



**Anionic Emulsions**

R&G SDS Number: 003

# SAFETY DATA SHEET

## Section 1: Identification of product / manufacturer / utilization

**Product form:** Liquid

**Product name:** SS-1h, OKSS-1h, RS-1, RS-2, Tac oil, Fog Seal, CRO, Chip Seal Oil

**Synonyms:** Anionic Asphalt Emulsion

### **Manufacturer**

Reed & Graham, Inc.  
690 Sunol Street  
San Jose, CA 95126 USA  
(408) 287-1400

### **Emergency telephone number**

CHEMTREC 1-800-424-9300

## Section 2: Hazards identification

### **Classification of mixture:**

- Eye Irritant – Category 2A
- Skin Corrosion/Irritation – Category 2
- Respiratory/Skin Sensitizer – Category 1



**Signal word:** WARNING

**Hazard Statements:**

- May cause skin and eye irritation.
- Vomiting may occur if swallowed.
- Substance may be harmful if swallowed irritating mouth, throat and / or stomach
- Fumes from heated material may be irritating.
- Prolonged or excessive inhalation may cause respiratory tract irritation.
- Vapors may have a strong offensive odor which may cause headaches, nausea and vomiting.
- Symptoms of overexposure include: fatigue, tearing of eyes, burning sensation in the throat, cough, and chest discomfort and skin irritation.

**Precautionary Statements:**

- Obtain and read product data sheet for instructions of use
- Do not handle material until all the safety data sheet has been obtain, read and understood.
- Contact with hot material may cause thermal burns

**Prevention**

- Do not eat, drink or smoke when using this product
- Do not breathe fume/gas/mist/vapors/spray
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood

**Response**

- If swallowed: Rinse mouth. DO NOT induce vomiting. Immediately call a poison center/doctor
- If on skin or hair: take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
- Continue rinsing. Immediately call a poison center/ doctor

**GHS pictogram**

**Storage**

- Store in an appropriate container or containment structure

**Disposal**

- Dispose of contents/container in accordance with local/regional/national regulations

<b>Section 3:            Composition / Information on Ingredients</b>
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<i>Chemical Name</i>	<i>Amount</i>	<i>CAS Number</i>
Asphalt (Petroleum)	30 - 70 %	8052-42-4
Water	< 50%	7732-18-5
Sodium Hydroxide	< 0.5%	1310-73-2
Hydrogen Sulfide	< 0.5%	7783-06-4
Emulsifier (Confidential Ingredient A)	< 3.0%	TRADE SECRET

**Component Information/Information on Non-Hazardous Components****General Information**

Concentration values are typical and may vary. Although specific identities of some products components are being withheld as trade secrets, known pertinent hazard are addressed in individual SDS.

<b>Section 4:            First Aid Measures</b>
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**GENERAL FIRST AID MEASURES:**

Get prompt medical attention. Cool exposed area with water to dissipate heat. Get prompt medical attention. If solidified, do not attempt to remove; only medically approved solvents can be removed affected area.

**EYE CONTACT FIRST AID:**

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. Burns due to contact with heated material require immediate medical attention.

**SKIN CONTACT FIRST AID:**

Wash skin with soap and water. Wear protective gloves to minimize skin contamination. For hot material exposure, DO NOT try to remove solidified material from the skin. DO NOT try to dissolve with solvents or thinners. Get medical attention immediately.

**INHALATION FIRST AID:**

At elevated temperatures may cause irritation of the eyes and respiratory tract. Although this product is not known to cause respiratory problems, if breathing is difficult, safely remove victim to fresh air and provide oxygen. Get immediate medical attention.

**INGESTION FIRST AID:**

Get immediate medical attention. DO NOT induce vomiting due to danger of aspirating liquid into lungs. Gastric lavage may be required.

<b>Section 5: Fire Fighting Measures</b>
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**EXTINGUISHING MEDIA:**

Suitable extinguishing media:

Use alcohol foam, carbon dioxide or water spray when fighting fires involving this material

Unsuitable extinguishing media:

Exercise care when using water as contact with hot asphalt products – may produce steam and violent foaming.

