

ARMOUR-SEAL TM

Safety Data Sheet

Prepared Date: 12/03/2014

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www.rhomar.com

Revision: 1

SECTION 1: IDENTIFICATION

Product Identifier

Product Name	Product Form	Product Code
ARMOUR-SEAL™	Liquid	RH-415

Relevant identified uses of the substance or mixture:

Equipment undercoating, underbody coating

Details of the supplier of the safety data sheet

Rhomar Industries, Inc. 2107 E. Rockhurst St. Springfield, MO 65802 USA T 417-866-5592; F 417-866-5593 solutions@rhomar.com

Emergency telephone number

1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Skin corrosion/irritation (Category 3)
Serious eye damage/eye irritation (Category 2)



Hazard Statements:

Causes mild skin irritation
Causes serious eye irritation

Signal Word: Warning

Precautionary Statements

Prevention:

Avoid breathing mist, spray.

Wash thoroughly after handling.

Wear protective gloves, protective clothing, eye protection, face protection.

Response:

<u>Eye Contact</u>: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Skin/Hair Contact: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water.

Storage:

Store in dry place. Store in a closed container.

Disposal:

Dispose of contents/container in accordance with local, regional, state, national, and international regulation.

Mixture Name CAS # Petroleum Hydrocarbon (Bitumen) Any concentration shown as a range is to protect confidentiality or is due to process variation.

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SECTION 4: FIRST-AID MEASURES

First Aid Measures

<u>General</u>: Take off contaminated clothing. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention if you fee unwell.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists, get medical attention.

Ingestion: If swallowed, rinse mouth. Do not induce vomiting. Gent medical advice/attention if you feel unwell.

Skin Contact: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water. If skin irritation or a rash occurs, get medical advice/attention.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

Indication of any Immediate Medical Attention and Special Treatment Needed

Provide general supportive measures and treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Material is non-combustible. For dried residue, Carbon dioxide (CO2), foam, water fog or dry chemical.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

For dried residue, Thermal decomposition (burning) will produce oxides of carbon including carbon monoxide and may also produce irritating, corrosive and/or toxic gases, vapors and fumes.

Protective Equipment and Precautions for Firefighters

Self-contained breathing apparatus and full protective gear must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Avoid unnecessary exposure and contact.

Methods and Material for Containment and Cleaning Up

Contain and absorb with inert material (e.g. oil dry, sand). Avoid dilution with water to minimize the extent of the spill. Dispose in accordance with all local, state and federal regulations. In the event of a large spill, contain material and recover uncontaminated material for use if possible. Avoid discharge into drains, water courses and the groud.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling

Avoid prolonged or repeated skin contact.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep containers tightly closed. Store in a cool, dry and well ventilated area. Keep from freezing.

Incompatible Contaminants

Avoid exposure to oxidizing agents. Incompatible materials may cause coagulation.

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SECTON 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name CAS # ACGIH TLV-TWA OSHA PEL
Petroleum Hydrocarbon (fumes*) 8052-42-4 0.5 mg/m³ No limits established
*Petroleum Hydrocarbon fumes will not normally be present.

Appropriate Engineering Controls

Engineering Controls: Use with adequate ventilation.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Face shield, goggles.

Skin and Body Protection: Wear long sleeved, body-covering clothing. Use chemical protective gloves.

Respiratory Protection: If atomizing, ensure adequate ventilation and local exhaust. Level of exposure needs to be determined. If required, use a particulate filter, a NIOSH approved air purifying respirator with organic vapor cartridge or a supplied air respirator.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid					
Color	Park gray to black					
рН	8.4 - 9.4	Melting Point/Freezing Point	Not determined			
Boiling Point/Boiling Range	212°F	Flash Point	Not applicable			
Evaporation Rate	Not determined	Flammability (Solid, Gas)	Nonflammable			
Upper Flammable Limits	Not applicable	Lower Flammable Limits	Not applicable			
Vapor Pressure at 20°C	23.5 mm Hg, based on solvent	Vapor Density	Not determined			
Specific Gravity	1.0 – 1.2	Solubility	Soluble while wet			
Partition Coefficient	Not determined	Auto-ignition Temperature	Not applicable			
Decomposition Temperature	Not determined	Viscosity	Shear dependent			
Odor Threshold	Not determined	Odor	Slight petroleum odor			

SECTION 10: STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable

Possibility of Hazardous Reactions

None

Polymerization

Will not occur

Conditions to Avoid

Freezing will cause coagulation

Incompatible Materials

Some chemicals will cause coagulation

Hazardous Decomposition Products

For dried residue combustion products: Oxides of carbon, nitrogen, and sulfur and potentially irritating and/or toxic fumes.

