



PERMAFLEX (S) 53 GL DR LINED

Version 2.
REVISION DATE: 06/29/2009

Print Date 07/07/2009

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : PERMAFLEX (S) 53 GL DR LINED
 Product code : 482S53

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 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 slight irritation to the respiratory system.
 Eyes : Direct contact may cause mild irritation.
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.
 Skin : May cause mild irritation. May cause sensitization resulting in irritation, itching and redness. May cause a rash.

Aggravated Medical Conditions

Pre-existing eye, skin 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. Long term overexposure to propylene glycol caused liver abnormalities, kidney damage in laboratory animals. Repeated excessive ingestion may cause central nervous system effects. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Skin, Eye, Lung

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	40.0 - 70.0



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Asphalt	8052-42-4	40.0 - 70.0
Neoprene latex	NJTSRN# 51721300-5016P	5.0 - 10.0
Propylene glycol	57-55-6	1.0 - 5.0
Bentonite	1302-78-9	1.0 - 5.0
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 : Not available.
- Method : Not available.
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Carbon monoxide and carbon dioxide can form. Oxides of sulfur can form.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : Not applicable, not expected to burn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal.

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. Store in sealed containers in a dry, ventilated warehouse location above freezing.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Not required under normal conditions of use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- 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.
- Protective measures : Use professional judgment in the selection, care, and use. Other equipment not normally required.
- Engineering measures : General ventilation is sufficient. 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
Bentonite	1302-78-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 15 mg/m3 5 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction. 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 : Asphalt
- pH : 10 - 12
- Vapour pressure : Not available.
- Vapor density : Heavier than air
- Melting point/range : Not available.



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Freezing point : Not available.
Boiling point/range : 212 °F, 100 °C
Water solubility : Dispersible
Specific Gravity : 1.0108
% Volatile Weight : 48 %

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.

SECTION 11 - TOXICOLOGICAL INFORMATION

Propylene glycol, CAS-No.: 57-55-6
Acute oral toxicity (LD-50 oral) 30,000 mg/kg (Rat) 18,000 mg/kg (Rabbit) 19,000 mg/kg (Dog) 23,900 - 31,800 mg/kg (Mouse) 18,400 - 196,000 mg/kg (Guinea pig)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with 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:



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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
Bentonite 1302-78-9
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

OSHA Status: Considered : Irritant
hazardous based on the Carcinogen
following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 25 g/l
exempt solvent)

VOC Method 310 : 1 %

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

Penn RTK Components : Water 7732-18-5
Asphalt 8052-42-4
Neoprene latex NJTSRN# 51721300-5016P
Propylene glycol 57-55-6

NJ RTK Components : Water 7732-18-5
Asphalt 8052-42-4
Neoprene latex NJTSRN# 51721300-5016P
Propylene glycol 57-55-6
Bentonite 1302-78-9
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
14808-60-7 Crystalline Silica (Quartz)/ Silica Sand



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SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	1
Flammability	0
Reactivity	0
PPE	

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

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