**SPECIAL HAZARDS:**

- Fire Hazard:** Product is an aqueous solution. Heated product may produce hazardous fumes, decomposition products or residues. Small quantities of hydrogen sulfide may be release upon heating.
- Explosion Hazard:** None
- Reactivity:** Avoid contact with strong bases
- Advice for Firefighters:** Decomposition may produce fumes, smoke, oxides of carbon and hydrocarbons and possible small quantities of hydrogen sulfide. Avoid breathing vapors from heated material. Combustion may produce CO, NOx, SOx and reactive hydrocarbons
- Protection for firefighting:** As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH approved and full protective gear

<b>Section 6: Accidental Release Measures</b>
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- General measures:** Clean up spills immediately using appropriate personal protective equipment.
- Non-emergency personnel:**
- Protective equipment: Glove, safety glasses, boots, long sleeves
- Emergency procedures: Absorb spills with absorbent material or sand.
- For emergency responders:**

Protective equipment: Gloves, safety glasses, boots  
Emergency procedures: Stop the source of the release. Clean up release as soon as possible.

**Environmental precaution:** Prevent contamination of soil, surface water or groundwater

**Method for containment/clean up:** Absorb spills with absorbent materials. Contain spilled liquid with sand or earth. Contain liquid to prevent contamination of soil, surface water or groundwater. Large spillage would be dammed-off and pumped into containers. Prevent materials from entering streams, drainages or sewers.

<b>Section 7: Handling and Storage</b>
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**Shelf life:** 1 day @ 82°C (in original, sealed containers)  
**Additional Hazard:** When handling hot material, use protective clothing impervious to this material.  
**Safe Handling:** Use good hygiene measure: wash exposed areas with mild soap and water before eating, drinking or smoking and again when leaving work.  
**Storage conditions:** Do not store at temperatures above 82°C  
**Additional handling:** When sampling containers use appropriate personal protective equipment such as gloves that are heat resistant, safety glasses, work boots and appropriate clothing. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing.

<b>Sections 8: Exposure Controls / Personal Protections</b>
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**Engineering measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
**Eye/Face protection:** Where contact with this material is likely, eye protection is recommended.  
**Skin protection:** Selection of specific items such as gloves, boots, apron or full body suit will depend on operation and potential exposure.  
**Respiratory Protection:** Where there is potential for airborne exposure in excess of applicable limit, wear NIOSH/MSHA approved respiratory protection.

**Exposure Guidelines:**

<b>Sodium Hydroxide:</b>	NIOSH REL	2mg/m <sup>3</sup>
	OSHA PEL	2mg/m <sup>3</sup>
	IDLH	10mg/m <sup>3</sup>
	Skin designation	Yes
<b>Hydrogen Sulfide:</b>	NIOSH REL	C 10ppm, 15mg/m <sup>3</sup> (10min)
	OSHA PEL	C 20ppm, 50ppm (10min)

## Sections 9: Physical and chemical properties

### Information of basic physical and chemical properties

<i>Physical state:</i>	Liquid
<i>Appearance:</i>	Brown to Black
<i>Odor:</i>	Asphalt odor
<i>pH</i>	8-13
<i>Melting point:</i>	0°C
<i>Freezing point:</i>	0°C
<i>Specific gravity:</i>	1.0-1.1(water = 1)
<i>Boiling point:</i>	100°C @ 7600mm Hg
<i>Flash point</i>	None
<i>UEL:</i>	N/A
<i>LEL:</i>	N/A
<i>Vapor pressure:</i>	Same as water mmHg @21°C
<i>Relative vapor density at 20°C</i>	1
<i>Solubility:</i>	Soluble in water
<i>%Volatiles:</i>	<35% @21°C @ 760b mmHg
<i>VOC:</i>	<2%

## Section 10: Stability and Reactivity

<i>Reactivity:</i>	Low
<i>Chemical stability:</i>	This compound is stable at ambient conditions.
<i>Conditions to avoid:</i>	Avoid extreme high temperatures
<i>Possibility of hazardous reactions:</i>	Low
<i>Hazardous decomposition products:</i>	Decomposition will not occur if handled and stored properly
<i>Incompatible materials:</i>	Avoid contact with strong bases.

