



SAFETY DATA SHEET

COMPANY IDENTITY: **Chemsol**
PRODUCT IDENTITY: **MIL-DTL-3301D**

SDS DATE: 06/23/2015
ORIGINAL: 06/23/2015

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.
THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: **MIL-DTL-3301D**

SYNONYMS: **Oxidized Asphalt**

PRODUCT USES: Automotive, Pipe Coatings, Industrial Applications

COMPANY IDENTITY: Chemsol
COMPANY ADDRESS: 8424 Boettner Road
COMPANY CITY: Bridgewater, MI 48115
COMPANY PHONE: 888-697-6001

EMERGENCY PHONES: CHEMTREC: 800-424-9300 (USA)
+1-703-527-3887 (INTL)

SECTION 2. HAZARDS IDENTIFICATION

WARNING!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

(H300s) HEALTH: Acute Toxicity, Oral(CAT:5)

H303 MAY BE HARMFUL IF SWALLOWED.

(H300s) HEALTH: Skin Corrosion/Irritation(CAT:1)

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE (When Heated).

(H300s) HEALTH: Serious Eye Damage/Eye Irritation(CAT:2)

H318 CAUSES SEVERE EYE BURNS (When Heated).

(H300s) HEALTH: Acute Toxicity, Inhalation(CAT:4)

H332 HARMFUL IF INHALED.



2.2 PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P314 Get medical advice/attention if you feel unwell.

P332+313 IF SKIN irritation occurs: Get medical advice/attention.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3.
COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Asphalt, Oxidized	64742-93-4	...	100

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4.
FIRST AID MEASURES

- 4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:
See Section 11 for Symptoms/Effects (acute & chronic).
- 4.2 EYE CONTACT:
Hot Material: For eyes, immediately flush with plenty of water for 15 minutes & get medical attention. Cold Material: Flush eyes with plenty of water.
- 4.3 SKIN CONTACT:
Hot Material: Immediately flush in cool water for at least 15 minutes. Immediately remove contaminated clothing. Get immediate medical attention. Cold Material: Clean exposed skin with waterless hand cleaner. Wash contaminated clothing before reuse.
- 4.4 INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).
- 4.5 SWALLOWING:
Rinse mouth. Do NOT give liquids to an unconscious or convulsing person. If a large amount is swallowed, get medical attention.

SECTION 5.
FIRE FIGHTING MEASURES

- 5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:
NO open flames.
- 5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:
Use agent approved for Class B hazards (such as: dry chemical, carbon dioxide, foam, steam, or water fog).
- 5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coats, gloves & rubber boots).
- 5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:
Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions.
Burning can produce oxides of carbon and other harmful products. Continue all label precautions!

**SECTION 6.
ACCIDENTAL RELEASE MEASURES**

- 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES:
Keep unprotected personnel away.
Wear appropriate personal protective equipment given in Section 8.
- 6.2 ENVIRONMENTAL PRECAUTIONS:
Keep from entering storm sewers and ditches which lead to waterways.
- 6.3 METHODS & MATERIAL FOR CONTAINMENT & CLEAN-UP:
Stop spill at source. Dike and contain.
Collect leaking & spilled liquid in sealable containers as far as possible.

**SECTION 7.
HANDLING AND STORAGE**

- 7.1 PRECAUTIONS FOR SAFE HANDLING:
Isolate from oxidizers, heat, & open flame. Use only with adequate ventilation.
Avoid prolonged or repeated contact with skin. Consult Safety Equipment Supplier.
Wear goggles, face shield, gloves, apron & footwear impervious to material.
- 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
Keep container tightly closed & upright when not in use to prevent leakage.

**SECTION 8.
EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 EXPOSURE LIMITS:

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)	STEL
Asphalt, Oxidized	64742-93-4	...	None Known	5 mg/m3	None Known

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Acceptable
SPECIAL: None OTHER: None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9.
PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Viscous Liquid, Dark-brown or Black
ODOR:	None
ODOR THRESHOLD:	Not Available
pH (Neutrality):	Not Available
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	Not Available
FLASH POINT (TEST METHOD):	> 274 C / > 525 F (COC)
EVAPORATION RATE (n-Butyl Acetate=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Class III-B
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	10.0 (Lowest Component)
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	0.0
VAPOR DENSITY (air=1):	Not Applicable
GRAVITY @ 68/68F / 20/20C:	
DENSITY:	Not Available
SPECIFIC GRAVITY (Water=1):	Not Available
POUNDS/GALLON:	Not Available
WATER SOLUBILITY:	Negligible
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available
VISCOSITY: BROOKFIELD LVF, No. 2, 12 rpm	< 700 cPs @ 149 C / 300 F
* Using CARB (California Air Resources Board Rules).	

