



İstanbul :

13.07.2018

Sayı

Our Reference : 2823

Konu

Subject

“Bitümlü Kaplama Astarı ve Asfaltik Astarın ABD/Evyap Limanı Arası
: Deniz Yoluyla Taşıttırılması İşi” Hk.

Sirküler: 426 /2018

Sayın Üyemiz,

Makine ve Kimya Endüstrisi Kurumu Genel Müdürlüğü İkmal Dairesi Başkanlığı'nın 12.07.2018 tarihli yazısı ile;

- Kurumlarının ihtiyacı olan “270 kg. Bitümlü Kaplama Astarı ve 1.293 kg. Hot-Melt Asfaltik Astar”ın sevke hazır olacağı, FOB New York Limanı/New Jersey ABD'den Evyap Limanı (Kocaeli)'na denizyolu ile taşıttırılacağı,

- Yazıları ekinde Güvenlik Bilgi Formları ve ambalaj bilgileri verilen malzemelerin taşınmasına ait informatif tekliflerin, 16/07/2018 Pazartesi günü saat 16.00'a kadar Başkanlıklarına gönderilmesi, istenmektedir.

İlgi yazı ve ekleri Odamız web sayfasında “www.denizticaretodasi.org.tr” adresinde ana sayfada “Genel” “Ticari” ve “İhale” Duyuruları bölümlerinde yayımlanmaktadır.

Bilgi ve gereğini arz ve rica ederiz.

Saygılarımızla,

İsmail ASASOĞLU
Genel Sekreter V.

Ek: İlgi yazı ve Ek'leri (15 sayfa – Web'te)

GEREĞİ:

- Tüm Üyeler (Web'te)
- Türk Armatörler Birliği
- S.S. Gemi Arm. Mot. Taş. Koop.
- Vapur Donatanları ve Acenteleri Derneği
- TAİS
- 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 29, 40,
27, 28 No.lu Meslek Grubu Üyeleri

BİLGİ:

- Makina ve Kimya Endüstrisi Kurumu
Gen. Müd. İkmal Dairesi Başkanlığı
- Yönetim Kurulu Bşk. ve Üyeleri

Ayrıntılı Bilgi: Meryem ÇELİK

Telefon: +90 212 252 01 30 (254)

E-mail: meryem.celik@denizticaretodasi.org.tr



Meclis-i Mebusan Caddesi No: 22
Te! : +90 212 252 01 30 (Pbx)
www.denizticaretodasi.org.tr
www.chamberofshipping.org.tr

34427 Fındıklı - Beyoğlu - İSTANBUL / TÜRKİYE
Fax : +90 212 293 79 35
E-mail : iletisim@denizticaretodasi.org.tr
E-mail : contact@chamberofshipping.org.tr



Mehmet KILIÇ

Kimden: MKE İkmal Dairesi Supply <supply@mkek.gov.tr>
Gönderme Tarihi: 12 Temmuz 2018 Perşembe 16:37
Konu: Bitümlü Kaplama Astarı ve Asfaltik Astarın ABD/Evyap Limanı Arası Deniz Yoluyla Taşıttırılması İşi
Ekler: MSDS-ASPHALTUM COMPOUND(1).pdf; MSDS-COATING COMPOUND, BI(1).pdf
Önem: Yüksek

Sayın Yetkili,

Kurumumuz ihtiyacı, 270 kg. Bitümlü Kaplama Astarı ve 1.293 kg. Hot-Melt Asfaltik Astar sevke hazır olup FOB New York/New Jersey ABD'den Evyap Limanı (Kocaeli)'na deniz yolu ile taşıttırılacaktır.

Ekte Güvenlik Bilgi Formları ve aşağıda ambalaj bilgileri verilen malzemelerin taşınmasına ait informatif tekliflerinizin, **16/07/2018 Pazartesi günü saat 16.00'a kadar** Başkanlığımıza iletilmesini rica ederiz.

