

## SAFETY DATA SHEET

### 1. Identification

<b>Product identifier</b>	<b>Tapecoat TC Mastic</b>	
<b>Other means of identification</b>		
<b>Synonyms</b>	Roskote A51 Low VOC	
<b>Recommended use</b>	Not available.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Chase Corporation - Tapecoat Division	
<b>Address</b>	1527 Lyons Street Evanston, IL 60201 United States	
<b>Telephone</b>	General Assistance	800 543-3458
<b>E-mail</b>	info@chasecorp.com	
<b>Emergency phone number</b>	Chemtrec (US - 24 hrs)	800 424-9300
	Chemtrec (INTL - 24 hrs)	703-527-3887

### 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	

#### Label elements



**Signal word**

Danger

**Hazard statement**

Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

## Precautionary statement

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

### Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. 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 exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

### Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### Disposal

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

### Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Pitch, Coal Tar, High-temp.		65996-93-2	40 - < 50
TOLUENE		108-88-3	20 - < 30
METHYL ETHYL KETONE		78-93-3	3 - < 5
Coal Tar Pitch		8007-45-2	1 - < 3
Other components below reportable levels			30 - < 40

### Constituents

Chemical name	Common name and synonyms	CAS number	%
Fluoranthene		206-44-0	2 - 2.75
Phenanthrene		85-01-8	1.8 - 2.5
Pyrene		129-00-0	1.5 - 2
1,2-benzanthracene		56-55-3	0.7 - 1
1,2-benzphenanthrene		218-01-9	0.7 - 1
Benzo(a) Pyrene		50-32-8	0.7 - 1
Benzo[ghi]perylene		191-24-2	0.5 - 1
Benzo (b) Fluoranthene		205-99-2	0.5 - 0.7
Indeno[1,2,3-cd]pyrene		193-39-5	0.5 - 0.7
Dibenzo(a,h)pyrene		189-64-0	0.4 - 0.6
Benzo[j]fluoranthene		205-82-3	0.4 - 0.5
Benzo[k]fluoranthene		207-08-9	0.4 - 0.5
Carbazole		86-74-8	0.3 - 0.4
Acenaphthene		83-32-9	0.2 - 0.3
Dibenzo(a,e)pyrene		192-65-4	0.15 - 0.25
Dibenz[a,h]anthracene		53-70-3	0.15 - 0.15
Dibenzo[a,i]pyrene		189-55-9	0.15 - 0.15
Naphthalene		91-20-3	0.02 - 0.15

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### Composition comments

Occupational Exposure Limits for constituents are listed in Section 8. All the Constituents listed are part of the Coal Tar Pitch (25036-25-3).

## 4. First-aid measures

### Inhalation

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.

<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Highly flammable liquid and vapor.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
METHYL ETHYL KETONE (CAS 78-93-3)	PEL	590 mg/m3 200 ppm
Pitch, Coal Tar, High-temp. (CAS 65996-93-2)	PEL	0.2 mg/m3

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
TOLUENE (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
Pitch, Coal Tar, High-temp. (CAS 65996-93-2)	TWA	0.2 mg/m3	Aerosol.
TOLUENE (CAS 108-88-3)	TWA	20 ppm	

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	TWA	10 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	885 mg/m3	
		300 ppm	
	TWA	590 mg/m3 200 ppm	
Pitch, Coal Tar, High-temp. (CAS 65996-93-2)	TWA	0.1 mg/m3	Cyclohexane-extractable fraction.
TOLUENE (CAS 108-88-3)	STEL	560 mg/m3 150 ppm	
	TWA	375 mg/m3 100 ppm	
<b>Constituents</b>	<b>Type</b>	<b>Value</b>	
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3 15 ppm	
	TWA	50 mg/m3 10 ppm	

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
METHYL ETHYL KETONE (CAS 78-93-3)	2 mg/l	MEK	Urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
<b>Constituents</b>	<b>Value</b>	<b>Determinant</b>	<b>Specimen</b>	<b>Sampling Time</b>
1,2-benzanthracene (CAS 56-55-3)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
1,2-benzphenanthrene (CAS 218-01-9)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Benzo(a) Pyrene (CAS 50-32-8)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Benzo[ghi]perylene (CAS 191-24-2)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Pyrene (CAS 129-00-0)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Phenanthrene (CAS 85-01-8)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Fluoranthene (CAS 206-44-0)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*

**ACGIH Biological Exposure Indices**

Constituents	Value	Determinant	Specimen	Sampling Time
Dibenz[a,h]anthracene (CAS 53-70-3)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Dibenzo[a,i]pyrene (CAS 189-55-9)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Dibenzo(a,e)pyrene (CAS 192-65-4)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Acenaphthene (CAS 83-32-9)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Benzo[j]fluoranthene (CAS 205-82-3)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Benzo[k]fluoranthene (CAS 207-08-9)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Dibenzo(a,h)pyrene (CAS 189-64-0)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Benzo (b) Fluoranthene (CAS 205-99-2)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.  
 TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

TOLUENE (CAS 108-88-3) Skin designation applies.

**US ACGIH Threshold Limit Values: Skin designation**

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Observe any medical surveillance requirements. When using do not smoke. 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

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Viscous Liquid.
<b>Color</b>	Black.
<b>Odor</b>	Aromatic Solvent.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-138.82 °F (-94.9 °C) estimated
<b>Initial boiling point and boiling range</b>	231.08 °F (110.6 °C) estimated
<b>Flash point</b>	40.0 °F (4.4 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	1.3 % estimated
<b>Flammability limit - upper (%)</b>	7 % estimated
<b>Explosive limit - lower (%)</b>	1.8 %
<b>Explosive limit - upper (%)</b>	11.5 %
<b>Vapor pressure</b>	12.29 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	896 °F (480 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

### Other information

<b>Density</b>	9.80 g/cm <sup>3</sup> estimated
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Flammable IB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	40 - 50 %
<b>Specific gravity</b>	1.2 estimated
<b>VOC</b>	< 250 g/l

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.  
**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.  
**Skin contact** Causes skin irritation.  
**Eye contact** Direct contact with eyes may cause temporary irritation.  
**Ingestion** Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

**Symptoms related to the physical, chemical and toxicological characteristics** Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

### Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways.

