1. **CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Petrol-Seal SBS - Part A
Generic Name: Sealant Activator
Chemical Family: Manganese Dioxide Paste
Responsible Party: RPM Technology, LLC
P.O. Box 33186
Reno, NV 89533

For further information contact MSDS Coordinator:
8am - 4pm Pacific Time, Mon - Fri: 886-403-4842

EMERGENCY OVERVIEW
24 Hour Emergency Telephone Numbers:
For Chemical Emergencies:
Spill, Leak, Fire or Accident
Call CHEMTREC
North America: (800) 424-9300
Others: (703)527-3887(collect)

HMIS HAZARD CLASS: Health: 1 (Slight)
Flammability: 1 (Slight)
Reactivity: 0 (Least)

2. **HAZARDOUS INGREDIENTS:**

Common Name	CAS Number	Approximate %
Manganese oxide	1313-13-9	40 - 50
Thiram	137-26-8	1 - 5
Sodium hydroxide	1310-73-2	1 - 5
Non-hazardous and other ingredients	Proprietary	
Balance below reportable levels		

3. **HEALTH HAZARD DATA:**

EMERGENCY OVERVIEW: May cause eye irritation. Prolonged or repeated contact may cause skin irritation. Do not swallow. See sections 3, 5, & 6.

PRIMARY ROUTES OF EXPOSURE: Eye. Skin.

EYE CONTACT: May cause slight to mild irritation.
SKIN CONTACT: Prolonged or repeated contact may cause irritation.

INHALATION (Breathing): Not hazardous in normal industrial use. INGESTION (Swallowing):Not hazardous in normal industrial use.

TARGET ORGANS/CHRONIC EFFECTS: Eyes.

CONDITIONS AGGRAVATED BY EXPOSURE: Exposure to this product is not expected to contribute, worsen or aggravate any pre-existing medical conditions.

CARCINOGENICITY:	ACGIH	IARC	NTP	OSHA
Manganese oxide	NO	NO	NO	NO
Thiram	NO	NO	NO	NO
Sodium hydroxide	NO	NO	NO	NO

4. **FIRST AID:**
EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT: Immediately flush with water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Professionally wash clothing and shoes before re-use.

INHALATION (Breathing): Medical attention is not normally required.

INGESTION (Swallowing): Seek medical attention. Immediately induce vomiting, as directed by medical personnel. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIANS: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5. **FIRE AND EXPLOSION HAZARD DATA:**

FLASH POINT...:	Not applicable	METHOD : Not Applicable
EXPLOSIVE LIMITS:	LEL(%) Not Determined	UEL(%)Not Determined
AUTOIGNITION:	Not Determined	

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Formaldehyde and/or other aldehydes. Oxides of sulfur. Hydrogen sulfide. Low molecular weight hydrocarbons.

FIRE AND EXPLOSION HAZARDS: During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

EXTINGUISHING MEDIA: **Small Fires**: Dry chemical, carbon dioxide, Halon, water spray, or foam. **Large Fires:** Water spray, fog, or alcohol foam.

FIRE FIGHTING PROCEDURES/EQUIPMENT: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. **ENVIRONMENTAL AND DISPOSAL INFORMATION:**

EVACUATION: Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

CONTAINMENT: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or if airborne exposure limits can be exceeded. See section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use proper protective equipment. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a components= RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations. No regulated ingredients.

Thiram	RQ = 10 LB
Sodium hydroxide	RQ = 1000 LB

7. **HANDLING AND STORAGE:**
STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed.

TRANSFER: No special precautions are needed. Follow good manufacturing and handling practices.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, face shield, and gloves. Professionally launder contaminated clothing before re-use.

EMPTY CONTAINER PRECAUTIONS: **Attention!** This container can be hazardous when empty. Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION:**

EXPOSURE GUIDELINES:

ACGIH - TLV	
Manganese oxide	5 mg/M3 Dusts % compounds, as MN
Manganese oxide	1 mg/M3 Fume
Thiram	2 mg/M3

OSHA - PEL	
Manganese oxide	1 mg/M3 Fume
Thiram	5 mg/M3 Resp.
Sodium Hydroxide	2 mg/M3

ENGINEERING CONTROLS/VENTILATION: No special requirements, but always provide adequate ventilation.

