I. PRODUCT IDENTIFICATION

Trade Name: VEEGUM®

Chemical Name: Hydrated magnesium aluminum silicate mineral
CAS Reg. No. 12199-37-0

Synonyms: Smectite Clay

Hazardous Ingredients/OSHA: Cristobalite - 2-4% by weight (crystalline silica) CAS Reg. No. 14464-46-1

Hazard: Inhalation.

Carcinogenic Ingredients/OSHA/NTP/IARC: See Section VII

USP/NF Category: Magnesium aluminum silicate - Type IA

INCI Name: Magnesium aluminum silicate

SARA Title III Section 313 Ingredients: Not applicable

II. WARNING STATEMENTS

WARNING! Contains 2-4% cristobalite. Avoid excessive dust generation. Prolonged inhalation may cause lung injury. Flake form is unlikely to present dust risk under normal conditions of use.

III. PHYSICAL AND CHEMICAL DATA

Appearance and Odor: White flakes
Vapor Pressure: N/A

(*) - Registered in U.S. Patent and Trademark Office

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.
III. PHYSICAL AND CHEMICAL DATA (continued)

Density, Mg/cu m: 2.6
Solubility in Water: Negligible
Boiling Point: N/A

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

IV. FIRE PROTECTION

Nonflammable: Use any extinguishing media suitable for surrounding fire.

V. REACTIVITY DATA

Non-reactive in general. Avoid powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide and oxygen difluoride.

VI. OCCUPATIONAL EXPOSURE LIMITS

For Cristobalite -

OSHA: PEL (resp. dust) TWA 0.05 mg/cu m
ACGIH: TLV (resp. dust) TWA 0.05 mg/cu m

For Nuisance Dust - (Recommended for total product if cristobalite limit is not exceeded)

OSHA: PEL (total dust) TWA 10 mg/cu m/8 hr.
(resp. dust) TWA 5 mg/cu m/8 hr.
ACGIH: TLV (total dust) TWA 10 mg/cu m/8 hr.
(resp. dust) TWA 5 mg/cu m/8 hr.

VII. PHYSIOLOGICAL EFFECTS SUMMARY

VEEGUM -

Acute oral toxicity (mice): LD50 >50,000 mg/kg body weight
Dermal (rabbit): LD50 >3,500 mg/kg body weight
Eye irritation: moderate (Draize = 15/110)
Skin irritation: moderate

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VII. PHYSIOLOGICAL EFFECTS SUMMARY (continued)

Feeding study (rats): 90 day studies at 10% of the diet showed no effects in either rats or dogs. At 20% of the diet rats showed decreased body weight.

Cristobalite

Excessive exposure to crystalline silica (cristobalite) is not likely with this product, due to its low percentage by weight (2-4%) and the physical form of the product (flakes). Adverse respiratory effects are associated with high silica exposures. Repeated, excessive exposure to free silica may result in silicosis, a form of progressive pulmonary fibrosis characterized by impairment of pulmonary function. Onset and progression are clearly related to dust concentration and duration of exposure.

"Inhalable" crystalline silica (quartz and cristobalite) is listed by IARC as a Group I carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a substance reasonably anticipated to be a carcinogen. Some human studies have not demonstrated a cancer association and considerable controversy exists concerning the IARC and NTP classification.*

Because of the flake form of VEEGUM, no release of cristobalite is expected unless the application involves a further dry blending or grinding procedure.

* Note: If used in the State of California, the following statement is required: Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer.

Medical Conditions Generally Aggravated By Exposure:

Excess exposure to any dust may aggravate existing respiratory conditions.

VIII. PRECAUTIONS FOR SAFE HANDLING

Engineering Controls: Closed system and/or local exhaust ventilation recommended.

Handling Procedures and Equipment:

Avoid generating dust. Use respiratory protection in the absence of adequate engineering controls. Keep containers closed when not in use. Clean up spills promptly (see SPILL PROCEDURE).
IX. PROTECTION AND CONTROL MEASURES

Eyes: Safety glasses should be adequate.

Skin: No special skin protection should be required. Wash skin after shift exposure.

Respiratory: Any NIOSH approved dust and mist respirator.

X. EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with plenty of flowing water. Get medical attention if irritation persists.

Skin: Wash off with water.

Inhalation: Remove to fresh air.

Ingestion: Unlikely to cause untoward effects.

XI. SPILL AND DISPOSAL PROCEDURES

Not a RCRA hazardous waste. Use vacuum to clean up spillage. If appropriate, use gentle water spray to wet down in order to minimize dust generation. Dispose of according to state or local regulations.

For Additional Information Contact:
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