



Material Safety Data Sheet

Date reviewed: February 7, 2013

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: FISHER DOVE GRAY
Product Code: 7410-72506
HMIS HAZARD RATING: Health:2 Fire:1 Reactivity:1 PPI:X

TCI POWDER COATINGS 734 DIXON DR. ELLAVILLE, GA 31806	TCI CANADA 903 BARTON STREET UNIT 3- 8 STONE CREEK, ON, L8E 5P5	E-Mail Toll Free Emergency Contact 1 Emergency Contact 2	ehs@tcipowder.com 800-533-9067 229-938-0454 229-815-0011
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SECTION II - INGREDIENT INFORMATION

Ingredient	CAS Number	PERCENTAGE
EPOXY RESINS	25036-25-3	15 -30 %
TITANIUM DIOXIDE	13463-67-7	15 -30 %
BLOCKED POLYISOCYANATE	NOT PROVIDED	10 -20 %
CALCIUM CARBONATE	471-34-1	3 -6 %

Note: This product releases a small amount of Caprolactam (CAS#105-60-2) on curing SEE SECTION XI.

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview

WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING)

PRIMARY ROUTES OF EXPOSURE: Eyes, Inhalation, Skin

Skin Contact: Incidental contact is not expected to cause irritation. However, exposure to this product may cause an allergic skin reaction and sensitization in some individuals. Repeated overexposure can cause skin dryness and may eventually lead to contact dermatitis.

Eye Contact: May cause slight to mild redness and burning. May cause mechanical irritation.

Inhalation: This product contains ingredients with established airborne exposure limits - see Section VIII. Otherwise it is considered a nuisance dust. No effects are expected when exposures are maintained below the exposure limits of Section VIII. However, exposure to this product may cause an allergic reaction and sensitization in some individuals. Lung and respiratory conditions may be aggravated by exposure.

Ingestion: May cause pain and upset stomach.

SECTION IV - FIRST AID MEASURES

Eye Contact: Immediately flush eyes with cool water for 15 minutes, occasionally lifting lids to ensure complete rinsing. Seek medical attention if symptoms persist.

Skin Contact: Wash skin thoroughly with soap and water. Remove and wash clothing and shoes before reuse. Seek medical attention if irritation persists.

Inhalation: Remove to fresh air. If breathing difficulties develop, seek medical attention. If necessary, give artificial respiration.

Ingestion: Seek immediate medical attention. Wash out mouth with water followed by a cupful of water to drink. Repeat if vomiting occurs. Never give anything by mouth to an unconscious person.

SECTION V - FIRE-FIGHTING MEASURES

Flash Range: Not Applicable

Lower Explosion Limit Range: 30 GM/M3 - 90 GM/M3

Extinguishing Media: Foam, CO₂, dry chemical or water spray.

Fire and Explosion Hazards: An HMIS flammability rating of 1 applies to the product as supplied. However, airborne dust from the product can present a flammability hazard and may form explosive dust mixtures with air. A potentially dangerous situation exists when powder is transferred from a closed container to a process in which dust concentrations are within the explosion (flammability) limits. The concentration of powder dust in air should be maintained outside of the limits.

Firefighting Instructions: Use fully protective equipment with self-contained breathing apparatus.

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Sweep up carefully or use explosion-proof vacuum cleaner. Then dispose of in accordance with local, state, and federal regulations.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Nonsparking tools should be used.

SECTION VII - HANDLING AND STORAGE

Keep all equipment clean and work areas free from dust. Avoid excessive skin contact. Do not ingest or inhale. Personnel should be trained in the safe handling and proper use of this product. Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities.

Store in a cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed. Protect from physical damage.

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Product ingredients other than ingredients with established airborne exposure limits may be considered under the PEL for particulates not otherwise regulated (nuisance dust).

Occupational Exposure Limits

Ingredients	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
EPOXY RESINS					
TITANIUM DIOXIDE	10 mg/m ³	n/est	n/est	n/est	10 mg/m ³
BLOCKED POLYISOCYANATE	10 mg/m ³	n/est	n/est	n/est	15 mg/m ³
CALCIUM CARBONATE	10 mg/m ³	n/est	n/est	n/est	15 mg/m ³
NUISANCE DUST	10 mg/m ³	N/est	N/est	N/est	15 mg/m ³ (total)
	3 mg/m ³				5 mg/m ³ (respirable)

ENGINEERING CONTROLS: Provide ventilation to keep airborne particulate concentration below established airborne exposure limits (TLV's or PEL's). It is recommended that all dust controls handling this product be explosion proof, contain relief vents, or other commensurate measures. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Ventilation equipment, baghouse, and cyclone dust collection should be grounded. Curing ovens and heating chambers should be properly vented to prevent any fumes from entering the workplace.