Malzeme : Bitümlü Kaplama Astarı (Hazmat: UN1263, Paint, Class 3, PG II)
Palet Adedi : 1 adet
Brüt Ağırlık : Yaklaşık 340 kg

Malzeme : Asfaltik Astar ("Non-Hazmat")
Palet Adedi : 4 adet
Brüt Ağırlık : Yaklaşık 1.385 kg

Berçem DURAN

Proje Alımları Şube Müdürü

Ahmet KONUR

İkmal Dairesi
Başkanı

GİZLİLİK NOTU: Bu mesaj ve ekleri mesajda gönderildiği belirtilen kişi/kişilere özeldir ve gizlidir. Bu mesajın muhatabı olmamanıza rağmen tarafınıza ulaşmış olması halinde mesaj içeriğinin gizliliği ve bu gizlilik yükümlülüğüne uyulması zorunluluğu tarafınız için de söz konusudur. Mesaj ve eklerinde yer alan bilgilerin doğruluğu ve güncelliği konusunda gönderenin ya da kurumumuzun herhangi bir sorumluluğu bulunmamaktadır. Kurumumuz mesajın ve bilgilerinin size değişikliğe uğrayarak veya geç ulaşmasından, bütünlüğünün ve gizliliğinin korunamamasından, virüs içermesinden ve bilgisayar sisteminize verebileceği herhangi bir zarardan sorumlu tutulamaz. © MKE Kurumu 2018



MIL-SPEC INDUSTRIES CORP.

e-mail: info@mil-spec-industries.com
<http://www.mil-spec-industries.com>

42 Herb Hill Road • Glen Cove, NY 11542
Tel: (516) 625-5787 • Fax: (516) 625-0988

MATERIAL SAFETY DATA SHEET

HAZARD RATING	Fire
4 - EXTREME	1
3 - HIGH	Health 1 0 Reactivity
2 - MODERATE	
1 - SLIGHT	Special
0 - INSIGNIFICANT	

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ASPHALTUM COMPOUND

MANUFACTURER/SUPPLIER:

Mil-Spec Industries Corp.
42 Herb Hill Road
Glen Cove, NY 11542

TELEPHONE NUMBER: 1-516-625-5787

EMERGENCY NUMBER: 1-800-255-3924 (US/Canada), +1-813-248-0585 (International)

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

DATE: August 25, 2011

Components	CAS #	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Gilsonite	12002-43-6	0-30	N. A.	N. A.	None
Wax		2-25	N. A.	N. A.	None
Hazardous Components	CAS #	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Asphalt	8052-42-4	50-98	N. E.	*5mg/m ³	*5mg/m ³ (NIOSH)

* = Exposure guidelines for Fumes from heating

N.E. -- Not Established

N.A. = Not Applicable

PEL = Permissible Exposure Limits

TLV = Threshold Limit Value

OSHA = Occupational Safety and Health Administration

ACGIH = American Conference of Governmental Industrial Hygienists

NIOSH = National Institute for Occupational Safety and Health

SECTION 3 - HAZARDS IDENTIFICATION

Potential Health Effects:

Thermal burns may result from contact with hot material

Fumes from hot material can be unpleasant and may cause nausea, headache, eye, and respiratory irritation.

Some asphalt contain sulfur compounds which may form hydrogen sulfide (H₂S) when heated. The rotten eggs odor of H₂S is unreliable as an indicator of concentration because it may be entirely masked by the odor of the asphalt. Signs and symptoms of overexposure to H₂S include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbance, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H₂S concentrations of 700-1000 ppm can be extremely hazardous or fatal.

SECTION 4 - FIRST AID MEASURES

- Eye Contact: if the hot material should splash into the eyes, flush eyes immediately with plenty of water while holding the eyelids open. Seek medical attention.
- Skin Contact: If the hot material gets on skin, quickly cool in water. Get medical attention for extensive burns. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.
- Inhalation: If there are signs or symptoms as described in this MSDS due to breathing this material, move the person to fresh air. If breathing has stopped, apply artificial respiration and get medical attention.
- Ingestion: Since this material is not expected to be an ingestion problem, no first aid procedures are required.

SECTION 5 - FIRE FIGHTING MEASURES

- Flash Point (C.O.C.): 500°F (260°C) Minimum
- Dust Explosivity Limits: Not Applicable
- Extinguishing Media: Carbon dioxide (CO₂), dry chemical, foam or water spray (fog).
- Fire Fighting Procedures: Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.
- Unusual Fire Hazards: When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Eliminate sources of ignition. Recover free product. Add sand, earth, or other suitable absorbent to spill area. Let cool and solidify. Scrape up into suitable containers.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

SECTION 7 - HANDLING AND STORAGE

Health Studies have shown that many petroleum hydrocarbons pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. Adhere to good hygienic practices. Avoid open flames.

Store in a cool, dry place, out of direct sunlight and away from heat, sparks and open flame.

