

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER: CARBON FILLED REPAIR COMPOUND - PART A

HITCO P/N: HS_Repair_Kits (Part A)
HITCO Product Spec: MDS3001A
WS: WS16601C / WS25844B
NSN: 8040015585549

MANUFACTURER: HITCO Carbon Composites, Inc.
ADDRESS: 1600 W. 135th Street, Gardena, CA 90249
GENERAL ASSISTANCE: (310) 527-0700
24-HOUR EMERGENCY ASSISTANCE: CHEMTREC Assist: (800) 424-9300

DATE OF PREPARATION OR LAST CHANGE: January 29, 2009

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL/ COMMON NAME</u>	<u>C.A.S. NUMBER</u>	<u>% BY WEIGHT</u>	<u>EXPOSURE GUIDELINES</u>
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A proprietary phenolic resin solution. Identity, CAS Numbers, and/or percent composition are trade secrets.

See Section 8 for Exposure Guidelines

SECTION 3 HEALTH HAZARD IDENTIFICATION

PRIMARY ROUTES OF ENTRY

EYE: Severely irritating and corrosive. Direct contact may cause irritation, corneal edema, and possibly corneal opacity. Prolonged exposure to vapors can cause moderate to severe eye irritation. Symptoms may include redness, watering, itching, or a burning sensation in the eye.

SKIN: Moderate to severely irritating and potentially corrosive. Exposure may cause symptoms similar to those listed under "Ingestion". Repeated or prolonged exposure may cause dryness, redness, itching, and inflammation. Dermatitis and/or allergic sensitization may occur in some individuals. Some ingredients are readily absorbed through the skin.

INGESTION: Ingested product may be corrosive to mouth, throat, and stomach, and cause

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harmful central nervous system effects. Product may also cause liver or kidney damage.

INHALATION: Inhalation may cause irritation of the respiratory tract including the nose, throat, and lungs. Other effects may include coughing, shortness of breath, nausea, headaches, or dizziness. Inhalation is known to cause coughing, chest pain difficulty in breathing, and if elevated exposures persist, potentially pulmonary edema.

CARCINOGEN LISTINGS: The U.S. Department of Labor, Occupational Health and Safety Administration (OSHA) has designated formaldehyde as a carcinogen defined with no further categorization. The American Conference of Governmental Industrial Hygienists (ACGIH) classifies formaldehyde as a suspected human carcinogen (TLV - A2).

Carbon black is considered by IARC as a possible human carcinogen (Group 2B). Carbon black is not listed as a carcinogen by the National Toxicology Program (NTP), the ACGIH, OSHA or the European Union (EU).

GENERAL TOXICOLOGY: Some components of this product are toxic by inhalation, ingestion and through skin absorption; they are readily absorbed through skin; they are probable human carcinogens and mutagens. Exposure may cause damage to kidneys; may cause allergic reactions; may cause sensitization reactions; and may cause heritable genetic damage.

SECTION 4 FIRST AID MEASURES

EMERGENCY/FIRST AID PROCEDURES

EYE: Flush eyes with large amounts of water for 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention if irritation persists.

SKIN: Quickly remove contaminated clothing. Thoroughly wash exposed area of skin with soap and water. Rinse with flooding amounts of water. For reddened or blistered skin seek medical attention.

INGESTION: DO NOT INDUCE VOMITING. Contact a poison control center. If victim is conscious, give 1 to 3 glasses water or milk to dilute stomach contents. Get medical attention immediately. Keep affected person warm and at rest. Gastric lavage with activated charcoal may be used by a physician to prevent absorption.

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INHALATION: In case of overexposure, immediately move person from contaminated area to fresh air at once and support breathing as needed. Get medical attention immediately. If breathing difficulties occur, administer oxygen until medical assistance can be rendered. Keep affected person warm and at rest.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use dry chemical, alcohol foam, all purpose Aqueous Film Forming Foam (AFFF), or carbon dioxide to extinguish fire. Water may be ineffective but should be used to cool fire exposed containers, structures, and to protect personnel. If leak or spill has not ignited, ventilate area and use water spray to disperse vapors and to protect personnel attempting to stop leak. Use water to dilute spills and to flush away from sources of ignition. Do not flush down public sewers or other drainage systems.

