



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)

1. PRODUCT IDENTIFICATION

Trade Name(s): ECOFLEX-S
Product Description: Polymer Modified Asphalt Emulsion
CAS No: N/A

Manufacturer / Supplier:
EPRO Services, Inc.
PO Box 347
Derby, KS 67037
800-882-1896 (8:00am – 5:00pm CST)

2. HAZARD(S) IDENTIFICATION

GHS-US Classification of the Substance or Mixture

Carc.2: H351
STOT RE 2: H373
Aquatic Chronic 3: H412
Full text of H-phrases: see Section 16

GHS-US Label Elements

Signal Word: Warning

Hazard Statements

H351: Suspected of causing cancer
H373: May cause damage to organs (thymus, liver, bone marrow) through prolonged or repeated exposure
H412: Harmful to aquatic life with long lasting effects

Precautionary Statements

P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P260: Do not breathe vapors, mist, and spray
P273: Avoid release to the environment
P280: Wear eye protection, protective clothing, and protective gloves
P308+P313: If exposed or concerned, get medical advice/attention
P314: Get medical advice/attention if you feel unwell
P405: Store locked up
P501: Dispose of contents/container in accordance with local, regional, national and international regulations

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition

temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas. Flammable vapors can accumulate in head space of closed system

Unknown Acute Toxicity (GHS-US)

Up to 30% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	%	Classification (GHS-US)
Asphalt	(CAS No) 8052-42-4	50 - 70	Not classified
Water	(CAS No) 7732-18-5	30 - 40	Not classified
Proprietary Polymer	Proprietary*	< 30	Not classified
Proprietary Hydrocarbon	Proprietary*	0 - 5	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation:vapor), H331 Skin Irrit. 2, H315 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402 Aquatic Chronic 2, H411

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Full text of H-phrases: See Section 16

4. FIRST-AID MEASURES

Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

First-aid Measures after Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures after Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

First-aid Measures after Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.

First-aid Measures after Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: There are potential chronic health effects to consider.

Symptoms/Injuries after Inhalation: May cause respiratory irritation.

Symptoms/Injuries after Skin Contact: May cause skin irritation.

Symptoms/Injuries after Eye Contact: May cause eye irritation.

Symptoms/Injuries after Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause damage to organs (Thymus, Liver, Bone Marrow) through prolonged or repeated exposure. Suspected of causing cancer

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but will burn at high temperatures.

Explosion Hazard: Product is not explosive. Contains Sulfur, may release small amounts of hydrogen sulfide.

Hydrogen sulfide is a highly flammable, explosive gas under certain conditions, is a toxic gas, and may be fatal. Gas can accumulate in the headspace of closed containers, use caution when opening sealed containers. Heating the product or containers can cause thermal decomposition of the product and release hydrogen sulfide.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from firefighting to enter drains or water sources. Do not breathe fumes or vapors from fire. Use water spray or fog for cooling exposed containers.

Protection During firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Refer to Section 9 for flammability properties.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take precautionary measures against static discharge. Use only non-sparking tools. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Incompatible Materials: Heat sources.

Storage Temperature: > 0 °C (32 °F)

Storage Area: Store locked up.

Specific End Use(s): Asphalt Emulsion

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV, NIOSH (REL), or OSHA (PEL).

Asphalt (8052-42-4)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (fume, inhalable fraction)
USA ACGIH	ACGIH chemical category	Not classifiable as a human carcinogen fume, coat tar-free
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	5 mg/m ³ (fume)

Proprietary Hydrocarbon		
USA ACGIH	ACGIH TWA (mg/m ³)	100 mg/m ³ (inhalable fraction and vapor)
USA ACGIH	ACGIH chemical category	Skin – potential significant contribution to overall exposure by the cutaneous route, Confirmed Animal Carcinogen with Unknown Relevance to Humans

Exposure Controls

Appropriate Engineering Controls: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapors may be released.

Personal Protective Equipment: Protective goggles, gloves, protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Thermal Hazard Protection: If material is hot, wear thermally resistant protective gloves.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

Other Information: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Odor: No data available

pH: No data available

Melting Point: Not applicable

Boiling Point: 100°C (212.00°F)

Auto-ignition Temperature: No data available

Flammability (solid, gas): No data available

Relative Vapor Density at 20°C: >1.0 (air=1)

Specific Gravity: 1.0+ / -0.2 at 60°F (15.6°C)

Viscosity: No data available

Appearance: Brown to Black

Order Threshold: No data available

Evaporation Rate: Slower (butyl acetate-1)

Freezing Point: No data available

Flash Point: No data available

Decomposition Temperature: No data available

Vapor Pressure: Not determined

Relative Density: No data available

Solubility: Water: miscible

Partition Coefficient: N-Octanol/Water: No data available

Other Information

VOC Content: 0

Volitales (includes water): 30 - 50%

10. STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Do not freeze.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: May release flammable gases. Thermal decomposition generates: Carbon oxides

(CO, CO₂). Nitrogen oxides. Hydrogen sulfide. Sulfur dioxide. Irritating or toxic vapors.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Not classified

Asphalt (8052-42-4)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg

Proprietary Hydrocarbon	
LD50 Dermal Rabbit	4720 µl/kg
LD50 Inhalation Rat	4.6 mg/l/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Asphalt (8052-42-4)	
IARC Group	2B
National Toxicology Program (NTP) Status	Twelfth Report-Items under consideration
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list

Proprietary Polymer	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries after Inhalation: May cause respiratory irritation.

Symptoms/Injuries after Skin Contact: May cause skin irritation.

Symptoms/Injuries after Eye Contact: May cause eye irritation.

Symptoms/Injuries after Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause damage to organs (Thymus, Liver, Bone Marrow) through prolonged or repeated exposure. Suspected of causing cancer.

12. ECOLOGICAL INFORMATION

Ecology – General: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Ecology – Water: Harmful to aquatic life with long-lasting effects.

Proprietary Hydrocarbon	
LC50 Fish 1	35 mg/l (Exposure time: 96 h – Species: Pimephales promelas (flow-through))

Persistence and Degradability: Not established.

Bioaccumulative Potential: Not established

Asphalt (8052-42-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	> 6

Mobility in Soil: No additional information available.

Other Adverse Effects: Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains. Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

14. TRANSPORT INFORMATION

DOT: Not regulated for transport

IMDG: Not regulated for transport

IATA: Not regulated for transport

15. REGULATORY INFORMATION (non-mandatory)

US Federal Regulations

SARA Section 311/312 Hazard Classes: Delayed (chronic) health hazard

TSCA (Toxic Substances Control Act) Inventory – Asphalt (8052-42-4): Listed

TSCA (Toxic Substances Control Act) Inventory – Water (7732-18-5): Listed

TSCA (Toxic Substances Control Act) Inventory – Proprietary Hydrocarbon: Listed

TSCA (Toxic Substances Control Act) Inventory – Proprietary Polymer: Listed

US State Regulations

Asphalt (8052-42-4)

Massachusetts: Right to Know List

New Jersey: Right to Know Hazardous Substance List

Pennsylvania: RTK (Right to Know) List

16. OTHER INFORMATION

GHS Full Text Phrases

Acute Tox. 3 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 3
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H331	Toxic if inhaled
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA Health Hazard: 1 – exposure could cause irritation but only minor residual injury even if not treatment is given.

NFPA Fire Hazard: 1 – must be preheated before ignition can occur

NFPA Reactivity: 0 – normally stable, even under fire exposure conditions, and are not reactive with water

This information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designated only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.