Toxic quantities of hydrogen sulfide (H₂S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should exercise caution.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Use supplied-air respirator in confined areas or when vapors exceed TLV limits.

Ventilation:	Local Exhaust:	In enclosed areas. Special: None
	Mechanical:	In enclosed areas. Other: None
Eye Protection:		Safety glasses or face shield for hot material.
Protective Gloves:		Insulated for hot material.
Other Protective Clothing Equipment:		Long sleeves and impervious clothing to protect against splashed hot material.
Work/Hygienic Practices:		See Section 7.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Black solid, cold. Asphalt odor		
Vapor Pressure (mm Hg.) @ 20°C:	< 0.1		
Boiling Point °F IBP Approx.:	900	Evaporation Rate (Butyl Acetate =1) @ 77°F:	< 0.01
Melting Point °F (Ring & Ball):	150-400	Vapor Density (Air = 1):	> 5
Solubility in water:	Negligible	Flash Point (C.O.C.):	500°F Min.
Specific Gravity (H ₂ O =1):	.95 – 1.05		

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	Do not overheat product. Auto-ignition may occur if heated beyond 600 F.
Incompatibility (Materials to Avoid):	May react with strong oxidizing materials.
Hazardous Decomposition or Byproducts:	Combustion: carbon dioxide (CO ₂), carbon monoxide (CO), sulfur oxides (SO _x), hydrogen sulfide (H ₂ S), smoke, fumes.
Hazardous Polymerization:	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

The cool solid material is not expected to cause eye and skin irritation, nor is it expected to have acute systemic toxicity by ingestion.

See additional health data for hot material health effect.

Carcinogenicity:	NTP? <u>No</u>	IARC Monograph? <u>See Section 16</u>	OSHA Regulated? <u>No</u>
------------------	----------------	---------------------------------------	---------------------------

SECTION 12 - ECOLOGICAL INFORMATION

EPA Hazard Classification Code:

Acute Hazard: _____ Chronic Hazard: _____ Fire Hazard: _____ Pressure Hazard: _____
Reactive Hazard: _____ Not Applicable: X

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

The Description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

Solid: Non Hazardous, Non Regulated

Hot Liquid:

DOT Shipping Name: Asphalt
DOT Label Information: Elevated temperature material, liquid, n.o.s. (asphalt)
DOT Hazard Class: 9 (Miscellaneous)
DOT ID Number: NA 3257
DOT Packing Group: III

SECTION 15 - REGULATORY INFORMATION

SARA TITLE III - EPA Regulation 40 CFR 302 (CERCLA Section 102); CFR 355 (SARA Section 301-304);
CFR 372 (SARA Section 311-3 13) - NOT APPLICABLE

EPA HAZARD CLASSIFICATION CODE: Acute Hazard/Chronic Hazard/Fire Hazard/Pressure Hazard/Reactive
Hazard - NOT APPLICABLE.

TOSCA, CANADIAN DSL: All components of this product are on the TOSCA and DSL inventories.

SECTION 16 - OTHER INFORMATION

ADDITIONAL HEALTH DATA:

No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) has recently reviewed the carcinogenic potential of asphalts. They concluded that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate, mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any serious effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes, or vapors should be reduced to a minimum. We strongly recommend that the precautions outlined in this MSDS be followed when handling this material.

Date of Last Revision: August 25, 2011.

This 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. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for his own particular use.



MIL-SPEC INDUSTRIES CORP.

e-mail: info@mil-spec-industries.com
<http://www.mil-spec-industries.com>

42 Herb Hill Road • Glen Cove, NY 11542
Tel: (516) 625-5787 • Fax: (516) 625-0988

MATERIAL SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY INFORMATION

- 1.1 Product identifier**
Product Name: Coating Compound, BI
Description: Mil-DTL-450D, Composition L, Type II
GHS Product Identifier: Not applicable.
Chemical Name: Not applicable.
CAS No.: Mixture
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified use(s): Protective Coating
Uses advised against: None.
- 1.3 Details of the supplier of the safety data sheet**
Manufacturer/Supplier: Mil-Spec Industries Corp.
42 Herb Hill Road
Glen Cove, NY 11542
(516) 625-5787
Telephone Number: (516) 625-5787
- 1.4 Emergency telephone number**
Emergency Phone No.: 1-800-255-3924 (US/Canada),
+1-813-248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
OSHA HCS (29 CFR 1910.1200): NSN: 8030-00-290-5141
- 2.2 Label elements**
Hazard Symbol: Not applicable
Hazard statement(s): Danger - Causes skin irritation.
Flammable liquid and vapor.
Precautionary statement(s): Wash hands and exposed skin after use.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
Avoid breathing vapors.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- 2.3 Other hazards**
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Toxic to aquatic life with long lasting effects.
This product may give rise to hazardous fumes in a fire. - Hydrogen sulfide