SPECIAL FIRE FIGHTING INSTRUCTIONS:

Product is dangerous when exposed to heat or flame. Fire may produce poisonous or irritating gas, fumes, or vapors. Exposed firefighters should wear National Institute for Occupational Safety and Health (NIOSH)/Mine Safety and Health Administration (MSHA) approved self-contained breathing apparatus with full-face mask and full protective equipment.

Vapors form flammable or explosive mixtures with air at room temperature. Vapors may concentrate in confined spaces. Vapors may spread to distant ignition source and flash back.

FLASH POINT: 82°C (180°F)

FLAMMABILITY LIMITS: ND

LOWER EXPLOSIVE LIMIT: ND

UPPER EXPLOSIVE LIMIT: ND

AUTO IGNITION TEMPERATURE: NA

SECTION 6 ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS

Take immediate steps to stop and contain spill. Caution should be used regarding personnel safety and exposure to the spilled material. Small spills may be diluted with water and mopped up or absorbed with noncombustible absorbent material or other absorbent known to be compatible. For large spills, dike area far ahead of spill for later cleanup and disposal.

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This material contains one or more constituents regulated as hazardous substances under U.S. Federal Law. The reportable quantity (RQ) of this material is 18,686 pounds, calculated on the basis of the regulated constituent providing the lowest RQ according to the following formula:

Constituent RQ/% in Material

Any spill, release, or substantial threat of release, of this material to the air, water and/or land in an amount equal to or in excess of the RQ in any 24 hour period, must be reported immediately to the National Response Center (800-424-8802); in Washington, D.C. (202-426-2675), unless the release results in exposure to persons solely within the boundaries of the facility.

In addition, under the Superfund Amendments and Reauthorization Act (SARA) in Title 40 of the Code of Federal Regulations, Section 355 (40 CFR 355) any release of this material to the air, water and/or land in an amount equal to or in excess of the RQ must be reported to the State Emergency Response Commission(s) and Local Emergency Planning Committee(s) likely to be affected by the release, unless the release is federally permitted or the release results in exposure to persons solely within the boundaries of the facility. In the event there is no Local Emergency Planning Committee, notification shall alternatively be made to the relevant local emergency response personnel.

SECTION 7 HANDLING AND STORAGE

HANDLING AND STORAGE PROCEDURES

Use good personal hygiene. Do not eat, drink, apply cosmetics, or smoke in areas of use or storage. Wash hands and face thoroughly after handling and before eating, drinking or smoking.

Contaminated work clothes should not be brought home. A sensitized employee should not be exposed to the material which causes the sensitization.

Shelf life is 6 months at temperatures ≤ 40 °F.

Empty containers may contain toxic or corrosive residue or vapors.

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SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS/WORK PRACTICES

VENTILATION:

Control airborne concentrations below the exposure guidelines specified by OSHA or other local, state and federal regulations.

PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE MEASURES

RESPIRATORY PROTECTION:

Use in well ventilated areas. Respiratory protection is not normally necessary. If exposure limits may possibly exceed the TLV or respiratory irritation is experienced, only NIOSH/MSHA approved respiratory protection should be worn. An industrial hygienist or other qualified professional should be consulted during the respirator selection process to assure that the respiratory protection used is appropriate under the conditions of use. A respiratory protection program that meets the OSHA respiratory protection requirements found in Title 29 of the Code of Federal Regulations, Part 1910, Section 134 (29 CFR 1910.134) must be followed whenever workplace conditions warrant respirator use.

PROTECTIVE CLOTHING:

Avoid skin contact. Wear appropriate chemical protective gloves and protective clothing such as armcovers or aprons.

EYE PROTECTION:

Avoid eye contact with this material. Wear chemical goggles. Do not wear contact lenses when working with this substance. Do not touch the eyes with contaminated skin or materials. Provide an eye wash station in the work area.

OTHER PROTECTIVE EQUIPMENT:

Depending on conditions, additional protection may be necessary such as face shield, apron, armsleeves, or other protective clothing.