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SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact: Causes serious eye irritation

Skin Contact: Causes skin irritation.

Ingestion: Unlikely: expect low ingestion hazard. Do not induce vomiting.

This product as a whole has not been tested for acute toxicity; the following is based on component data:

Chemical Name

Ingestion - Oral LD50

Similar Material

>500 gm/kg (Rat)

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Dermatitis may occur with repeated or prolonged skin contact.

Carcinogenicity: None of the components of this mixture are considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.

SECTION 16: OTHER INFORMATION

The information herein is presented in good faith and believed to be correct as of the date hereof. However, the manufacturer makes no representation as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purposes prior to use.

No representations or warranty's, either express or implied of merchantability, fitness for a particular purpose or of any other nature with respect to the product or to the information herein is made hereunder. The manufacturer shall in no event be responsible for any damages of whatsoever nature directly or indirectly resulting from the publication or use of or reliance upon information contained herein.

MATERIAL SAFETY DATA SHEET

AMERICAN INDUSTRIAL SUPPLY, INC. 8714 Darby Ave. Northridge, CA 91325

GENERAL INFORMATION NUMBER: (818) 841-7788

EMERGENCY # (800)255-3924

REVISION DATE: June 13, 2002

DATE OF ISSUE: September 19, 2003

I - Product Identification

Prevent

PRODUCT CODE: 0346

CHEMICAL FORMULATION: Rust treatment.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

HAZARD RATING:

4 - Extreme:

3 - High;

2 - Moderate;

1 - Slight;

0 - Insignificant

II - Hazardous Ingredients									
Values reported as TWA unless noted.									
SUBSTANCE	APPROX	OSHA	ACGIH	EPA 40 CFR:					
	<u>%</u>	PEL	$\underline{\text{TLV}}$	<u>302</u>	<u>355</u>	<u>372</u>	<u>CAS #</u>		
Tannic Acid	1.00-5.00	N/E	N/E	N	N	N	1401-55-4		
2-Butoxyethanol	1.00-5.00	25 ppm (skin)	25 ppm (skin)	N	N	Y	111-76-2		

Key:

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value C: Ceiling level

STEL: Short Term Exposure Limit

N/A: Not Applicable

N/D: Not Determined

N/E: Not Established

Y: Yes N: No

302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).

355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): N/D

SPECIFIC GRAVITY (WATER = 1): 1.13

VAPOR PRESSURE (mm Hg): N/D

VOC CONTENT (% by weight): 1.00-5.00 EVAPORATION RATE (WATER = 1): \sim 1.0

VAPOR DENSITY (AIR = 1): N/D

pH: 3.00-4.00

SOLUBILITY IN WATER: Soluble

APPEARANCE AND ODOR: Beige, opaque emulsion; bland odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/A

(TEST METHOD): Closed cup

FLAMMABLE LIMITS IN AIR (VOLUME %)

UPPER: N/D

LOWER: N/D

EXTINGUISHING MEDIA: Water, foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: None

V - Reactivity Data

STABILITY: Stable

INCOMPATIBILITY: Oxidizers, strong alkalis.

CONDITIONS TO AVOID: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None

VI - Health Hazard Data

ROUTES OF ENTRY INHALATION: X EYE CONTACT: X SKIN CONTACT: X INGESTION: X INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None. EFFECTS OF OVEREXPOSURE

IF IN EYES: Moderate irritation and redness.

IF ON SKIN: Prolonged or repeated exposure can lead to mild irritation, formation of dark colored stains.

IF SWALLOWED: Gastrointestinal irritation, nausea, cramps, vomiting.

IF INHALED: None expected under normal use.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

IF ON SKIN: Wash with soap and water. If irritation persists, obtain medical attention.

IF SWALLOWED: Contact physician or poison control center immediately. Give affected person 1 to 2 glasses of water. Do not induce vomiting unless told to do so by a physician or poison control center. Never give anything to an unconscious person.

IF INHALED: Remove person to fresh air.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Contain spill. Soak up spilled material with inert absorbent material and place in a properly marked closed container for proper disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.

VENTILATION

LOCAL: Recommended

MECHANICAL: Not required

VENTILATION
PROTECTIVE GLOVES: Chemical resistant.

EYE PROTECTION: Safety glasses or chemical goggles.

OTHER PROTECTIVE EQUIPMENT: Eye wash station.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool, dry place. Do not freeze. Shake well before

using. Keep container tightly closed when not in use.

OTHER PRECAUTIONS: Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: None

DOT CLASS: None

DOT ID NUMBER: None

DOT PACKING GROUP: None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

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Prepared by: PMR

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