SECTION 10.
STABILITY & REACTIVITY

- 10.1 REACTIVITY & CHEMICAL STABILITY:
Stable under normal conditions, no hazardous reactions when kept from incompatibles.
- 10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:
Isolate extreme heat, & open flame.
- 10.3 INCOMPATIBLE MATERIALS:
Isolate from strong oxidizers and acids.
- 10.4 HAZARDOUS DECOMPOSITION PRODUCTS:
Oxides of Carbon and other toxic vapor are given off when heated.
- 10.5 HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11.
TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

- 11.1.1 SKIN CONTACT:
May cause irritation to skin, defatting, dermatitis.
- 11.1.2 EYE CONTACT:
May cause irritation to eyes, redness, tearing, blurred vision.
- 11.1.3 INHALATION:
Always exercise caution when working around closed bulk containers of asphalts.
- 11.1.4 SWALLOWING:
Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SECTION 11.
TOXICOLOGICAL INFORMATION (CONTINUED)

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

11.3.1 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

Laboratory animals exposed to repeated applications of asphalt materials for their entire lifetime have developed skin tumors primarily at the site of application. The asphalt material was not washed off between exposures. Intermittent or occasional skin contact with petroleum asphalts is not expected to have serious health effects as long as good personal hygiene measures, such as those outlined in this Safety Data Sheet, are followed.

No carcinogenic effects were observed during lifetime inhalation studies with laboratory animals, although lung damage in the test animals was observed. Findings included bronchitis, pneumonitis and abscess formation, among other, similar problems caused by other non-specific irritants.

The International Agency for Research on Cancer (IARC) has found that there is limited evidence of carcinogenicity for undiluted steam-refined asphalts in humans. It has also found that occupational exposures to oxidized asphalt and their emissions are probably carcinogenic to humans.

11.3.2 TARGET ORGANS: May cause damage to target organs, based on animal data.

11.3.3 IRRITANCY: Irritating to contaminated tissue.

11.3.4 SENSITIZATION: No component is known as a sensitizer.

11.3.5 MUTAGENICITY: No known reports of mutagenic effects in humans.

11.3.6 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.

11.3.7 TERATOGENICITY: No known reports of teratogenic effects in humans.

11.3.8 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans.

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

No mammalian information is available on this product.

SECTION 12.
ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

No aquatic environmental information is available on this product.

12.4 MOBILITY IN SOIL

Mobility of this material has not been determined.

**SECTION 12.
ECOLOGICAL INFORMATION (CONTINUED)**

12.5 DEGRADABILITY

This product is completely biodegradable.

12.6 ACCUMULATION

Bioaccumulation of this product has not been determined.

**SECTION 13.
DISPOSAL CONSIDERATIONS**

Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.

ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES.

**SECTION 14.
TRANSPORT INFORMATION**

BULK PRODUCT IS SHIPPED AT TEMPERATURES ABOVE 150 C / 300 F; HARD ASPHALT (PACKAGED)

MARINE POLLUTANT: No
DOT SHIP NAME: UN3257, Elevated Temperature Liquid, n.o.s.(Asphalt), 9, PG-III
TDG SHIP NAME: Not Determined
DRUM LABEL: Class 9
IATA / ICAO: Not Determined
IMO / IMDG: Not Determined
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 128

**SECTION 15.
REGULATORY INFORMATION**

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.

This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

15.2 STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

15.3 INTERNATIONAL REGULATIONS

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION
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16.1 HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 1, PHYSICAL HAZARD: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals
trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING

See Section 2 (Hazards Identification). Employees should be made aware of
all hazards of this material (as stated in this SDS) before handling it.

16.3 SDS DATE: 06/23/2015

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 06/23/2018.
Safety Data Sheet was prepared by: Chemical Data Services, e-mail: chemdatsrv@aol.com.