2.4 Additional Information



NFPA Rating



HMIS (Hazardous Material Information System)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances - Not applicable

3.2 Mixtures

Hazardous ingredient(s)	% wt.	CAS No.	Hazard statement(s)
Ligroine	50%	8032-32-4	Highly flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.
Asphalt, oxidized*	45%	64742-93-4	Probably carcinogenic to humans.
Xylene	0 - 5%	1330-20-7	Flammable liquid and vapor. Harmful by inhalation and in contact with skin. Causes skin irritation.
Ethylbenzene	0 - 1%	100-41-4	Flammable liquid and vapor. Harmful by inhalation.

*Contains: Polycyclic Aromatic Compounds (PACs). See Section: 15.

Other Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

None

3.3 Additional information - None

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

Move person to fresh air. Apply artificial respiration if necessary. Administer oxygen if necessary. If symptoms occur obtain medical attention.

Skin Contact

Wash skin with soap and water. Molten material can cause severe burns. Do NOT try to peel molten material from the skin. Cool rapidly with water. If symptoms occur obtain medical attention.

Eye Contact

If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Get medical attention if eye irritation develops or persists.

Ingestion

Drink one glass of water. Do not give anything by mouth to an unconscious person. Do not induce vomiting. Call a physician (or poison control center immediately).

- | | |
|---|---|
| 4.2 Most important symptoms and effects, both acute and delayed | Treat patient as for inhalation. Hydrogen sulfide |
| 4.3 Indication of the immediate medical attention and special treatment needed | None known |

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- | | |
|---------------------------------|--|
| -Suitable Extinguishing Media | Extinguish preferably with foam, carbon dioxide or dry chemical. |
| -Unsuitable Extinguishing Media | Water spray should be used to cool containers. May react violently with water. |

- | | |
|--|--|
| 5.2 Special hazards arising from the substance or mixture | Combustion causes toxic fumes. Combustion products: Hydrogen sulfide, Sulfur oxides, Carbon dioxide, Carbon monoxide |
|--|--|

- | | |
|-------------------------------------|---|
| 5.3 Advice for fire-fighters | A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire. Keep upwind. |
|-------------------------------------|---|

SECTION 6: ACCIDENTAL RELEASE MEASURES

- | | |
|--|-----------------------------------|
| 6.1 Personal precautions, protective equipment and emergency procedures | Avoid contact with skin and eyes. |
|--|-----------------------------------|

- | | |
|--------------------------------------|---|
| 6.2 Environmental precautions | Do not allow to enter drains, sewers or watercourses. |
|--------------------------------------|---|

- | | |
|---|---|
| 6.3 Methods and material for containment and cleaning up | Eliminate sources of ignition. Stop leak if safe to do so. Ensure adequate ventilation. Contain spillages with sand, earth or any suitable adsorbent material. Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorized waste disposal contractor. |
|---|---|

- | | |
|--|-------|
| 6.4 Reference to other sections | None. |
|--|-------|

- | | |
|-----------------------------------|-------|
| 6.5 Additional Information | None. |
|-----------------------------------|-------|

SECTION 7: HANDLING AND STORAGE

- | | |
|--|---|
| 7.1 Precautions for safe handling | Eliminate sources of ignition. Avoid inhalation and contact with eyes or skin. Ensure adequate ventilation. |
|--|---|

7.2 Conditions for safe storage, including any incompatibilities

- | | |
|-------------------------|--|
| -Storage Temperature | Keep in a cool, well ventilated place. |
| -Incompatible materials | Strong oxidizing agents. |

- | | |
|--------------------------------|--------------------|
| 7.3 Specific end use(s) | Protective Coating |
|--------------------------------|--------------------|

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	(8hr TWA)		STEL		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Ligroine	8032-32-4	----	350 mg/m3	----	1800 mg/m3	
Asphalt, oxidized	64742-93-4	----	5 mg/m3	----	-----	Fume
Xylene	1330-20-7	100 ppm	100 ppm	----	150 ppm	
Ethylbenzene	100-41-4	100 ppm	20 ppm	----	----	

8.1.2 Recommended monitoring method

NIOSH 1501 & NIOSH 1550 & NIOSH 5042

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Keep container closed when not in use. Use only with adequate ventilation to keep exposures (airborne levels of dust, fume, vapor etc.) below recommended exposure limits. Keep upwind.

