

UNCONTROLLED

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 1 of 11

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

MASTERSHIELD DECORATIVE GLITTER - DISCO

SYNONYMS

Cobblestone Paving

PRODUCT USE

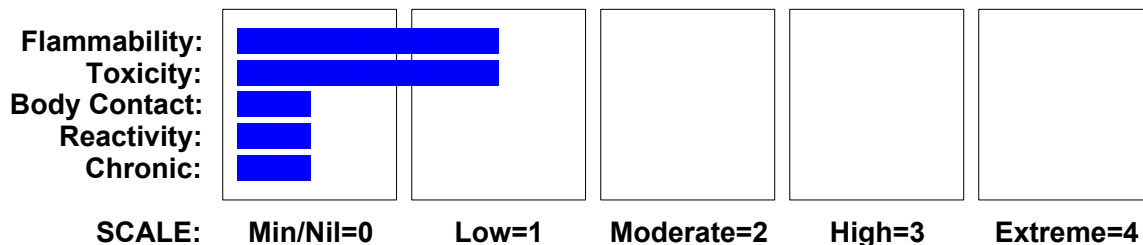
For use in Mastershield Polymer Flooring.

SUPPLIER

Company: Cobblestone Paving Australia P/L
Address:
PO Box 2057
Burleigh Mdc, Gold Coast
QLD, 4220
AUS

Company: Cobblestone Paving Australia P/L
Address:
45 Alex Fisher Drive
Burleigh Gardens
QLD, 4220
AUS
Telephone: +61 7 5593 7766
Fax: 07 5593 7777

HAZARD RATINGS



Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

SAFETY

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 2 of 11

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
polyethylene terephthalate copolymers/ polyesters/ polyolefins	25038-59-9	>60
methyl methacrylate	80-62-6	<0.125
vinyl acetate	108-05-4	<0.06

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh 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.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

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 dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.
- If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

FIRE FIGHTING

- Use water delivered as a fine spray to control fire and cool adjacent area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 3 of 11

Section 5 - FIRE FIGHTING MEASURES ...

FIRE/EXPLOSION HAZARD

- Solid which exhibits difficult combustion or is difficult to ignite.
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited
- Dry dust can also be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport.
- Build-up of electrostatic charge may be prevented by bonding and grounding.
- Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.

FIRE INCOMPATIBILITY

Avoid contamination with strong oxidising agents as ignition may result

HAZCHEM

None

Personal Protective Equipment

Glasses:
Safety Glasses.

Gloves:
General purpose rubber glove.

Respirator:
Type A-P Filter of sufficient capacity

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety glasses.
- Use dry clean up procedures and avoid generating dust.
- Sweep up or
- Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- Place spilled material in clean, dry, sealable, labelled container.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment and dust respirator.
- Prevent spillage from entering drains, sewers or water courses.
- Avoid generating dust.
- Sweep, shovel up. Recover product wherever possible.
- Put residues in labelled plastic bags or other containers for disposal.
- If contamination of drains or waterways occurs, advise emergency services.

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 4 of 11

Section 6 - ACCIDENTAL RELEASE MEASURES ...

EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

life-threatening health effects is:

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:

other than mild, transient adverse effects without perceiving a clearly defined odour is:

American Industrial Hygiene Association (AIHA)

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

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

SUITABLE CONTAINER

Packaging as recommended by manufacturer.

STORAGE INCOMPATIBILITY

Avoid storage with oxidisers

STORAGE REQUIREMENTS

- Keep dry.
- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials.
- Protect containers against physical damage.
- Check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 5 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

None assigned. Refer to individual constituents.

ODOUR SAFETY FACTOR (OSF)

OSF=20 (VINYL ACETATE)

Exposed individuals are NOT reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

Odour Safety Factor (OSF) is determined to fall into either Class C, D or E.

The Odour Safety Factor (OSF) is defined as:

OSF= Exposure Standard (TWA) ppm/ Odour Threshold Value (OTV) ppm

Classification into classes follows:

Class	OSF	Description
A	550	Over 90% of exposed individuals are aware by smell that the Exposure Standard (TLV-TWA for example) is being reached, even when distracted by working activities
B	26-550	As "A" for 50-90% of persons being distracted
C	1-26	As "A" for less than 50% of persons being distracted
D	0.18-1	10-50% of persons aware of being tested perceive by smell that the Exposure Standard is being reached
E	<0.18	As "D" for less than 10% of persons aware of being tested

EXPOSURE STANDARDS FOR MIXTURE

"Worst Case" computer-aided prediction of vapour components/concentrations:

Composite Exposure Standard for Mixture (TWA) (mg/m³): 79.6027 mg/m³

If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.

Component Breathing Zone ppm Breathing Zone mg/m³ Mixture Conc: (%)

Component	Breathing zone (ppm)	Breathing Zone (mg/m ³)	Mixture Conc (%)
vinyl acetate	7.38	25.8171	0.1
methyl methacrylate	13.12	53.7856	0.1

Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone.