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EXPOSURE GUIDELINES:

A proprietary phenolic resin solution:

Carbon Black	PEL 3.5 mg/m ³ (OSHA) TWA 3.5 mg/m ³ (NIOSH) STEL (proposed industry guideline) 7 mg/m ³
Formaldehyde	PEL 0.75 ppm, STEL 2 ppm, action level 0.5 ppm (OSHA) TLV Ceiling 0.3 ppm (ACGIH) TWA 0.016 ppm, 15-minute Ceiling 0.1 (NIOSH)
Isopropanol (IPA)	PEL 400 ppm (980 mg/m ³); STEL 500 ppm (1,225 mg/m ³) (OSHA) TLV 200 ppm (490 mg/m ³); STEL 400 ppm (980 mg/m ³) (ACGIH) Ceiling 800 ppm 15-minute (NIOSH)
Nuisance Dust	PEL 5 mg/m ³ (respirable), 10 mg/m ³ (total) (OSHA) TLV 10 mg/m ³ (total) (ACGIH)
Phenol	PEL (Skin) 5 ppm (19 mg/m ³) (OSHA) TLV (Skin) 5 ppm (19 mg/m ³) (ACGIH) TWA 5 ppm (19 mg/m ³), 15-minute Ceiling (Skin) 15.6 ppm (60 mg/m ³) (NIOSH)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Black

SPECIFIC GRAVITY (water=1): ND

VAPOR PRESSURE: ND

VAPOR DENSITY (air=1): ND

VISCOSITY: ND

MELTING POINT: NA

NA = Not Applicable

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BOILING POINT: NA

EVAPORATION RATE (water=1): > 1

% VOLATILE BY VOLUME: ND

SOLUBILITY IN WATER: Insoluble

pH: NA

SECTION 10 STABILITY AND REACTIVITY

STABILITY:

Stable under most storage conditions.

INCOMPATIBILITY:

Incompatible with strong acids, bases, and oxidizing agents such as calcium hypochlorite.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition may be hazardous and may include carbon monoxide, carbon dioxide, and reactive hydrocarbons. Formaldehyde gas and unknown organic compounds may also be produced. Under severe thermal degradation, molecular fragments of phenols and anhydrides may be formed.

HAZARDOUS POLYMERIZATION: Not likely to occur.

SECTION 11 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD

This substance, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR 261). It is listed as Hazardous Waste Code D001 due to its flammability.

The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

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SECTION 12 TRANSPORTATION INFORMATION

DOT INFORMATION

HAZARD CLASS: 3

PROPER SHIPPING NAME: Resin Solution, Flammable

LABELS REQUIRED: Flammable Liquid

PLACARDS REQUIRED: Flammable Liquid

BILL OF LADING DESCRIPTION: Resin Solution, Flammable, 3, UN1866, II

UN/NA CODE: UN 1866

Packaging Group: II

SECTION 13 REGULATORY INFORMATION

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory. All components of this product are listed on the Canadian Domestic Substances List (DSL) Inventory.

The Canadian Workplace Hazardous Materials Information System (WHMIS) Flammable Material and Other Toxic Effects category applies to this product.

Carbon black is classified as a D2A under WHMIS. Statement of Equivalence: This product contains ingredients that have been classified in accordance with the hazard criteria of the Controlled Products Regulations.

SARA TITLE III INFORMATION

This product is classified as an Immediate Hazard, a Delayed Hazard, and as a Fire Hazard under the hazard categories of the Superfund Amendments and Reauthorization Act (SARA) Section 311/312 (40 CFR 370).

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This product contains toxic chemicals (in excess of the applicable de minimis concentrations) that are subject to the annual toxic chemical release reporting requirements of SARA Section 313 (40 CFR 372).

<u>Component</u>	<u>CAS Number</u>	<u>Maximum %</u>
Formaldehyde	50-00-0	0.5
Phenol	108-95-2	1.3

This product contains formaldehyde and phenol which are listed as Hazardous Air Pollutants under Section 112 of the Clean Air Act and are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42 with reference to Appendix D, Table II-V).

OTHER REGULATORY INFORMATION

Formaldehyde and phenol are listed as extraordinary hazardous substances as defined in the Massachusetts Right-To-Know Law, Department of Health, Chapter 105, Section 670.005.

Formaldehyde is listed as a special hazardous substance as defined in Pennsylvania Right-To-Know Law, Section 3800.

PROPOSITION 65 INFORMATION

Formaldehyde was a listed chemical subject to the State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) on January 1, 1988.

Carbon black extracts have been listed on the Proposition 65 List since January 1, 1990.

SECTION 14 OTHER APPLICABLE INFORMATION

Persons with pre-existing skin and respiratory disorders may be more susceptible to the effects of this product.

REVISION DATE: January 29, 2009

SUPERSEDES: December 6, 2004

NOTICE TO USERS: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Data Safety Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vender for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.