8.2.2 Personal protection equipment

Eye/face protection



Wear protective eye glasses for protection against liquid splashes.

Skin protection (Hand protection/other)



Avoid skin contact. Wear suitable protective clothing and gloves. Gloves should be changed if excessive exposure has occurred.

Respiratory protection:



In case of inadequate ventilation wear respiratory protection. Use NIOSH approved respiratory protection.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

8.2.3 Environmental Exposure Controls

Do not discharge waste and/or cleaning water via public sewer system. Ensure waste is collected and contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Viscous liquid
Color	Black
Odor	Hydrocarbon solvent
Odor Threshold (ppm)	Not available.
pH (Value)	Not available.
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	93-149 (200-300 °F)
Flash Point (°C)	13 (55 °F) [Closed cup]
Evaporation rate	Not available.

Flammability (solid, gas)	Not applicable.
Explosive limit ranges	Not applicable.
Vapor Pressure (Pascal)	Not determined.
Vapor Density (Air=1)	Not determined.
Density (g/ml)	0.8 - 1.0
Solubility (Water)	Negligible
Solubility (Other)	Not known
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Temperature (°C)	Not determined.
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (cSt) @ 40°C	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

9.2 Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	May react violently with: Strong oxidizing agents, Water.
10.4 Conditions to avoid	Heat.
10.5 Incompatible materials	Oxidizers. May react violently with water.
10.6 Hazardous Decomposition Product(s)	Combustion causes toxic fumes. Combustion products: Hydrogen sulfide, Oxides of carbon, Sulfur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Substances

Not applicable

11.1.2 Mixtures

Acute toxicity	Not available.
Irritation	Not available.
Corrosivity	Not available.
Sensitization	Not available.
Repeated dose toxicity	Not available.
Carcinogenicity	Not available.
Mutagenicity	Not available.
Toxicity for reproduction	Not available.

11.1.3 Substances in preparations / mixtures

Ligroine (CAS No. 8032-32-4)

Acute toxicity

- Oral: LD50 > 5000 mg/kg (rat)
- Dermal: LD50 > 2000 mg/kg (rabbit)
- Inhalation: LC50 > 7630 mg/m³ (rat)
- Causes skin irritation.
- It is not a skin sensitizer.

Repeated dose toxicity

- NOEL < 200 mg/m³ (Dermal Irritation)
- NOAEC - 9640 mg/m³ (Inhalation)

Carcinogenicity: No evidence of carcinogenicity.

Asphalt (CAS No. 64742-93-4)

Carcinogenicity

- Dermal tumors (mouse)
- Inhalation (rat): No evidence of carcinogenicity.

NTP	IARC	ACGIH	OSHA
No.	Group 2A; Probably carcinogenic to humans.	A4; Not classifiable as human carcinogen	No.

Xylene (CAS No. 1330-20-7)

Acute toxicity

- Oral LD50 (rat): 3523 mg/kg -bw (males), >4000 mg/kg-bw (females)
- Inhalation LC50 (rat), 4 hour(s): 27 - 29 mg/l
- Dermal LD50 (rabbit): >4200 mg/kg-bw
- Irritant: Irritating to eyes and skin.

Repeated dose toxicity

- NOEL (rat) oral, 13 week(s): 150 mg/kg
- NOAEC (rat): ≥810 ppm; 6 hour(s)/ Days, 5 days/week(s), 13 week(s).

Carcinogenicity: Probably not carcinogenic to humans.

Ethylbenzene (CAS No. 100-41-4)

Acute toxicity

- Oral LD50 (rat): ≈3500 mg/kg-bw
- Inhalation RD50 (mouse), 5 minutes, 50% reduction in reflex respiratory rate: 6.2 mg/l
- Dermal LD50 (rabbit): ≈15 g/kg-bw
- Irritant: Irritating to eyes and skin.

Repeated dose toxicity

- NOAEL (rat) oral, 28 days: 75 mg/kg-bw
- NOAEC (rat) Inhalation, 28 days: 800 ppm

Carcinogenicity: Probably not carcinogenic to humans.

