NAME OF PRODUCT: Protect-AM-W-FLEX Part A MSDS DATE: 1/12/14

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Protect-AM-W-FLEX-A

PRODUCT CODES: Protect- AM-W-FLEX -A /1, Protect- AM-W-FLEX -A /5SF, Protect- AM-W-FLEX 1200-A /5

MANUFACTURER: Protective Industrial Polymers

ADDRESS: 7875 Bliss Parkway North Ridgeville, Ohio 44039

EMERGENCY PHONE:

CHEMTREC PHONE: 800-424-9300 (outside USA) 703-527-3887

OTHER CALLS: 440-327-0015

PRODUCT USE: Industrial Use Only

PREPARED BY: MEY

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

CAS NO.	<u>% WT</u>	<u>Name</u>
25068-38-6	50-60	Reaction product: bisphenol-A-(epichlorhydrin); epoxy
		resin (number average molecular weight <= 700)
13463-67-7	24-30	Titanium Dioxide
trade secret	0-5	Alkyl Phenol blocked polyisocyanate
26139-75-3	3-8	Formaldehyde, polymer with 1,3 dimethylbenzene
67762-90-7	0-5	Silicones and siloxanes, dimethyl-reaction products with silica
84852-15-3	<5	para-nonyl phenol
1302-78-9	<1	Bentonite
64742-46-7	<1	Distillates(petroleum) hydrotreated middle

All hazardous components in the mixture present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic are listed.

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview

This material is HAZARDOUS by OSHA Hazard Communication definition

Signal Word: CAUTION

Hazards:

May be irritating to the eyes and skin. Contact with hot material can cause thermal burns. May cause skin sensitization.

Clear, near colorless slight faint sweet smelling liquid.

ROUTES OF ENTRY: Eyes, Skin, respiratory tract

POTENTIAL HEALTH EFFECTS

Skin:

Although no appropriate human or animal health effects data are known to exist, this material is expected to be a skin irritant.

Inhalation:

Although no appropriate human or animal health effects are know to exist, this material may be an inhalation hazard.

FYF.

May cause mild irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Vapors may irritate eyes.

SKIN CONTACT: May cause moderate injury to skin following prolonged or repeated contact, and may cause skin sensitization or other allergic responses.

INGESTION: Single dose oral toxicity is low.

NAME OF PRODUCT: Protect-AM-W-FLEX Part A

ACUTE HEALTH HAZARDS: yes

SECTION 4: FIRST AID MEASURES

EYES:Immediately flush the eye with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower lids. If pain or irritation persists, promptly obtain medical attention.

SKIN: Remove contaminated clothing as needed. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If stickly, use waterless cleaner first. Seek medical attention of ill effect or irritation develops.

MSDS DATE: 1/12/14

INGESTION: If product is ingested, do not induce vomiting and contac a physican or Poisin Control Center.

INHALATION: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Alcohol resistant foam (preferred), water, Water fog, CO2, dry chemical, dry sand, limestone powder. FIRE & EXPLOSION HAZARDS: None known, treat as combustible.

FIRE-FIGHTING EQUIPMENT: Use a positive pressure, self-contained breathing apparatus and protective clothing.

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

PROTECTION:

SPECIAL FIRE FIGHTING PROCEDURES: Material will not burn unless preheated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Follow facility/company's emergency plans.

Environmental Precautions

Stop the flow of material, if this is without risk. Eliminate sources of ignition. Ventilate the contaminated area. Contain the spill and prevent the material from obtaining access to any confined spaces, public sewers, or waterways.

Methods for Clean-Up

Ventilate the contaminated area. Eliminate ignition sources including sources of electrical, static or frictional sparks. Collect the material

using absorbents, non-sparking tools, explosion-proof vacuums or other equipment required by the size of the release.

Decontaminate

the area, collecting any cleaning and rinsing media for proper reclamation or disposal.

Other Information

Wear appropriate protective equipment and clothing during clean-up. Determine appropriate course of action for the collected material.

