

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:

Eye Contact: 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Name	CAS #	Weight %
Petroleum Hydrocarbon (Bitumen)	8052-42-4	30-60

Any concentration shown as a range is to protect confidentiality or is due to process variation.

SECTION 4: FIRST-AID MEASURES

First Aid Measures

General: 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 feel 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. Get 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 ground.

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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	CAS #	ACGIH TLV-TWA	OSHA PEL
Petroleum Hydrocarbon (fumes*)	8052-42-4	0.5 mg/m ³	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	Dark gray to black		
pH	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.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure**Product Information**Eye Contact: Causes serious eye irritationSkin 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.