RESPIRATORS: Use a properly fitted NIOSH/MSHA approved respirator if needed to avoid breathing dust.

SKIN PROTECTION: Protective gloves & clothing recommended.

EYE PROTECTION: Goggles or safety glasses with side-shields recommended.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Form:	SOLID POWDER
Color:	GREY
Odor:	NEGLIGIBLE
Solubility (in water):	INSOLUBLE
pH Value:	NOT APPLICABLE
Boiling Range:	NOT APPLICABLE
Vapor Pressure (mmHg):	NOT APPLICABLE
Melting Point:	< 300° F
Evaporation Rate:	NOT APPLICABLE
Vapor Density:	NOT APPLICABLE
Partition Coefficient:	NOT APPLICABLE
% Volatile Weight:	< 1 (one hour at 110° C)
% Volatile	See Above
Specific Gravity:	1.65
Molecular Weight:	MIXTURE

SECTION X - STABILITY AND REACTIVITY

Stability: This product is stable under normal conditions of storage and use.

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous decomposition products: Combustion byproducts may contain CO, CO₂, incompletely burned carbon compounds, NO₂ or other

nitrogen compounds.

SECTION XI - TOXICOLOGICAL INFORMATION

PRODUCT:

Exposure to this product may cause an allergic reaction and sensitization in some individuals. Extended inhalation of dust can lead to particulate deposition in the lungs. Repeated overexposure can cause skin dryness and may eventually result in contact dermatitis. Extended inhalation of dust can lead to particulate deposition in the lungs.

COMPONENTS:

EPOXY RESINS

TITANIUM DIOXIDE

Signs and symptoms of acute exposure to titanium dioxide may include physical irritation of the skin and eyes, with redness and swelling; cough; and sneezing. Signs and symptoms of chronic exposure to titanium dioxide may include X-ray evidence of mild fibrosis; dyspnea; cough; and declines in pulmonary function. Titanium dioxide is not known to cause sensitization.

LD50 (oral/rat) \geq 10,000 mg/kg

LD50 (dermal/rabbit) \geq 10,000 mg/kg

In 2006 IARC concluded that titanium dioxide is possibly carcinogenic to humans (Group 2B). This conclusion was based on experimental evidence in animals (rat inhalation studies). There is inadequate evidence in humans for the carcinogenicity of titanium dioxide.

BLOCKED POLYISOCYANATE

This material by itself is expected to be a low hazard for usual industrial handling by trained personnel when in the unheated state. Nevertheless, exposure to this material can cause an allergic reaction and sensitization in some individuals. This material can decompose at elevated temperatures and caution is recommended when storing or processing it above 50 degrees C. Blocked Polyisocyanates are used as curatives in some powder coating powder formulations. Caprolactam is the blocking agent in this material and Caprolactam is released at raised temperatures during the cure of the powder coating product. Trace amounts of volatile monomeric isocyanates have also been detected in the volatiles during the cure reaction of similar materials. Inhalation of curing oven vapors should be avoided. Do not vent curing oven exhaust into the workplace. Caprolactam has irritating properties. Prolonged exposure to high concentrations of Caprolactam may cause nausea, vomiting, dizziness, headaches, and tremors. Exposure limits established for Caprolactam: ACGIH TLV (particulates)=1mg/M3; ACGIH TLV (vapor)=5ppm (23mg/M3); NIOSH REL (vapor)=.22ppm(1mg/M3); OSHA PEL (total dust) =1mg/M3 (VACATED)

CALCIUM CARBONATE Overexposure to Calcium Carbonate may result in irritation to eyes, skin and respiratory system. Acute ingestion may result in mild gastrointestinal distress while chronic exposure may result in hypercalcemia, alkalosis and renal impairment. Approximately 70-80% of inhaled Calcium Carbonate was retained in the lungs. Animal studies suggest that inhalation of Calcium Carbonate dusts may enhance susceptibility to respiratory infection. Acute Toxicity: LD50 (oral/rat)=6450 mg/kg. Carcinogenicity: NTP=No, IARC=No, OSHA=No.

SECTION XII - ECOLOGICAL INFORMATION

No information is available for this product.

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state, and federal regulations.

SECTION XIV - TRANSPORT INFORMATION

In non-bulk containers this product is not a regulated Hazardous Material for transportation (49 CFR 172).

SECTION XV - REGULATORY INFORMATION

The ingredients in this product are listed on the TSCA Inventory maintained by U.S. EPA or are otherwise approved for commercial use under TSCA.

This product contains the following Toxic Chemicals at levels above the applicable de minimis concentrations (40 CFR 372).

None

These Toxic Chemicals (SARA TITLE III SECTION 313) are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372.

SECTION XVI - OTHER INFORMATION

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

The information contained herein is based on the data available to us and is believed to be correct. However, we make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof, we assume no responsibility for injury from the use of the product described herein.