If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.

At the "Composite Exposure Standard for Mixture" (TWA) (mg/m³): 0.2 mg/m³

Component	Breathing Zone	Concentration
-----------	----------------	---------------

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 6 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

	(mg/m ³)	(%)
polyethylene terephthalate	39681.9459	99.7

INGREDIENT DATA

POLYETHYLENE TEREPHTHALATE:

TLV TWA: 10 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Inhalable fraction) [ACGIH]

TLV TWA: 3 mg/m³ (Value for particulate matter containing no asbestos and <1% crystalline silica, Respirable fraction) [ACGIH]

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m³

METHYL METHACRYLATE:

PEL TWA: 100 ppm, 410 mg/m³ [OSHA Z1]

TLV TWA: 50 ppm, 205 mg/m³; STEL: 100 ppm, 410 mg/m³ A4 SENSITISER

NOTE: This substance has been classified by the ACGIH as A4 NOT classifiable as causing Cancer in humans

ES TWA: 50 ppm, 208 mg/m³; STEL: 100 ppm, 416 mg/m³ (skin) SENSITISER

OES TWA: 50 ppm, 208 mg/m³; STEL: 100 ppm, 416 mg/m³

REL TWA: 50 ppm; STEL: 75 ppm [Rohm & Haas]

MAK value: 50 ppm, 210 mg/m³

Designated S in List of MAK values: Danger of sensitization.

MAK Category I Peak Limitation: For local irritants Allows excursions of twice the MAK value for 5 minutes at a time, 8 times per shift.

MAK Group C: There is no reason to fear risk of damage to the developing embryo when MAK and BAT values are observed.

MAK values, and categories and groups are those recommended within the Federal Republic of Germany

Odour Threshold Value: 0.049 ppm (detection), 0.34 ppm (recognition)

IDLH Level: 1000 ppm

NOTE: Detector tubes measuring in excess of 50 ppm, are available.

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

Concentrations as low as 125 ppm have produced irritation of the mucous membranes of exposed workers. The recommended TLV-TWA is thought to be sufficiently low to protect against discomfort from irritation and acute systemic intoxication.

VINYL ACETATE:

TLV TWA: 10 ppm A3 [ACGIH]

TLV STEL: 15 ppm A3 [ACGIH]

TLV TWA: 10 ppm, 35 mg/m³; STEL: 15 ppm, 53 mg/m³ A3

CAUTION: This substance has been classified by the ACGIH as A3 Animal Carcinogen (at relatively high doses)

ES TWA: 10 ppm, 35 mg/m³; STEL: 20 ppm, 70 mg/m³

OES TWA: 10 ppm, 36 mg/m³; STEL: 20 ppm, 72 mg/m³

NIOSH REL 15 minute Ceiling: 4 ppm

Odour Threshold Value: 0.12 ppm (detection), 0.40 ppm (recognition)

The recommended TLV-TWA is thought to minimise the potential of systemic effects whilst the STEL is recommended to protect against ocular irritation. The NIOSH REL Ceiling value is based on protecting the most individuals from sensory irritation. Effects were observed at 4.2 to 5.7 ppm (hoarseness) and 5.7-6.8 (ocular irritation). ACGIH values are based on 15 years industrial experience by 21 chemical operators who reported no

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 7 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

significant upper respiratory tract irritation at concentrations less than 22 ppm and the examination of medical records and multiphasic examinations which revealed no evidence of chronic health effects from exposure to levels of 5 to 10 ppm.

PERSONAL PROTECTION



EYE

- Safety glasses.
- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET

Wear general protective gloves, eg. light weight rubber gloves.

OTHER

- Overalls.
- Impervious protective clothing.
- Eyewash unit.

ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air)	Air Speed: 0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 8 of 11

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

Within each range the appropriate value depends on:

Lower end of the range

- 1: Room air currents minimal or favourable to capture
- 2: Contaminants of low toxicity or of nuisance value only
- 3: Intermittent, low production.
- 4: Large hood or large air mass in motion

Upper end of the range

- 1: Disturbing room air currents
- 2: Contaminants of high toxicity
- 3: High production, heavy use
- 4: Small hood - local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Various coloured flakes with a mild odour; does not mix with water.

PHYSICAL PROPERTIES

Solid.

Does not mix with water.

Sinks in water.

Molecular Weight: Not applicable

Melting Range (°C): Not available

Solubility in water (g/L): Immiscible

pH (1% solution): Not applicable

Volatile Component (%vol): Not available

Relative Vapour Density (air=1): Not available

Lower Explosive Limit (%): Not available

Autoignition Temp (°C): Not available

State: Divided solid

Boiling Range (°C): Not applicable

Specific Gravity (water=1): >1

pH (as supplied): Not applicable

Vapour Pressure (kPa): Not applicable

Evaporation Rate: Not available

Flash Point (°C): Not available

Upper Explosive Limit (%): Not available

Decomposition Temp (°C): Not available

log Kow : 0.95-1.03

log Kow (Prager 1995): 0.73

log Kow : 0.73

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 9 of 11

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION ...

