PANTHER

MARBLE CHIPS

MARBLE CHIPS

MATERIAL IDENTITY

Product Trade Name: Deco Mar Reg.

Common Names: Ground Limestone, Dolomitic Agricultural Lime "Ag Lime"

Chemical Formula: CaCO3MgCO

CAS number: 1317-65-3 (In TSCA Inventory)

Physical Form: White Powder

HMIS Ratings

Health Hazard 1
Flammability Hazard 0
Reactivity Hazard 0
Max. Personal Protection E

Emergency Telephone: 800-424-CHEMTREC

INGREDIENTS AND HAZARDS

Ingredient Wt % (Approx.) CAS No. OSHA PEL* ACGIH TLV*

Ground Limestone >-98% 1317-65-3 5mg/m3 Resp. 2mg/m3 Resp

Unless otherwise noted, all PEI and TLV values are reported as 8 hour time weighted averages (TWA).

HAZARD IDENTIFICAITON AND CAUTIONS

Appearance: White Powder

Primary Routes of Entry: Skin contact, skin absorption, eye contact, ingestion: Hazard Classification -

None (Historical basis for classification.) Target Organs: Eye, skin, and lungs

Medical Conditions Aggravated by Exposure: Skin contact may aggravate existing dermatitis. Breathing excessive quantities of ground limestone dust may aggravate pre-existing reparatory conditions.

Potential Health Effects:

Eye Contact: This product may produce irritation upon contact with the eye. See also section 4 below. Skin Contact: This product may produce irritation upon contact with the skin See also Section 4 below Ingestion: No adverse effects are expected. If ingested, seek medical advice. See also Section 4 below. Inhalation: Inhalation of excessive quantities of ground limestone dust may irritate the respiratory tract. See also Section 4 below.

This product typically contains crystalline silica above 0.1% as a naturally occurring impurity. The international Agency for Research on Cancer has concluded that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I) It also noted that carcinogenicity was not detected in all industrial circumstance studies and may be dependent on external factor affection its biological activity or distribution of its polymorphs.

FIRST AID MEASURES

Eye Contact: Follow good industrial hygienic practices, In case of contact, immediately flush eyes with plenty of water. Seek medical aid if necessary

Skin Contact: Follow good industrial hygienic practices. Wash affected skin areas thoroughly with soap

MARBLE CHIPS

and water. Seek Medical aid if necessary.

Inhalation: Follow good industrial hygiene practices, if ingested, do not induce vomiting. If conscious, drink

two glasses of water. Seek medical aid if necessary.

FIRE FIGHTING MEASURES

Explosion Data: Not Explosive

LEL: N/A UEL: N/A

Extinguishing Media: Product will not burn

NFPA 704 M Hazard Classification Health 1 Flammable:0 Reactivity: 0

ACCIDNETAL RELEASE MEASURES

Vacuum, plump or scoop spilled material into containers for reclaiming or disposal. Use proper respiratory and personal protective equipment. MSHA/NIOSH or OSHA/NIOSH approved respirator recommended. Spilled materials ma cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads. No neutralizing chemicals required. Material is inert and non reactive. Ground limestone is not a CERCLA listed hazardous substance.

HANDLING AND STORAGE

Storage in a cool, dry location is recommended.

Keep away from acids.

Spilled material may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads.

Minimize dust generation & accumulation.

If excessive dust is generated, provide adequate ventilation and use proper respiratory and personal protective equipment.

MSHA/NIOSH approved respirator recommended.

EXPOSURE CONTROL/PERSONAL PROTECTION

Hazardous Weight CAS No. MSHA PEL OSHA PEL ACGIH TLV

Ingredients % approval

Crystalime 1319-65-3 10mg/cu.m.total 15mg/cu.m.total 2mg/m3 Resp

Silica

Quartz 0.1%-1.5% 14808-60-7 5mg/m3Resp 0.1mb/m3 Resp. 0.005mg/m3Resp.

Unless other

Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted averages. (TWA) Respiratory Protection: If respirator is required us of a MSHA/NIOSH approved respirator is recommended.

Ventilation: Use exhaust ventilation, if required to maintain dust concentration below recommended exposure limits.

Protective Equipment: Wear side shield safety glasses. Rubber gloves are recommended for prolonged exposure.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Appearance & Orders: Odorless, white powder PH 9-10

MARBLE CHIPS



Specific Gravity: ~2.7 % Solubility in Water: 1.4mg/100ml @25 Degrees Celsius

Melting Point: 825 Degree Celsius Boiling Point: N/A Freezing Point: N/A Vapor Pressure: N/A

Vapor Density: N/A VOC: None Evaporation Rate: N/A

STABILITY AND REACTIVITY

Chemical Stable: Yes

Compatibility with other Substances: Yes Hazardous Decomposition/by products: No

Conditions Contributing to Hazardous Polymerization: None

Incompatibility (Materials to Avoid): Will react with acids to product carbon dioxide gases.

DISPOSAL CONSIDERATION

EPA Waste Number: Under RCRA (40 CFR 261) ground limestone is a non-hazardous waste. Dispose of waste material in accordance with all local, state, and federal requirements.

TOXICOLOGICAL INFORMATION

Ground Limestone - CAS No. 1317-65-3

Primary Route of Exposure: X Skin X Eye X Inhalation X Ingestion

Acute Health Hazards:

Eye contact may cause mechanical irritation. Calcium carbonate is a sever eye irritant.

Skin contact may aggravate existing dermatitis. Calcium carbonate is a moderate skin irritant. Inhalation from prolonged and continuous exposure to excessive quantities of dust may aggravate existing asthmatic or respiratory conditions

Calcium Carbonate Oral LD (50) in rates is 6450 mg/kg

Chronic Health Hazards* Carcinogenicity? NO LARC? NO OSHA? NO

TRANSPORT INFORMATION

EPA Waste Number: Not Regulated DOT Classification: Not Regulated DOT/MO: Not Regulated Internal UN: Not Regulated

REGULATORY INFORMATION

SARA Title III Section 302 Extremely Hazardous Substances: This product does not contain extremely hazardous substances subject to the reporting requirements of Selection 302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 355.

SARA Title III Section 311 and 312 Health and Physical Hazards Categories per 40 CFR 370.2

Immediate Delaved Firc Pressure Reactivity YES YES NO NO NO

PANTHER

MARBLE CHIPS

SARA Section 313 Notification: The product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

TSCA: Product is listed in Initial Inventory, Vol 1, Appendix A, CAS No. 1317-65-3

The International Agency for Research on Cancer has concluded that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)" It also noted that carcinogenicity was not detected in all industrial circumstance studies and may be dependent on external factors affection its biological activity or distribution of its polymorphs. (See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68 (1997) Exposure to reparable silica has also been associated with silicosis, soleroderma, and nephrotoxicity. (See Occupational Lung Disorders, third Edition, Chapter 12 (1994) and American Journal of Respiratory and Critical Carc Medicine, Volume 155, pp 761 765 (1997). Using Recommended NIOSH test method 7500, no crystalline silica was detected.

WARNGING: This product may also contain extremely small amounts of one or more naturally occurring materials known to the State of California to cause cancer, birth defects, or other reproductive harm.

While theis information and recommendations set forth herein are believed to be accurate as of the date hereof PANTHER INDUSTRIES INC. PIGMENTS & ADDITIVES GROUP MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAMIS ALL LIABILITY FROM RELIANCE THEREION.

DATE PREPARED Feb 10 2007 REVISED Feb 10 2007 Panther Industries Inc. 108 Internal Rd Davidson, Saskatchewan SOG-1A0