11.2 Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Substances in preparations / mixtures

Ligroïne (CAS No. 8032-32-4)

- NOEL = 4.5 mg/l (96 hour) (*Oncorhynchus mykiss*)
- LL50 = 5.2 mg/l (14 days) (*Pimephales promelas*)
- EL50 = 4.5 mg/l (48 hour) (*Daphnia magna*)
- NOELR = 2.6 mg/l (21 days) (*Daphnia magna*)

Asphalt (CAS No 64742-93-4)

- Not harmful to aquatic organisms.

Xylene (CAS No. 1330-20-7)

- Fish: LC50 (96 hour) - 2.6 mg/l (*Oncorhynchus mykiss*)
- Fish: NOEC (56 days) - >1.3 mg/l (*Oncorhynchus mykiss*)
- Aquatic invertebrates: IC50 (24 hour(s)) - 1 mg/l (*Daphnia magna*)
- Aquatic plants: EC50 (73 hour(s)) - 1.9 mg/l (*Pseudokirchnerella subcapitata*)

Ethylbenzene (100-41-4)

- Fish: LC50 (96 hour) - 4.2 mg/l (*Oncorhynchus mykiss*)
- Aquatic invertebrates: EC50 (48 hour) - 1.8 - 2.4 mg/l (*Daphnia magna*)
- Aquatic plants: EC50 (72 hour) - 5.4 mg/l (*Pseudokirchnerella subcapitata*)

12.2 Persistence and degradability

The product is not biodegradable.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

- Asphalt (CAS No. 64742-93-4)
- Ligroine (CAS No. 8032-32-4)
- Xylene (CAS No. 1330-20-7)
- Ethylbenzene (CAS No. 100-41-4)

The substance has low mobility in soil.
The substance has high mobility in soil.
The substance has high mobility in soil.
The substance has moderate mobility in soil.

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

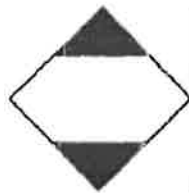
13.2 Additional Information

None known.

SECTION 14: TRANSPORT INFORMATION

14.1 Ground or Water Domestic Voyage

If shipped in 0.26 gallon cans (1L) or less:
UN1263, Paint, 3, II, Ltd. Qty.



If shipped in 1 or 5 gallon pails (3.8L or 18.9L):
UN1263, Paint, 3, II



If shipped in 55 gallon drums (208L) or bulk:

UN1263, Paint, 3, II, (contains Benzo[a]pyrene and Benzo[b]fluoranthene), RQ



Non-bulk



Bulk

14.2 Sea transport (IMDG)

If shipped in 13 gallon cans (5L) or less:
UN1263, Paint, 3, II, (13°C c.c.), Ltd. Qty.



If shipped in 5 gallon pails (18.9L):
UN1263, Paint, 3, II, (13°C c.c.)

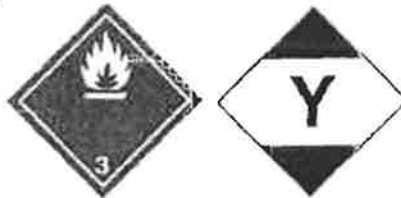


If shipped in 55 gallon drums (208L):
UN1263, Paint, 3, II, (13°C c.c.), (contains Benzo[a]pyrene and Benzo[b]fluoranthene), RQ



14.3 Air transport (ICAO/IATA)

If shipped in 0.13 gallon cans (0.5L) or less and net per package 0.26 gallons (1L):
UN1263, Paint, 3, II, Ltd. Qty.



If shipped in 1 or 5 gallon pails (3.8L or 18.9L):
UN1263, Paint, 3, II



SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

RCRA Hazardous Waste Number (40 CFR 261.33): F003, U239

US RCRA Hazard Class: Ignitable or ToxicWaste

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)	Qty [^] (Pounds)	Qty [^] (Gallons)
Xylene (mixed isomers)	1330-20-7	0 - 5	100	2,000	200

[^]Quantity of spill to reach RQ. **See Proposition 65 (California)*

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
Xylene (mixed isomers)	1330-20-7	3.5-5.6
Polycyclic Aromatic Compounds (PACs)	Category No. N590	16.5

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
----	----	----	----

Proposition 65 (California): "WARNING: This product contains chemicals known to the State of California to cause cancer." See above - **

SECTION 16: OTHER INFORMATION

Additional Information

None

The following sections contain revisions or new statements: 1-16.

Date of Last Revision: December 1, 2014.

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Mil-Spec Industries gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Mil-Spec Industries accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.