephone: +61 2 9621 6255

Emergency Tel: +61 1800 039 008

Fax: +61 2 9831 4244

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

POISONS SCHEDULE

None

RISK

Risk Codes

R41

Risk Phrases

■ Risk of serious damage to eyes.

SAFETY

Safety Codes

S401

Safety Phrases

■ To clean the floor and all objects contaminated by this material use water and detergent.

S46

■ If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
acrylic copolymer latex	Not avail.	30-60
pigments and fillers		10-30
2, 2, 4- trimethyl- 1, 3- pentanediol monoisobutyrate	25265-77-4	<2
diuron	330-54-1	<1
ammonium hydroxide	1336-21-6	<0.1
2- octyl- 4- isothiazolin- 3- one	26530-20-1	<0.1
1, 2- benzisothiazoline- 3- one	2634-33-5	<0.01
2- methyl- 4- isothiazolin- 3- one	2682-20-4	<0.01
ingredients not contributing to the classification		balance

Section 4 - FIRST AID MEASURES

SWALLOWED

- - If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

EYE

- If this product comes in contact with the eyes:

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Section 4 - FIRST AID MEASURES

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.

SKIN

- If skin contact occurs:
 - Immediately remove all contaminated clothing, including footwear.
 - Flush skin and hair with running water (and soap if available).
 - Seek medical attention in event of irritation.

INHALED

- - If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

- Treat symptomatically.

for diuron:

- Symptomatic and supportive action is indicated.
 - Methaemoglobinaemia is possible
 - if compound is hydrolysed in vivo to aniline.
 - Methaemoglobinaemia causes cyanosis. Reversion of methaemoglobin to haemoglobin is spontaneous after removal from exposure, so moderate degrees of cyanosis need be treated only by supportive measures such as bed rest and oxygen inhalation.
- For acute or short term repeated exposures to ammonia and its solutions:
- Mild to moderate inhalation exposures produce headache, cough, bronchospasm, nausea, vomiting, pharyngeal and retrosternal pain and conjunctivitis. Severe inhalation produces laryngospasm, signs of upper airway obstruction (stridor, hoarseness, difficulty in speaking) and, in excess, high doses, pulmonary oedema.
 - Warm humidified air may soothe bronchial irritation.
 - Test all patients with conjunctival irritation for corneal abrasion (fluorescein stain, slit lamp exam)
 - Dyspneic patients should receive a chest X-ray and arterial blood gases to detect pulmonary oedema.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- - There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD

+43cv+43cz+43ds11#436a#4300

FIRE INCOMPATIBILITY

- - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM

None

PERSONAL PROTECTION

Glasses:
Chemical goggles.

Gloves:
PVC chemical resistant type.

Respirator:
Type AK- P Filter of sufficient capacity

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- - Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

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.

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

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Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- - Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with moisture.
- DO NOT allow clothing wet with material to stay in contact with skin.

SUITABLE CONTAINER

- - Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

- - Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- - Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
Australia Exposure Standards	Granosite Granoshield Matt MCR (Diuron)		10		
Australia Exposure Standards	diuron (Diuron)		10		
Australia Exposure Standards	ammonium hydroxide (Ammonia)	25	17	35	24

The following materials had no OELs on our records

- 2, 2, 4- trimethyl- 1, 3- pentanediol monoisobutyrate:
- 2- octyl- 4- isothiazolin- 3- one:
- 1, 2- benzisothiazoline- 3- one:
- 2- methyl- 4- isothiazolin- 3- one:

CAS:25265- 77- 4 CAS:77- 68- 9
CAS:26530- 20- 1
CAS:2634- 33- 5
CAS:2682- 20- 4

PERSONAL PROTECTION

RESPIRATOR

Type AK-P Filter of sufficient capacity

EYE

- - Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens 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].

HANDS/FEET

- - Wear chemical protective gloves, eg. PVC.
 - Wear safety footwear or safety gumboots, eg. Rubber.
- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- frequency and duration of contact,
 - chemical resistance of glove material,
 - glove thickness and
 - dexterity.

OTHER

- - Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

- General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances.

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

White liquid with a characteristic odour; miscible with water.

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Available
Boiling Range (°C)	100 aprox	Solubility in water (g/L)	Miscible
Flash Point (°C)	Not Applicable	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	10
Autoignition Temp (°C)	Not Applicable	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	>1
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

■ - Presence of incompatible materials.

- Product is considered stable.

- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

■ Risk of serious damage to eyes.

CHRONIC HEALTH EFFECTS

■ Not applicable.

TOXICITY AND IRRITATION

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

■ Diuron is absorbed readily through the gut and lungs while uptake through the skin is more limited. It is slightly toxic to mammals but juveniles are more susceptible than adults(18).

ACRYLIC COPOLYMER LATEX:

■ No significant acute toxicological data identified in literature search.

