



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Barriseal S and Barriseal R

Synonyms: Modified Water based asphalt emulsion

Manufacturer/Supplier

Carlisle Coatings & Waterproofing Incorporated
900 Hensley Lane
Wylie, TX 75098

Internet Address: <http://www.ccwcompanies.com/>

Fax Number: (972) 442-0076

Phone Numbers

Medical Emergency:

CHEMTREC (USA): (800) 424-9300

CHEMTREC (International):

MSDS Assistance: (972) 442-6545

Fax On Demand: NA

Technical Assistance: (888) 229-2199

Customer Service: (888) 229-0199

2. COMPONENT INFORMATION

Component	CAS No.	Percent Range	Hazardous in Blend

This product is not hazardous according OSHA 29 CFR 1910.1200.

Hazards:

Flammable/Combustible No Acute Toxin No Chronic Toxin No Carcinogen No
Pressure No Reactive No Exposure Limit Target Organ Other

2A. OTHER INGREDIENTS Greater than 3%

Component	CAS No.
Bitumen/Asphalt	8052-42-4
Synthetic Rubber	106-99-0
Emulsifier	Mixture
Soap Additive	7722-88-5 (>1%)
Clay	12174-11-7

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview:

May cause moderate irritation to eyes. May be harmful if swallowed. Read and understand all health and safety information on the product label and Material Safety Data Sheet before use.

Ratings

Health 1 Flammability 1 Reactivity 0

Primary Route of Exposure: Skin x Inhalation x Eye x Ingestion x

Health Effect Information

Eye Contact: May cause eye irritation and conjunctivitis in direct contact.

Skin Contact: May cause mild skin irritation on prolonged or repeated contact.

Inhalation: Vapor and mist may cause respiratory irritation, dizziness and/or nausea, tightness of chest, shortness of breath, headache.

Ingestion: May cause gastrointestinal irritation, nausea, and vomiting.

Medical Conditions Aggravated by Exposure: Prolonged or repeated skin contact with asphalt may result in skin sensitivity such as rashes, irritation, and chronic dermatitis. Presence of emulsifying and de-emulsifying agents during application may irritate the skin.

4. FIRST AID INFORMATION

Eye Contact: Flush with water for 15 minutes. Get medical attention immediately.

Skin Contact: Wipe off and wash skin with soap and water. Promptly remove contaminated clothing and wash before reuse. Do not use harsh solvents to remove asphalt from skin. Lotion or hand cream may aid in the removal of asphalt.

Inhalation: Remove to fresh air. If breath has stopped, start artificial respiration. Oxygen may be administered. Consult physician immediately.

Ingestion: Do not induce vomiting unless directed to do so by a physician. Consult a physician immediately.

Notes to Physician: The petroleum hydrocarbons in this product are a complex mixture of paraffinic, naphthenic and aromatic hydrocarbons. As with other petroleum products, the aromatic compounds are present in varying concentrations and structures. Some of these compounds may be those that have shown to result in tumor formation in animals under lab conditions.

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties

Flash Point: NA

Test Method:

Flame extension: NA

Test Method: NA

Flammable Limits in Air

Upper Percent: NA

Lower Percent: NA

Autoignition Temperature: >700 deg F

Test Method: NA

NFPA Classification: H 1 F 1 R 0

Extinguishing Media: CO₂, foam, and dry chemical or water spray.

Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: Firemen must wear full-face air-supplied masks and full protective clothing.

Unusual Fire and Explosion Conditions: This product may ignite when sufficient heat is applied.

Check for combustible vapors prior to and during welding or torch cutting on vessels or tanks.

Hazardous Combustion By-Products: CO, CO₂, unburned hydrocarbons. Emits acrid fumes.

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Evacuate non-essential personnel to safe areas. Clean-up responders should wear proper protective clothing and gloves before entering the affected area.

Regulatory Notifications: Certain component of this product is defined as hazardous according to U.S. EPA. Spill reporting requirements and reportable quantities vary by region. Consult all applicable state and local regulations. For Canada, observe all precautions noted above.

Containment and Clean up: Prevent Product from entering drinking water supplies or streams. Observe above precautions, collect liquid with inert, noncombustible material and remove for disposal.

7. HANDLING AND STORAGE INFORMATION

Handling: Avoid prolonged contact with skin. Use protective gloves. Avoid rubbing eyes while

handling.