## Section 11: Toxicological Information

<i>Skin corrosion:</i>	May cause irritation and a rash with prolonged or repeated contact with skin
<i>Serious eye damage:</i>	Irritating, may injure eye tissue if not removed promptly.
<i>Respiratory or skin sensitization:</i>	Repeated contact may cause skin irritation; prolonged inhalation may cause respiratory tract irritation
<i>Germ cell mutagenicity:</i>	None

<b><i>Carcinogenicity:</i></b>	IARC has determined hydrochloric acid may be carcinogenic in humans
<b><i>Reproductive toxicity:</i></b>	This product contains one or more chemicals known to cause reproductive harm.
<b><i>Specific target organ toxicity (single exposure):</i></b>	Skin and or respiratory irritation, mild
<b><i>Specific target organ toxicity (repeated exposure):</i></b>	Skin, respiratory, kidney and liver
<b><i>Aspiration hazard:</i></b>	Respiratory distress as a result of aspiration
<b><i>Symptoms after inhalation:</i></b>	Respiratory tract irritation, cough, chest discomfort
<b><i>Symptoms after eye contact:</i></b>	Eye Tearing, irritation burns if contact made with heated material
<b><i>Symptoms after ingestions:</i></b>	Harmful if swallowed, irritating to mouth, throat and stomach

## **Section 12: Ecological Information**

### ***Environmental Hazards***

This material should be prevented from uncontrolled applications to soil or earth. This material should be prevented from entering storm water, sewage drainage system and bodies of water.

## **Section 13: Disposal Consideration**

### ***Waste Disposal Instructions***

This product, as supplied, when discarded or disposed of, may be a hazardous waste according to Federal regulations (40 CFR 261). Under the Resource Recovery Act (RCRA), it is the responsibility of the user of the product to determine whether the material is a hazardous waste subject to RCRA. Treat or dispose of waste material in accordance with all local, state/provincial and national requirements. Avoid disposal into wastewater treatment facilities.

### ***Disposal of Contaminated Containers or Packaging***

Unclean empty containers should be disposed of in the same manner as the contents.

### ***Contaminated Materials***

Treat as product waste.

## **Section 14: Transport Information**

<b><i>Product label:</i></b>	SS-1h, OKSS-1h, RS-1, RS-2, Tac oil, Fog Seal, CRO CSS-1h, MSE
<b><i>UN Number:</i></b>	Non-hazardous, no UN number
<b><i>DOT Shipping Name:</i></b>	Non Regulated, Water Based Asphalt Emulsion
<b><i>DOT Hazard Class:</i></b>	Non-hazardous

**Section 15: Regulatory Information**

*EEC Symbols and*

*Indications of Danger:* Irritant (Xi)

*R-Phrases:* R36/37/38 – Irritating to eyes, respiratory system and skin

*WHMIS Hazard symbols:* Class D – irritant

*California Proposition 65:* This product contains one or more chemicals known to the State of California to cause cancer and or reproductive harm.

*Clean Air Act – 112:* Hydrochloric acid (7647-01-0)

*Title V:* Hydrochloric acid (7647-01-0)

Hydrogen sulfide (7783-06-4)

*CERCLA Hazardous sub:* Hydrochloric acid (7647-01-0)

Hydrogen sulfide (7783-06-4)

*SC Toxic Air Pollutants List:* Hydrochloric acid (7647-01-0)

Hydrogen sulfide (7783-06-4)

*Sara Title II 0- Section 313:* There are no known ingredients subject to reporting

*TSCA Inventory Status:* All ingredients of the product are listed.

**Section 16: Other Information**

Hazardous Material Information System (HMIS):	Health	1
	Flammability	1
	Physical Hazard	
	Personal Protection	B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves, respirator

**Key/Legend**

EPA – Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute of Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration, CERCLA = Comprehensive Environmental Response Compensation & Liability Act of 1980

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