2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 3200 mg/kg

Oral (rat) LD50: 3200 mg/kg ***

Dermal (rabbit) LD50: >16 ml/kg *

Dermal (g.pig) LD50: >16 ml/kg ***

Inhalation (rat) LC50: >3.55 mg/l/6h

Inhalation (rat) LC50: 1600 mg/kg ***

Oral (Mouse) LD50: 3200 mg/kg

Dermal (None) Guinea: pig LD50>20 ml/kg

■ The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

Not a skin sensitiser (guinea pig, Magnusson-Kligman) ***

Ames Test: negative ***

Micronucleus, mouse: negative ***

Not mutagenic ***

No effects on fertility or foetal development seen in the rat ***

* [SWIFT]

** [Eastman]

*** [Perstop]

IRRITATION

Skin - Slight Irritant *

Skin (rabbit): Mild ***

Eyes - Moderate Irritant *

DIURON:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

IRRITATION

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Section 11 - TOXICOLOGICAL INFORMATION

Oral (rat) LD50: 1017 mg/kg Nil Reported

Dermal (rat) LD50: >5000 mg/kg

■ Diuron is absorbed readily through the gut and lungs while uptake through the skin is more limited. It is slightly toxic to mammals but juveniles are more susceptible than adults(18).

Note: Equivocal animal tumorigenic agent by RTECS criteria.

NOTE: This substance may contain impurities (tetrachloroazobenzene and tetrachloroazoxybenzene).

Maximum impurity levels are proscribed under various jurisdictions

ADI: 0.006 mg/kg/day

NOEL: 0.625 mg/kg/day

AMMONIUM HYDROXIDE:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 350 mg/kg

Oral (human) LDLo: 43 mg/kg

Inhalation (human) LCLo: 5000 ppm/5m

Inhalation (human) TCLo: 20 ppm

Inhalation (rat) LC50: 2000 ppm/4h

Unreported (man) LDLo: 132 mg/kg

■ The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

2-OCTYL-4-ISOTHIAZOLIN-3-ONE:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 550 mg/kg

Dermal (rabbit) LD50: 690 mg/kg

Oral (male) rat: LD50 248 mg/kg

Oral (female) rat: LD50 293 mg/kg

Dermal (male) rabbit: LD50 311 mg/kg

■ Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

ROHM & HAAS Data

ADI: 0.03 mg/kg/day

NOEL: 60 mg/kg/day

IRRITATION

Eye (rabbit): 0.25 mg SEVERE

Eye (rabbit): 1 mg/30s SEVERE

IRRITATION

Skin (rabbit): 500 mg/24 hours

Eye(rabbit):100 mg SEVERE

Skin (rabbit): 45% conc SEVERE

Eye (rabbit): 45% conc CORROSIVE

Eye (rabbit): 5% conc Moderate

Eye (rabbit): 0.5% non Irritant

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
2, 2, 4- trimethyl- 1, 3- pentanediol monoisobutryate	LOW		LOW	HIGH
diuron	HIGH		LOW	MED
ammonium hydroxide	LOW		LOW	HIGH
2- octyl- 4- isothiazolin- 3- one	HIGH		LOW	MED
2- methyl- 4- isothiazolin- 3- one	HIGH		LOW	HIGH

Section 13 - DISPOSAL CONSIDERATIONS

■ Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction,.

- DO NOT allow wash water from cleaning or process equipment to enter drains.

- It may be necessary to collect all wash water for treatment before disposal.

- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

- Where in doubt contact the responsible authority.

- Recycle wherever possible.

- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or

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Section 13 - DISPOSAL CONSIDERATIONS

disposal facility can be identified.

- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).

- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:

None (ADG6)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE

None

REGULATIONS

Regulations for ingredients

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (CAS: 25265-77-4,77-68-9) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "OECD Representative List of High Production Volume (HPV) Chemicals"

diuron (CAS: 330-54-1) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - pesticides)", "Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia New Zealand Food Standards Code - Maximum Residue Limits (Australia only) - Schedule 3 - Chemical Groups", "OECD Representative List of High Production Volume (HPV) Chemicals"

ammonium hydroxide (CAS: 1336-21-6) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals"

2-octyl-4-isothiazolin-3-one (CAS: 26530-20-1) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6"

1,2-benzisothiazoline-3-one (CAS: 2634-33-5) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "OECD Representative List of High Production Volume (HPV) Chemicals"

2-methyl-4-isothiazolin-3-one (CAS: 2682-20-4) is found on the following regulatory lists;

"Australia Inventory of Chemical Substances (AICS)"

No data for Granosite Granoshield Matt MCR (CW: 4746-21)

No data for acrylic copolymer latex (CAS: , Not avail)

Section 16 - OTHER INFORMATION

Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
2- methyl- 4- isothiazolin- 3- one	2682- 20- 4	R43

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
2, 2, 4- trimethyl- 1, 3- pentanediol monoisobutyrate	25265- 77- 4, 77- 68- 9

■ 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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references.

■ The (M)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.

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Section 16 - OTHER INFORMATION

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This is the end of the MSDS.