



PERMAROOF MB COLD ADHESIVE

Version 2.
REVISION DATE: 06/29/2009

Print Date 01/14/2012

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : PERMAROOF MB COLD ADHESIVE
Product code : 400CA05

COMPANY : Republic Powdered Metals
2628 Pearl Road
Medina, OH 44256

Telephone : (800) 551-7081
Emergency Phone: : 1-800-551-7081
After Hours: Chemtrec 1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

Black. Liquid. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause slight irritation to the respiratory system.

Eyes : Direct contact may cause moderate irritation. Direct contact may cause temporary redness and discomfort.

Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.

Skin : May cause moderate irritation. May cause itching, reddening, inflammation. May cause a rash. May cause sensitization.

Aggravated Medical Conditions

Pre-existing eye, skin, liver, kidney, and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Prolonged or repeated skin contact with asphalt may result in skin sensitivity, such as irritation, rashes, and dermatitis. Prolonged or repeated exposure to polycyclic aromatic hydrocarbons and other volatiles which are contained in trace amounts in asphalt have been shown to cause cancer or respiratory damage in animals. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. Fillers are encapsulated and not expected to be released from product under normal conditions of use. Prolonged or repeated exposure to mineral spirits (petroleum naphtha or stoddard solvent) may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, and adverse liver, kidney, and lung effects.

Target Organs: Skin, Eye, Lung, Liver, Kidney, Nerve

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SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Asphalt	8052-42-4	40.0 - 70.0
Stoddard solvent (Mineral Spirits)	8052-41-3	30.0 - 60.0
Calcium Carbonate (Limestone)	1317-65-3	10.0 - 30.0
Magnesium aluminum silicate	12174-11-7	5.0 - 10.0
Inert Filler	NJTSRN# 51721300-5013P	3.0 - 7.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	- <1.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation	:	Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
Eye contact	:	Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
Skin contact	:	Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
Ingestion	:	Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point	:	115 F, 46 °C
Method	:	Pensky-Martens Closed Cup
Lower explosion limit	:	0.70 %(V) Solvent
Upper explosion limit	:	6 %(V) Solvent
Autoignition temperature	:	Not available.
Extinguishing media	:	If water fog is ineffective, use carbon dioxide, dry chemical or foam.
Hazardous combustion products	:	Smoke, fumes. Carbon monoxide and carbon dioxide can form. Oxides of sulfur can form.
Protective equipment for firefighters	:	Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
Fire and explosion conditions	:	Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Vapor concentrations in enclosed areas may ignite explosively. Empty containers may contain ignitable vapors.



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SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Do not smoke, weld, generate sparks, or use flame near container. Do not use in confined or poorly ventilated areas. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store under dry warehouse conditions away from heat and all ignition sources.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

Exposure Limits

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Asphalt	8052-42-4	ACGIH TWA: benzene solubles	0.5 mg/m3	Inhalable fraction.as
Stoddard solvent (Mineral Spirits)	8052-41-3	ACGIH TWA: OSHA PEL:	100 ppm 2,900 mg/m3	



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Chemical Name	CAS Number	Regulation	Limit	Form
Calcium Carbonate (Limestone)	1317-65-3	OSHA PEL: OSHA PEL: ACGIH TWA: ACGIH TWA: OSHA TWA: OSHA TWA:	5 mg/m3 15 mg/m3 3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Inert Filler	51721300-5013P	ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	10 mg/m3 5 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Total dust. Respirable fraction.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL: ACGIH TWA:	0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3 0.025 mg/m3	Respirable. Total dust. Total dust. Respirable fraction. Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid
Color	: Black
Odor	: Solvent
pH	: Not available.
Vapour pressure	: Not available.
Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: Not available.
Water solubility	: Negligible
Specific Gravity	: 1.01
% Volatile Weight	: 33 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid	: Oxidizing agents.
Stability	: Material is stable under normal storage, handling, and use.
Hazardous polymerization	: Will not occur under normal conditions.



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SECTION 11 - TOXICOLOGICAL INFORMATION

No Data Available

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA Class : D001: Reportable Quantity = 100 lbs. (Characteristic of ignitability)
This classification applies only to the material as it was originally produced.

Disposal Method : Subject to hazardous waste treatment, storage, and disposal requirements under RCRA. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:
NOT REGULATED

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

OSHA Hazardous Components :

Asphalt	8052-42-4
Stoddard solvent (Mineral Spirits)	8052-41-3
Calcium Carbonate (Limestone)	1317-65-3
Magnesium aluminum silicate	12174-11-7
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Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

OSHA Status: Considered : Irritant



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hazardous based on the following criteria: Carcinogen

OSHA Flammability : II

Regulatory VOC (less water and exempt solvent) : 337 g/l

VOC Method 310 : 33 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:

MASS RTK Components : Asphalt 8052-42-4
Stoddard solvent (Mineral Spirits) 8052-41-3
Calcium Carbonate (Limestone) 1317-65-3
Inert Filler NJTSRN# 51721300-5013P

Penn RTK Components : Asphalt 8052-42-4
Stoddard solvent (Mineral Spirits) 8052-41-3
Calcium Carbonate (Limestone) 1317-65-3
Magnesium aluminum silicate 12174-11-7
Inert Filler NJTSRN# 51721300-5013P

NJ RTK Components : Asphalt 8052-42-4
Stoddard solvent (Mineral Spirits) 8052-41-3
Calcium Carbonate (Limestone) 1317-65-3
Magnesium aluminum silicate 12174-11-7
Inert Filler NJTSRN# 51721300-5013P
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:

8052-42-4 Asphalt
12174-11-7 Magnesium aluminum silicate
14808-60-7 Crystalline Silica (Quartz)/ Silica Sand

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	2
Reactivity	1
PPE	

0 = Minimum
1 = Slight
2 = Moderate
3 = Serious
4 = Severe



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Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend

ACGIH - American Conference of Governmental Hygienists

NTP - National Toxicology Program

DOT - Department of Transportation

DSL - Domestic Substance List

EPA - Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency for Research on Cancer

MSHA - Mine Safety Health Administration

NDSL - Non-Domestic Substance List

NIOSH - National Institute for Occupational Safety and Health

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act

RTK - Right To Know

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

V - Volume

VOC - Volatile Organic Compound

WHMIS - Workplace Hazardous Materials Information System