Storage: Store in dry, cool environment. Keep containers closed when not in use. Avoid freezing.

Empty Container Warnings

Drums: Drums may be reused after the liner is disposed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

<u>Chemical</u>	<u>CAS Number</u>	<u>Regulation and Limit</u>
Asphalt	8052-42-4	ACGIH TWA: 0.5 mg/m ³ (benzene solubles)

Personal Protective Equipment

Eye/Face Protection: Wear safety goggles. Contact lenses should not be worn.

Skin Protection: Use protective rubber gloves.

Respiratory Protection: Provide adequate ventilation to maintain vapors below PEL/TWA. If vapor levels are exceeded, use NIOSH approved respirator, both during and immediately after application, until vapor levels are below limits.

Personal Hygiene: Avoid rubbing eyes during handling. Use good personal hygiene practices to avoid incidental ingestion.

Engineering Controls / Work Practices

Ventilation: Provide local exhaust or area ventilation to maintain concentration of vapors below PEL/TWA

Other: Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown to black liquid	Vapor Pressure: <1 mm Hg at 70F (158C)
Odor: Asphalt	
Physical state: Liquid	Vapor Density (air=1): Heavier than air
pH: 10 - 11	Percent Volatile by Volume: 30-45
DOT Corrosivity: NA	Volatile Organic Content: <20 g/liter (less water)
Boiling Point: 212 deg F	
Melting Point: Not available	
Specific Gravity: 1.01(S), 1.031 (R)	
Pour Point: NA	
Solubility in Water: Miscible but bitumen/polymer particles are insoluble	
Octanol / Water Coefficient: Log K _{ow} = NA	

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable under normal storage, handling, and use.

Conditions to Avoid: Avoid extreme heat, fire and temperature.

Incompatible Materials to Avoid: Avoid strong acids, strong oxidizers.

10. TOXICOLOGICAL INFORMATION (will only print available data)

Eye Effects: Vapors may cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.

Skin Effects: Hot asphalt causes smarting of the skin and first degree burns on short exposure; may cause secondary burns on long exposure.

Acute Inhalation Effects: Human inhalation, TCLo: No data

Acute Oral Effects: Rat, oral, LD50: 5 to 15 g/kg

Chronic Effects: Prolonged and repeated skin contact may cause dermatitis, photosensitization, and melanosis. Evidence from animal studies suggest that asphalt left on skin for long periods of time may result in local carcinomas, but there have been no reports of such effects on human skin that can be attributed to asphalt alone.

Carcinogenicity: Not a human carcinogen

Mutagenicity: No data

Teratogenicity: No data

11. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL INFORMATION

Regulatory Information: Consult all regulations (federal, state, provincial, local etc.) or a qualified waste disposal firm when characterizing waste for disposal.

Waste Disposal Methods: Dispose of waste in accordance with local, state and federal EPA regulation.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Not regulated

15. REGULATORY INFORMATION

Regulatory Lists

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory or exempt from listing on the TSCA Inventory.

This product or its components are listed on, or exempt from the Canadian Domestic Substance

EPA Regulations:

RCRA

RCRA Hazardous Waste Number: Not Listed

RCRA Hazardous Waste Classification (40 CFR 261): Waste material should not be hazardous due to its characteristics

CERCLA

CERCLA: Not a listed hazardous substance

CERCLA Reportable Quantity (RQ): This material is not a hazardous substance and does not have a reportable quantity. However, if spilled into waters of U.S., it may be reportable under Clean Water Act.

SARA

SARA 311/312: NA
SARA Toxic Chemical: Not Listed
SARA EHS (Extreme Hazardous Substance) (40 CFR 355): Not Listed

TSCA

TSCA: All components are listed in the TSCA inventory.

OSHA Regulations: Air contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not Listed

OSHA Specifically Regulated Substance: No

State Regulations: Review applicable state regulations to determine regulatory status of this product.

16. OTHER INFORMATION**MSDS Revisions**

Previous Version Date: 07/07/2007

Section

Old Information: 11 part MSDS

New Information: 16 part MSDS

Prepared By: R&D **Date:** 01/29/2008

Disclaimer of Warranty: The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Carlisle Coating and Waterproofing Inc. rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.