EYE PROTECTION: An eye wash facility should be readily available. Wear chemical splash goggles or safety glasses with side shields.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation.

RESPIRATORY PROTECTION: Respiratory protection is not usually required.

9. **PHYSICAL DATA:**

Appearance:	Black	Odor :	Amine
Physical State:	Paste	Solubility:	Insoluble
pH:	Not Applicable	Boiling Point:	300F (148C)
Vapor Pressure:	0.1	Vapor Density :	>1
Evaporation Rt:	< 1 (n-Butal alcohol)	VOC Material :	Not Established
VOC Material:	Not Established	%Non-Vol. (w/w):	100
Specific Gravity:	1.78		

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. **REACTIVITY DATA:**
CHEMICAL STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Not applicable.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers. Acids. Amphoteric metals (i.e., copper, aluminum, and zinc. Contact with acid can generate hydrogen sulfide..

11. **TOXICITY DATA:**
COMPONENTS:
Manganese oxide: Eye, skin, and respiratory tract irritant. Can cause liver and kidney injury.
Thiram: Positive results were obtained in the Ames test. Can cause liver and kidney injury. Studies with laboratory animals have indicated this chemical may affect the reproductive system. May affect blood cells, hematopoiesis, and/or bone marrow. In laboratory tests this substance was found to be mutagenic to yeast. Found to induce skin sensitization reactions when tested in guinea pigs.

Orla LD50	Rat	560 mg/kg
	Mouse	1,350 mg/kg
	Rabbit	210 mg/kg
Inhalation LC 50	Rat	50 mg/M3 / 4-hours

Sodium hydroxide: Corrosive! Causes eye and skin burns.

Dermal LD50	Rabbit	1,000 mg/kg

12. **ECOLOGICAL INFORMATION:**
No data are available on this product.

13. **DISPOSAL INFORMATION:**
DISPOSAL: Dispose in accordance with all local, state, and federal regulations.

GENERAL STATEMENTS: Federal regulations may apply to empty container. State and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; (3) treat at an acceptable waste treatment facility.

SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. **TRANSPORTATION INFORMATION:**

Weight (lb)	Shipping name	49 CFR	IATA	IMO
< 200	Not regulated			
>= 200	Environmentally hazardous substances, liquid, N.O.S. (Thiram)	Y	Y	Y

DOT Label: Not Applicable UN/NA ID Num: Not Applicable
DOT Label No: L142-3 WHMIS Label: F142

Use the following for Environmentally hazardous substances, (liquid), N.O.S.: D.O.T. Label: Class 9; D.O.T. Identification Number: UN 3082; Hazard Class: 9; Packaging Group: III

15. **REGULATORY INFORMATION:**
FEDERAL: This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:

N - Fire Hazard	N - Sudden Release of Pressure Hazard
N - Reactivity Hazard	Y - Immediate (acute) Health Hazard
N- Delayed (chronic) Health Hazard	

OZONE-Depleting Chemicals - No regulated ingredients.

SARA Section 302 Extremely Hazardous Mat - No regulated ingredients. SARA Section 313 Toxic Chemicals - No regulated ingredients.

CHEMICAL Listing - Listed on the following Country=s Chemical Inventories:

United States Toxic Substance Control Act Chemical component(s) in this product are on the section 8(b) Chemical Substance Inventory List (40 CFR 710).

STATE RIGHT TO KNOW:
Pennsylvania - New Jersey R-T-K

Titanium Dioxide	13463-67-7	10 - 20
Calcium carbonate	471-34-1	5 - 10
Limestone	1317-65-3	5 - 10
Non-hazardous trade secret ingredient(s)		Proprietary Balance

California - California Proposition 65
Warning: This product contains a chemical(s) known to the State of California to cause cancer.

Formaldehyde 50-00-0 Trace*
Cancer Hazard.
* Trace = present at less than 0.01 percent.

CONEG - No data available.

CANADA: This is a controlled product under the Canadian Workplace Hazardous Materials Information System (WHMIS).
Class D Division 2 Sub-division B
CEPA - NPRI - No regulated ingredients.

16. **ADDITIONAL INFORMATION:**
USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein - are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

The information herein is given in good faith. No warranty, expressed or implied, is given regarding the accuracy of these data or the results obtained from the use thereof. Consult PRM Technology, LLC for further information.