



SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Kiln Seal
PRODUCT IDENTIFIER CODE(S): 103185
PRODUCT RECOMMENDED/INTENDED USE: Protective Coating
MANUFACTURER/SUPPLIER: Texas Refinery Corp.
ADDRESS: 500 Airport Drive, Mansfield, TX 76063
GENERAL INFORMATION: 817-332-1161
24 HR. EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification(s):

Health	Physical	Environmental
Acute Toxicity, Inhalation- Category 4 Skin Irritant- Category 2 Eye Irritant- Category 2B STOT, Single Exposure- Category 3 (Narcotic Effects) STOT, Repeated Exposure- Category 2	Flammable liquid- Category 3	Not classified

GHS Label:

Pictogram(s):	
<p>Signal Word: Warning!</p> <p>Hazard Statements: Flammable liquid and vapor. Causes eye irritation. Causes skin irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure by inhalation. Harmful if inhaled.</p>	<p>Precautionary Statements: Keep away from heat, sparks, open flames and hot surfaces- No smoking. Keep container tightly closed. Do not eat, drink or smoke when using this product. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Wear protective gloves/eye protection/face protection. Ground/bond container and receiving equipment. Wash thoroughly after handling. Avoid breathing mist/vapors/spray. Use only outdoors or in a well-ventilated area. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents and container in accordance with local/regional/national/international regulations.</p> <p>Response: FIRST AID: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF EYE IRRITATION PERSISTS: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. IF SKIN IRRITATION OCCURS: Seek medical advice/attention. Take off contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF EXPOSED OR CONCERNED: Get medical advice/attention. IN CASE OF FIRE: Use appropriate media for extinction.</p>

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Weight %
Asphalt, Oxidized	64742-93-4	40-70
Stoddard Solvent	8052-41-3	30-60

SECTION 4 FIRST AID MEASURES

PRINCIPAL ROUTES OF EXPOSURE: Eyes, Skin and Inhalation

EFFECTS OF EXPOSURE (ACUTE AND CHRONIC): May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May be irritating to eyes.

IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If contact lenses are present, DO NOT delay irrigation or attempt to remove lenses. Get medical attention if irritation develops and persists.

IF ON SKIN: For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. For minor skin contact, avoid spreading material on unaffected skin. Wash off with soap and plenty of water.

IF SKIN IRRITATION OCCURS: Get medical advice/attention.

IF SWALLOWED: Rinse mouth thoroughly. Call a POISON CENTER or doctor/physician. Do NOT induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach contents doesn't get into the lungs.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention, if needed.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED: Not available.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

GENERAL INFORMATION: IF EXPOSED OR CONCERNED: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Chronic skin conditions may worsen.

NOTES TO PHYSICIAN: None

SECTION 5 FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Foam. Carbon dioxide (CO₂). Water fog. Dry chemical powder.

UNSUITABLE EXTINGUISHING MEDIA: Do not use water jet as an extinguisher, as this will spread the fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Fire may produce irritating, corrosive and/or toxic gases.

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. Move containers from fire area if you can do so without risk. Do not get water inside container. Some of these materials, if spilled, may evaporate leaving a flammable residue.

SPECIFIC METHODS: In the event of fire and/or explosion do not breathe fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Stop the flow of material, if this is without risk. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for disposal. Never return spills in original containers for reuse.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not contaminate water. If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.

SECTION 7**HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING: Avoid heat, sparks, open flames and other ignition sources. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Do not empty into drains. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store in a well-ventilated place. Keep container tightly closed. Keep container dry. Keep away from food, drink and animal feedings. Keep out of reach of children. Use care in handling/storage.

SECTION 8**EXPOSURE CONTROLS/PERSONAL PROTECTION****OCCUPATIONAL EXPOSURE LIMITS:**

US. OSHA TABLE Z-1 Limits for Air Contaminants (29 CFR 1910.1000)		
Components	Type	Value
STODDARD SOLVENT (CAS 8052-41-3)	PEL	2900 mg/m ³ 500 ppm
US. ACGIH Threshold Limit Values		
Components	Type	Value
STODDARD SOLVENT (CAS 8052-41-3)	TWA	100 ppm
U.S.- NIOSH		
Components	Type	Value
ASPHALT, OXIDIZED (CAS 64742-93-4)	REL	5 mg/m ³
US. NIOSH: Pocket Guide to Chemical Hazards		
Components	Type	Value
STODDARD SOLVENT (CAS 8052-41-3)	Ceiling TWA	1800 mg/m ³ 350 mg/m ³

BIOLOGICAL LIMIT VALUES: No biological exposure limits noted for the ingredient(s).

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; chemical goggles (if splashing is possible).

HAND PROTECTION: Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

OTHER: It is a good industrial hygiene practice to minimize skin contact. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

THERMAL HAZARDS: Not available.

GENERAL HYGIENE CONSIDERATIONS: When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practices.