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Considered an unlikely route of entry in commercial/industrial environments.
The material is moderately discomforting to the gastro-intestinal tract and may be harmful if swallowed in large quantity

EYE

The material is moderately discomforting to the eyes and is capable of causing a mild, temporary redness of the conjunctiva (similar to wind-burn), temporary impairment of vision and/ or other transient eye damage/ ulceration

SKIN

The material may be mildly discomforting to the skin.
Open cuts, abraded or irritated skin should not be exposed to this material The material may accentuate any pre-existing skin condition

INHALED

The material is discomforting to the upper respiratory tract.
Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact and inhalation. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

Mastershield Decorative Glitter - Disco

Not available. Refer to individual constituents.
unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

POLYETHYLENE TEREPHTHALATE:

No data of toxicological significance identified in literature search.

METHYL METHACRYLATE:

TOXICITY

Oral (rat) LD50: 7872 mg/kg
Inhalation (human) TClO: 125 ppm
Inhalation (human) TClO: 60 mg/m³(15 ppm)
Dermal (rabbit) LD50: > 5000 mg/kg
Inhalation (rat) LC50: 3750 ppm *
Dermal (rabbit) LD50: 35500 mg/kg *
The substance is classified by IARC as Group 3:
NOT classifiable as to its carcinogenicity to humans.

IRRITATION

Skin (rabbit): 10000 mg/kg (open)
Eye (rabbit): 150 mg

[* Manuf. Rohm & Haas]

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 10 of 11

Section 11 - TOXICOLOGICAL INFORMATION ...

Evidence of carcinogenicity may be inadequate or limited in animal testing. Based on the available oncogenicity data and without a better understanding of the carcinogenic mechanism the Health and Environmental Review Division (HERD), Office of Toxic Substances (OTS), of the US EPA previously concluded that all chemicals that contain the acrylate or methacrylate moiety ($\text{CH}_2=\text{CHCOO}$ or $\text{CH}_2=\text{C}(\text{CH}_3)\text{COO}$) should be considered to be a carcinogenic hazard unless shown otherwise by adequate testing.

This position has now been revised and acrylates and methacrylates are no longer de facto carcinogens.

VINYL ACETATE:

TOXICITY

Oral (rat) LD50: 2920 mg/kg

Inhalation (rat) LC50: 4000ppm/2hr

Dermal (rabbit) LD50: 2335 mg/kg

IRRITATION

Skin (rabbit): 10 mg/24h open

irritant

Eye (human): 22 ppm irritant

Eye (rabbit): 500 mg/24h mild

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Section 12 - ECOLOGICAL INFORMATION

No data for Mastershield Decorative Glitter - Disco.
Refer to data for ingredients, which follows:

POLYETHYLENE TEREPHTHALATE:

No data for polyethylene terephthalate.

METHYL METHACRYLATE:

log Kow : 0.95-1.03

Koc : 87

Half-life (hr) air : 2.7-3

Half-life (hr) H2O surface water : 6.3-336

Henry's atm m³ /mol: 3.24E-04

BOD 5 if unstated: 0.14

Log BCF : 0.55

Toxicity Fish: LC50(96)0.089mg/L

VINYL ACETATE:

Hazardous Air Pollutant: Yes

Fish LC50 (96hr.) (mg/l): 19-39

Algae IC50 (72hr.) (mg/l): 35-370

Water solubility (mg/l): 20000

log Kow (Prager 1995): 0.73

BOD5: 62%

BOD20: 72%

log Kow : 0.73

Koc : 19-59

Half-life (hr) air : 12-14.6

Half-life (hr) H2O surface water : 50-312

Half-life (hr) soil : 175

Henry's atm m³ /mol: 4.81E-04

BOD 5 if unstated: 42-51%

BCF : 2.1-2.4

Log BCF : 0.32-0.37

continued...

MASTERSHIELD DECORATIVE GLITTER - DISCO

ChemWatch Material Safety Data Sheet
Issue Date: Mon 25-Mar-2002

CHEMWATCH 4709-46
CD 2004/3 Page 11 of 11

Section 12 - ECOLOGICAL INFORMATION ...

Toxicity Fish: LC50(96)28-80mg/L

Section 13 - DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options and recycle where possible .
 - Consult State Land Waste Management Authority for disposal.
 - Incinerate residue at an approved site.
 - Recycle containers if possible, or dispose of in an authorised landfill.
-

Section 14 - TRANSPORTATION INFORMATION

Shipping Name:
NONE
Dangerous Goods Class: None
UN/NA Number: None
ADR Number:
Packing Group: None
Labels Required:
Additional Shipping Information:
International Transport Regulations:
IMO: None

HAZCHEM

None

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE

None

REGULATIONS

No data available for vinyl acetate (CAS: 108-05-4).

Section 16 - OTHER INFORMATION

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: Mon 25-Mar-2002
Print Date: Mon 16-Aug-2004