

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** POLYARMOR SRD 5000 PART B RESIN**MANUFACTURER**

The Hanson Group, LLC

3044 Adriatic Court

Peachtree Corners, GA 30071

Emergency Contact: 8:00AM - 5:00PM EST**Emergency Phone:** 770-495-9554**E-Mail/Website:** sales@hansonco.net / www.hansonco.net**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (US Transportation) :** (800) 424 - 9300**CHEMTREC (Outside USA) :** (703) 527 - 3887

EMERGENCY TELEPHONE NUMBER: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the USA, Canada, or US Virgin Islands, call CHEMTREC at 1-800-424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

2. HAZARDS IDENTIFICATION**GHS CLASSIFICATIONS**

Corrosive to Metals, Category 1

Acute Toxicity (Oral), Category 4

Acute Toxicity (Dermal), Category 4

Serious Eye Damage, Category 1

Skin Corrosion, Category 1B

Skin Irritation, Category 1B

Skin Sensitization, Category 1

Target Organ Toxicity (Repeated exposure), Category 1

Target Organ Toxicity (respiratory irritation), Category 3

GHS LABEL

Corrosion

Exclamation
markHealth
hazard**SIGNAL WORD:** DANGER**HAZARD STATEMENTS**

H290: May be corrosive to metals.

H302 + H312: Harmful if swallowed or in contact with skin.

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

H372: Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

PRECAUTIONARY STATEMENTS**Prevention:**

P234: Keep only in original packaging.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P270: Do not eat, drink or smoke when using this product.

P264: Wash ... thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P332+P313: If skin irritation occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P390: Absorb spillage to prevent material damage.

Storage:

P406: Store in a corrosion resistant/...container with a resistant inner liner.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501: Dispose of contents/container to ...

HAZARDS NOT OTHERWISE CLASSIFIED: May be slightly toxic if inhaled or absorbed through the skin. May cause severe eye irritation. May be irritating to the respiratory tract, skin, and gastrointestinal tract. May cause skin sensitization.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Alpha-(2-aminomethylethyl) omega- (2-aminomethylethoxy)- poly(oxy(methyl-1,2 -ethanediyl))	40 - 70	9046-10-0
Diethylmethylbenzenediamine	10 - 30	68479-98-1
N,N,N',N'-Tetrakis(2-hydroxypropyl)ethylenediamine	10 - 30	102-60-3

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN

3-aminopropyltriethoxysilane	1 - 5	919-30-2
Potassium Aluminosilicate	1 - 5	12736-96-8

COMMENTS: *TS*-The specific chemical identity and/or exact percentage of this composition has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush with plenty of water for two minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Have eyes examined and tested by medical personnel.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

INHALATION: Remove victim to fresh air and provide oxygen if breathing is difficult. Seek medical attention if cough or other symptoms develop.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

HAZARDOUS COMBUSTION PRODUCTS: Combustion has the potential to generate toxic fumes, including Carbon Monoxide and Carbon Dioxide.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (AS/NZS 1715 and AS/NZS 1716 approved or equivalent) and full protective gear. Toxic vapors may evolve. Fight fires from a safe distance or protected areas. Use of large volumes of water may produce run-off that could be toxic to wildlife and/or pose a hazardous waste disposal issue. Water may not be effective for large fires.

HAZARDOUS DECOMPOSITION PRODUCTS: During Combustion

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

LARGE SPILL: Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN**ENVIRONMENTAL PRECAUTIONS**

WATER SPILL: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of material into sources of water.

GENERAL PROCEDURES: Absorb spill with an emergency spill kit, diatomaceous earth, saw dust or equivalent inert material. Shovel up and dispose of at an appropriate waste disposal facility following applicable laws and regulations.

7. HANDLING AND STORAGE

HANDLING: Avoid skin contact with hot material. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

STORAGE: Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from strong bases. Store away from oxidizing agents.

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

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
EXPOSURE LIMITS				
Chemical Name	Type		ppm	mg/m ³
Diethylmethylenediamine	Supplier OEL	TWA	0.02 ppm	0.13 mg/m ³

ENGINEERING CONTROLS: Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety goggles or safety glasses with side shields when handling and mixing this material.

SKIN: Wear impervious compatible chemical resistant protective clothing such as neoprene or butyl rubber gloves, aprons, boots or Tyvek coveralls, as appropriate to prevent contact with skin.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

COMMENTS: If a component is disclosed in section 3 but does not appear in the table above, an occupational exposure limit is not available for the component.

