SAFETY DATA SHEET



1. Identification

Product identifier SS-1H

Other means of identification

Product Code 1980

Recommended use Asphalt Pavement Tack Oil

Recommended restrictionsMust be diluted with water following manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer:Tricor Refining, LLC.Address:P.O. Box 5877

Bakersfield, CA 93388

24-hour Telephone

(661) 393-7110

Number:

CHEMTREC: 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	50 - 70
WATER		7732-18-5	25 - 45
PROPRIETARY INGREDIENTS		N/A	< 5
Other components below reportable le	vels		0.999999999

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician if symptoms develop or persist.

Skin contact If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of

asphalt. Wash contact areas with soap and water. If needed, seek medical attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

IngestionRinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large

amount does occur, call a poison control center immediately.

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Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

Treat symptomatically.

treatment needed **General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Dry chemical powder. Carbon dioxide (CO2).

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Direct contact with eyes may cause temporary irritation.

Special protective equipment and precautions for

firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire-fighting equipment/instructions ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.

Specific methods

In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with

water spray.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Conditions for safe storage, including any incompatibilities

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze.

Value

Form

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values	
Components	Туре

ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide to Che Components	mical Hazards Type	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.

Biological limit values No biological exposure limits noted for the ingredient(s).

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Appropriate engineering

controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined

occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style

gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection Not available.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

9. Physical and chemical properties

Viscous liquid **Appearance** Physical state Liquid. **Form** Liquid.

Brown to Black Color

Odor Tar-like **Odor threshold** Not available. 9.6 - 10.6Melting point/freezing point Not available. Initial boiling point and 212 °F (100 °C)

boiling range

> 400.0 °F (> 204.4 °C) Cleveland Open Cup Flash point

Evaporation rate <=1

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressure Not available

Vapor density >= 1

Relative density Not available.

Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

> 700 °F (> 371.11 °C) **Auto-ignition temperature**

Not available. **Decomposition temperature Viscosity** Not available.

Other information

Density 8.30 - 8.50 lb/gal

Percent volatile < 2 % Specific gravity 1.01

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport

Chemical stability Stable under normal temperature conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

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Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat

product.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition

Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide.

products

11. Toxicological information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard. Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eve contact Harmful in contact with eves.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Not available. **Acute toxicity**

Test Results Product Species

SS-1H (CAS Mixture)

Acute

Other

LD50 Mouse 4000 mg/kg estimated

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Harmful in contact with eyes. None known.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause skin disorders if contact is repeated or prolonged.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not classified. Specific target organ toxicity Not classified.

- single exposure

Specific target organ toxicity

- repeated exposure

Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged exposure may cause chronic effects.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Product		Species	Test Results
SS-1H (CAS Mixture)			
Crustacea	EC50	Daphnia	3459 mg/l, 48 hours estimated
Fish	LC50	Fish	12500 mg/l, 96 hours estimated

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. Mobility in soil No data available.

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^{*} Estimates for product may be based on additional component data not shown.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Disposal recommendations are based on uncontaminated material. Dispose in accordance with all

applicable regulations. When this product as supplied is to be discarded as waste, it does not meet

the definition of a RCRA waste under 40 CFR 261.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code Not applicable.

Waste from residues / Dispose of in accordance with local regulations. Empty containers or liners may retain some product

unused products residues. This material and its container must be disposed of in a safe manner (see: Disposal

instructions). Avoid discharge into water courses or onto the ground.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) Liste

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not a

(SDWA)

Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

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US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

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Version # References **ACGIH**

United States & Puerto Rico

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

Toxic Substances Control Act (TSCA) Inventory

US. IARC Monographs on Occupational Exposures to Chemical Agents

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Disclaimer

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. The information in the sheet was written

based on the best knowledge and experience currently available.

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Yes