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Material Safety Data Sheet

CHEMTREC Transportation Emergency Phone: 800-424-9300

Pittsburgh Poison Control Center Health Emergency No.: 412-681-6669

Note: The CHEMTREC Transportation Emergency Phone is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. Identification

Product Name: CARBOZINC 11 HS BASE Revision Date: 1/20/2013

Identification Number: 0249A1NL Supercedes Date: 9/7/2011

Product Use/Class: Solvent Based Inorganic Zinc - FOR INDUSTRIAL USE ONLY

Manufacturer: Carboline Company Preparer: Regulatory Department

2150 Schuetz Road St. Louis, MO 63146

2. Hazard Identification

EMERGENCY OVERVIEW: This product may contain titanium dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. FLAMMABLE liquid and vapor.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May be harmful if absorbed through the skin. Direct skin contact may cause irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled, may affect the brain or nervous system, causing dizziness, headache, or nausea. May cause nose and throat irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No hazards to be specially mentioned.

MEDICAL CONDITIONS PRONE TO AGGRAVATION: If you have a condition that could be aggravated by exposure to dust or organic vapors, see a physician prior to use.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Hazardous Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
ALKYL SILICATE	PMN P89-0882	40.0	N/E	N/E	N/E	N/E
ETHYL ALCOHOL	64-17-5	25.0	1000 ppm	1000 ppm	1900 MGM3	N/E
ANHYDROUS ALUMINUM	66402-68-4	25.0	10.0 MG/M3	N/E	5.0 MG/M3	N/E
SILICATE						
PROPYLENE GLYCOL	107-98-2	10.0	100 ppm	150 ppm	360 MGM3	N/E
MONOMETHYL ETHER						
MICA	12001-26-2	5.0	3 MGM3	N/E	3 MGM3	N/E
TITANIUM DIOXIDE	13463-67-7	5.0	10 MGM3	N/E	10 MGM3	N/E
ETHYL POLYSILICATE	11099-06-2	5.0	N/E	N/E	N/E	N/E

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4. First-aid Measures

AFTER EYE CONTACT: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. If rash or irritation develops, consult a physician. Launder clothing before reuse.

AFTER INHALATION: If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe.

AFTER INGESTION: If swallowed do not induce vomiting. Seek immediate medical attention.

5. Fire-fighting Measures

Flash Point, °F: 55F (12C) Lower Explosive Limit, %: 1.2 (Setaflash) Upper Explosive Limit, %: 36.0

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable Liquid. Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and to wear conductive and non-sparking shoes.

SPECIAL FIREFIGHTING PROCEDURES: No Information

6. Accidental Release Measures

PERSONAL SAFETY MEASURES/ENVIRONMENTAL MEASURES/METHOD OF CLEANING/CONTAINMENT: Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow exposure controls/personal protection guidelines in Section 8. Contain and soak up residual with an aborbent (clay or sand). Take up absorbant material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section 15 for SARA Title III and CERCLA information.

7. Handling and Storage

INSTRUCTIONS FOR SAFE HANDLING: Avoid breathing vapors or spray mist. Do not get in eyes, on skin, or on clothing. Keep container tightly closed when not in use. Wear personal protection equipment. Do not breathe vapors. Wash thoroughly after handling. If pouring or transferring materials, ground all containers and tools. Do not weld, heat, cut or drill on full or empty containers. Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

STORAGE CONDITIONS: Keep away from heat, sparks, open flames and oxidizing agents. Keep containers closed. Store in a cool, dry place with adequate ventilation.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Use explosion-proof ventilation when required to keep below health exposure guidelines and Lower Explosion Limit (LEL).

RESPIRATORY PROTECTION: Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use. For silica containing coatings in a liquid state, and/or if no exposure limits are established in Section 2 above, supplied air respirators are generally not required.

SKIN PROTECTION: Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure.

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EYE PROTECTION: Recommend safety glasses with side shields or chemical goggles to avoid eye contact.

OTHER PROTECTIVE EQUIPMENT: Eye wash and safety showers should be readily available.

PROTECTION AND HYGIENE MEASURES: Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and allow hazardous materials to pass through. Check shoes carefully after soaking before reuse.

9. Physical and Chemical Properties

Boiling Range: 64 F (18 C) - 248 F (120 C) Vapor Density: HEAVIER THAN AIR

Odor: SOLVENT Odor Threshold: N/D

Appearance: Viscous Green, Grey or Red Evaporation Rate: Slower than ether

 Solubility in Water:
 N/D
 Specific Gravity:
 1.26

 Freeze Point:
 N/D
 pH:
 N/D

Physical State: Liquid Vapor Pressure: No Information

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Heat, sparks and open flames.

MATERIALS TO AVOID: Keep away from strong oxidizing agents, heat and open flames.

HAZARDOUS COMPOSITION PRODUCTS: Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

Chemical Name	CAS-No.	LD50	LC50
ALKYL SILICATE	PMN		
ALICIE GILIOATE	P89-0882		
ETHYL ALCOHOL	64-17-5	7060 mg/kg, oral, rat	20000 ppm/10 hrs, rat, inhalation
ANHYDROUS ALUMINUM SILICATE	66402-68-4		
PROPYLENE GLYCOL MONOMETHYL ETHER	107-98-2	5180 mg/kg, oral, rat	10000 ppm/4 hrs rat, inhalation
MICA	12001-26-2		
TITANIUM DIOXIDE	13463-67-7	10000 mg/m3, oral (rat)	6.82 mg/L, Inh, rat 4H
ETHYL POLYSILICATE	11099-06-2		

12. Ecological Information

ECOLOGICAL INFORMATION: No data

13. Disposal Information

DISPOSAL INFORMATION: Dispose of in accordance with State, Local, and Federal Environmental regulations. Responsibility for proper waste disposal is with the owner of the waste.

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14. Transport Information

DOT Proper Shipping Name:PaintPacking Group:IIDOT Technical Name:N/AHazard SubClass:N/ADOT Hazard Class:3Resp. Guide Page:128

DOT UN/NA Number: UN 1263 **Additional Notes:** No Information

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA HAZARD CATEGORY

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, CHRONIC HEALTH HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

PENNSYLVANIA RIGHT-TO-KNOW:

Chemical NameCAS-No.IRON OXIDE1332-37-2

CALIFORNIA PROPOSITION 65:

Chemical NameCAS-No.TITANIUM DIOXIDE13463-67-7MICROCRYSTALLINE SILICA14808-60-7METHYL ISOBUTYL KETONE108-10-1

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

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International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B2 D2A D2B

16. Other Information

HMIS Ratings:

Health: 2 Flammability: 3 Reactivity: 1 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 288

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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