9. PHYSICAL AND CHEMICAL PROPERTIES

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN

PHYSICAL STATE: Liquid
COLOR: Various Pigmented Color
pH: No data available
FLASHPOINT AND METHOD: \geq (212°F) Closed Cup
FLAMMABLE LIMITS: 0 to 0
VAPOR PRESSURE: No data available
VAPOR DENSITY: Not Available
BOILING POINT: Not Available
MELTING POINT: Not Available
DENSITY: 1.01
SPECIFIC GRAVITY: 1.01
VISCOSITY #1: 550 Centipoise
(VOC): 0 g/l Calculated

10. STABILITY AND REACTIVITY

REACTIVITY: This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

STABILITY: Stable.

CONDITIONS TO AVOID: Heat

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, Water, Amines, Strong bases, Alcohols

11. TOXICOLOGICAL INFORMATION**ACUTE TOXICITY**

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Alpha-(2-aminomethylethyl) omega- (2-aminomethylethoxy)-poly(oxy(methyl-1,2 -ethanediyl))	480 mg/kg	> 1000 mg/kg	
Diethylmethylbenzenediamine	472 mg/kg	> 2000 mg/kg	> 0.61 mg/l
N,N,N',N'-Tetrakis(2-hydroxypropyl)ethylenediamine	3280 mg/kg	> 2000 mg/kg	
3-aminopropyltriethoxysilane	1570 mg/kg	4290 mg/kg	

NOTES: LD50 data is not available for this product. Toxicity of this product may be attributed to a combination of the chemicals contained in this product.

SAFETY DATA SHEET

Industrial / Professional Use Only



THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN**SKIN CORROSION/IRRITATION:** Causes skin corrosion and irritation.**SERIOUS EYE DAMAGE/IRRITATION:** Causes eye damage and irritation.**RESPIRATORY OR SKIN SENSITISATION:** May be sensitizing to respiratory system and skin.**GERM CELL MUTAGENICITY:** Product is a blend of material that has been shown to be Ames Negative (non mutogenic)**CARCINOGENICITY****NOTES:** Some positive data exists, but the data are not sufficient for classification.**REPRODUCTIVE TOXICITY:** Not toxic to development.**12. ECOLOGICAL INFORMATION****ENVIRONMENTAL DATA:** No environmental data has been established or is available for this product.**13. DISPOSAL CONSIDERATIONS****DISPOSAL METHOD:** Dispose in accordance with applicable Federal, State, and Local regulations.**RCRA/EPA WASTE INFORMATION:** D002 (Corrosive)**COMMENTS:** Refer to Section 6. Accidental Release Measures for additional information.**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** POLYAMINES, LIQUID, CORROSIVE, N.O.S., (POLY(OXYPROPYLENE)DIAMINE)**PRIMARY HAZARD CLASS/DIVISION:** 8**UN/NA NUMBER:** 2735**PACKING GROUP:** II**VESSEL (IMO/IMDG)****SHIPPING NAME:** POLYAMINES, LIQUID, CORROSIVE, N.O.S., (POLY(OXYPROPYLENE)DIAMINE)**PRIMARY HAZARD CLASS/DIVISION:** 8**PACKING GROUP:** II**15. REGULATORY INFORMATION****UNITED STATES****TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA REGULATORY:** This product contains Diethyltoluenediamine which is subject to TSCA Section 4 test rules and TSCA 12(b) export notification.**TSCA STATUS:** All ingredients in this mixture are in compliance with TSCA.

SAFETY DATA SHEET

Industrial / Professional Use Only



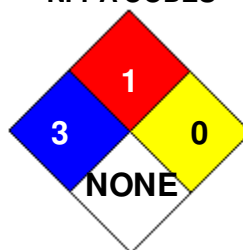
THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

Date Prepared : 05/01/2017

MSDS No : SRD5000-B

POLYARMOR SRD 5000 PART B RESIN**16. OTHER INFORMATION**

Date Prepared: 05/01/2017

NFPA CODES

MANUFACTURER DISCLAIMER: This SDS to the best of our knowledge conforms to the requirements of 2012 OSHA Hazard Communication Standard 29 CFR 1910.1200, and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS 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 reliable and to represent the best available data on these products, 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 PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF 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 herein 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 shipping, handling and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other 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 known to handlers, processors, and end users.