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: Viscous liquid

COLOR: Brown to black

ODOR: Mild petroleum odor

ODOR THRESHOLD: Not available

pH: Not available

MELTING POINT/FREEZING POINT (°F/C): No data

INITIAL BOILING POINT AND BOILING RANGE (°F/C): 300/148.89

FLASH POINT (°F/C): 105.0/40.6 (TCC)

EVAPORATION RATE: 70.0

FLAMMABILITY (SOLID,GAS): Not available

LOWER EXPLOSIVE LIMIT/UPPER EXPLOSIVE LIMIT: LEL 0.9% estimated, UEL 6.0% estimated

VAPOR PRESSURE: < 50 psi

VAPOR DENSITY (Air= 1): > 4.5
RELATIVE DENSITY: Not available
SOLUBILITY (ies) (in water): Insoluble
PARTITION COEFFICIENT (n-Octanol/water): Not available
AUTOIGNITION TEMPERATURE: No data
DECOMPOSITION TEMPERATURE: Not available
VISCOSITY: Not available
DENSITY: 7.00-8.00 lb/gal
FLAMMABILITY CLASS: Class II
VOLATILE ORGANIC COMPOUNDS (VOC's) (Weight %): 4.2 lb/gal

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: The product is stable and non-reactive under normal conditions of use, storage and transport.
CHEMICAL STABILITY: Stable at normal conditions.
POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization does not occur.
CONDITIONS TO AVOID: Heat, flames and sparks. Avoid all sources of ignition.
INCOMPATIBLE MATERIALS: Avoid strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: Irritants. Carbon oxides. Sulphur oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

INHALATION: Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

SKIN CONTACT: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

EYE CONTACT: May be irritating to eyes.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: Not available.

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: Not classified

SKIN CORROSION/IRRITATION: Causes skin irritation.

SERIOUS EYE DAMAGE/EYE IRRITATION: Causes eye irritation.

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY SENSITIZATION: Not available.

SKIN SENSITIZATION: Not a skin sensitizer.

GERM CELL MUTAGENICITY: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

CARCINOGENICITY:

IARC MONOGRAPHS. Overall Evaluation of Carcinogenicity

ASPHALT, OXIDIZED (CAS 64742-93-4) 2A Probably carcinogenic to humans.

STODDARD SOLVENT (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.

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

Not listed

REPRODUCTIVE TOXICITY: Not classified.

SPECIFIC TARGET ORGAN TOXICITY- Single Exposure: Central nervous system.

SPECIFIC TARGET ORGAN TOXICITY- Repeated Exposure: Prolonged exposure may cause chronic effects.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY: Not expected to be harmful to aquatic organisms.

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

PARTITION COEFFICIENT (n-Octanol/water) (log Kow):

STODDARD SOLVENT 3.16-7.15

MOBILITY IN SOIL: Not available.

OTHER ADVERSE EFFECTS: Not available.

FURTHER INFORMATION ON ECOLOGY: Do not allow to contaminate the soil, waterways or waste water.

SECTION 13**DISPOSAL CONSIDERATIONS**

DISPOSAL INSTRUCTIONS: Dispose of contents/container in accordance with local/regional/national/international regulations. If discarded, this product is considered a RCRA ignitable waste, D001.

HAZARDOUS WASTE CODE: D001: Waste flammable material with a flash point <140° F

WASTE FROM RESIDUES/UNUSED PRODUCTS: Dispose of in accordance with local regulations.

CONTAMINATED PACKAGING: Empty containers should be taken to an approved waste handling site for recycling or disposal.

WARNING: "Empty" Container Warning: "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT Pressurize, Cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, spark, static electricity or other sources of ignition. They may explode and cause injury or death. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14**TRANSPORT INFORMATION**

U.S. DEPARTMENT OF TRANSPORTATION (DOT) NON-BULK SHIPPING DESCRIPTION: Non-hazardous per DOT Exception 49 CFR 173.150 (f)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) BULK SHIPPING DESCRIPTION: NA1993, Combustible Liquid, N.O.S. (Contains Stoddard Solvent), III

INTERNATIONAL MARITIME ORGANIZATION (IMDG) SHIPPING DESCRIPTION: UN 1999, TARS, LIQUID, 3, III

FURTHER INFORMATION: If shipped by ground in quantities LESS than 119 gallons/450 L (non-bulk): Not regulated as a hazardous material. If shipped by vessel in individual containers that are less than 7.9 gallons (30 L) each, then IMDG 2.3.2.5 exception applies: Not regulated as a hazardous material.

FREIGHT CLASSIFICATION: Roof coating, asphalt base (NMFC 170080 CLASS 55)

SECTION 15**REGULATORY INFORMATION**

US FEDERAL REGULATIONS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances- Not applicable.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D): Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories	Immediate Hazard- Yes
	Delayed Hazard- No
	Fire Hazard- Yes
	Pressure Hazard- No
	Reactivity Hazard- No

SARA 302 Extremely Hazardous Substance: Not listed.

SARA 311/312 Hazardous Chemical: Yes.

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 (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: Stoddard Solvent (CAS# 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act: Not regulated.

US. Pennsylvania RTK- Hazardous Substance: Stoddard Solvent (CAS# 8052-41-3)

US. Rhode Island RTK: Not regulated.

US. California Proposition 65: Not listed.

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
U.S. & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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).

SECTION 16**OTHER INFORMATION**

REVISION INDICATOR: New SDS compliant with GHS and OSHA.

DATE OF REVISION: 05/11/2017

SUPERSEDES: 08/09/2016

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity

National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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