Regulations vary. Consult local authorities before disposal.

Exposure Guidelines: All PPE use is to be determined by a qualified person.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid all sources of ignition: heat, sparks, and open flames.

OTHER PRECAUTIONS: For Industrial Use Only.

SECTION 7 NOTES: Keep container tightly closed and dry; store in a cool place.

PAGE 2 OF 5

NAME OF PRODUCT: Protect-AM-W-FLEX Part A MSDS DATE: 1/12/14

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Control airborne concentration below the exposure guideline. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved airpurifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Contaminated leather items, such as shoes, belts and watchbands, should be removed and destroyed.

ENGINEERING CONTROLS:Proper industrial hygiene practices are required for workers and should be achieved through engineering controls including ventilation with a high turn over rate whenever feasible. When such controls are not available or not feasible to achieve full protection, respirators for workers and other personal protective equipment is mandated. Exhause air may need to be filters to reduce environmental contamination and odors.

EYE PROTECTION: Wear Safety goggles or safely glasses with side shields when handling and mixing this material.

WORK HYGIENIC PRACTICES: Always follow Good personal hygiene practices when working with this material.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: white viscous sweet smelling liquid

PHYSICAL STATE: liquid

Form: Viscous liquid

Colour : white

Boiling point : ~> 260 °C (> 500 °F)

Flash point : ~251 °C (484 °F) (Pensky-Martens) Vapour pressure : ~0.03 mbar at 77 °C (171 °F)

Density: 11.23

Solubility in water : Negligible.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions (CONDITIONS TO AVOID) Avoid high temperatures

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) no further relevant information available.

HAZARDOUS DECOMPOSITION PRODUCTS: irritant gases/vapors, carbon monoxide and carbon dioxide HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: Toxicological Information

Acute oral toxicity: LD50 - Low toxicity, LD50 > 2000 mg/kg. Acute dermal toxicity: LD50 - Low toxicity, LD50 > 2000 mg/kg.

TOXICOLOGICAL INFORMATION:

No additional toxicology information is available for this material. (See Component Toxicity Information).

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: See component summary.

NAME OF PRODUCT: Protect-AM-W-FLEX Part A MSDS DATE: 1/12/14

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of in a licensed facility. Do not discharge into waterways or swere systems without proper authorization. If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local and federal regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated by U.S. Department of Transportation (USDOT). If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

SECTION 15: REGULATORY INFORMATION

US. EPA CERCLA Hazardous Substances (40 CFR 302) Reaction product: bisphenol-A-

(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

No RQ

SARA 311/312 Hazards Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Reaction 313 TOXIC Chemicals (40 CFR of Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

No De minimis Concentration

STATUS ON SUBSTANCE LISTS:

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Reaction product: bisphenol-A-

(epichlorhydrin); epoxy resin (number average molecular weight <= 700) Threshold Planning Quantity: No TPQ Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) Reportable quantity: No RQ

New Jersey Right-To-Know Chemical List

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) Not Listed

EPA HAZARD CLASSIFICATIONS:

AcuteChronicFirePressureReactiveHazardHazardHazardHazardYesyesnono

TSCA (TOXIC SUBSTANCE CONTROL ACT):

All ingredients in this mixture are listed with the TSCA Chemical Substance Inventrory

INTERNATIONAL REGULATIONS: The components in this product are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS)

NAME OF PRODUCT: Protect-AM-W-FLEX Part A MSDS DATE: 1/12/14

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER: This MSDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200, 91/155/EEC and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Eash user mush review the MSDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold is subject to our standard terms and conditions, a copy of which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be relable and to represent the best available data on these prudcts, No guaranty, warranty, or representation is made, intended, or implied as to the correctness, or sufficiency of any information, or as to the merchantability or suitability or fitness of any chemical compounds or other products for any use therof and are not subject to a claim by a third party for infringement of any patent or other intellectual property right. Some of the information presented and conclusions drawn herin are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper standards. Toxicity and risk characteristics of chemical compounds of products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made know to handlers, processors, and end users.