Components	Species	Test Results
METHYL ETHYL KETONE (CAS 78-93-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 8000 mg/kg
<b>Oral</b>		
LD50	Rat	2300 - 3500 mg/kg
TOLUENE (CAS 108-88-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12120 mg/kg
<b>Oral</b>		
LD50	Rat	2.6 g/kg
Constituents	Species	Test Results
Naphthalene (CAS 91-20-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2 g/kg
Carbazole (CAS 86-74-8)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Benzo(a) Pyrene (CAS 50-32-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	725 mg/kg
Phenanthrene (CAS 85-01-8)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	700 mg/kg



Constituents	Species	Test Results
Fluoranthene (CAS 206-44-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	3180 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	May cause genetic defects.	
<b>Carcinogenicity</b>	May cause cancer.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
1,2-benzanthracene (CAS 56-55-3)		2B Possibly carcinogenic to humans.
1,2-benzphenanthrene (CAS 218-01-9)		2B Possibly carcinogenic to humans.
Acenaphthene (CAS 83-32-9)		3 Not classifiable as to carcinogenicity to humans.
Benzo (b) Fluoranthene (CAS 205-99-2)		2B Possibly carcinogenic to humans.
Benzo(a) Pyrene (CAS 50-32-8)		1 Carcinogenic to humans.
Benzo[ghi]perylene (CAS 191-24-2)		3 Not classifiable as to carcinogenicity to humans.
Benzo[j]fluoranthene (CAS 205-82-3)		2B Possibly carcinogenic to humans.
Benzo[k]fluoranthene (CAS 207-08-9)		2B Possibly carcinogenic to humans.
Carbazole (CAS 86-74-8)		2B Possibly carcinogenic to humans.
Coal Tar Pitch (CAS 8007-45-2)		1 Carcinogenic to humans.
Dibenz[a,h]anthracene (CAS 53-70-3)		2A Probably carcinogenic to humans.
Dibenzo(a,e)pyrene (CAS 192-65-4)		3 Not classifiable as to carcinogenicity to humans.
Dibenzo(a,h)pyrene (CAS 189-64-0)		2B Possibly carcinogenic to humans.
Dibenzo[a,i]pyrene (CAS 189-55-9)		2B Possibly carcinogenic to humans.
Fluoranthene (CAS 206-44-0)		3 Not classifiable as to carcinogenicity to humans.
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)		2B Possibly carcinogenic to humans.
Naphthalene (CAS 91-20-3)		2B Possibly carcinogenic to humans.
Phenanthrene (CAS 85-01-8)		3 Not classifiable as to carcinogenicity to humans.
Pitch, Coal Tar, High-temp. (CAS 65996-93-2)		1 Carcinogenic to humans.
Pyrene (CAS 129-00-0)		3 Not classifiable as to carcinogenicity to humans.
TOLUENE (CAS 108-88-3)		3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b>		
Not regulated.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
1,2-benzanthracene (CAS 56-55-3)		Reasonably Anticipated to be a Human Carcinogen.
Benzo (b) Fluoranthene (CAS 205-99-2)		Reasonably Anticipated to be a Human Carcinogen.
Benzo(a) Pyrene (CAS 50-32-8)		Reasonably Anticipated to be a Human Carcinogen.
Benzo[j]fluoranthene (CAS 205-82-3)		Reasonably Anticipated to be a Human Carcinogen.
Benzo[k]fluoranthene (CAS 207-08-9)		Reasonably Anticipated to be a Human Carcinogen.
Dibenz[a,h]anthracene (CAS 53-70-3)		Reasonably Anticipated to be a Human Carcinogen.
Dibenzo(a,e)pyrene (CAS 192-65-4)		Reasonably Anticipated to be a Human Carcinogen.
Dibenzo(a,h)pyrene (CAS 189-64-0)		Reasonably Anticipated to be a Human Carcinogen.
Dibenzo[a,i]pyrene (CAS 189-55-9)		Reasonably Anticipated to be a Human Carcinogen.
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)		Reasonably Anticipated to be a Human Carcinogen.
Naphthalene (CAS 91-20-3)		Reasonably Anticipated to be a Human Carcinogen.
Pitch, Coal Tar, High-temp. (CAS 65996-93-2)		Known To Be Human Carcinogen.
<b>Reproductive toxicity</b>	May damage fertility or the unborn child.	
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.	
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure.	
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.	
<b>Chronic effects</b>	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

## 12. Ecological information

### Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species		Test Results
Tapecoat TC Mastic			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	46.4498 mg/l, 48 hours estimated
Fish	LC50	Fish	399.551 mg/l, 96 hours estimated

Components	Species		Test Results
METHYL ETHYL KETONE (CAS 78-93-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours

TOLUENE (CAS 108-88-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

Constituents	Species		Test Results
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Naphthalene (CAS 91-20-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	1.11 - 1.68 mg/l, 96 hours

Acenaphthene (CAS 83-32-9)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1.102 - 1.475 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.52 - 0.71 mg/l, 96 hours

Carbazole (CAS 86-74-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	2.3 - 4.88 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.93 mg/l, 96 hours

Pyrene (CAS 129-00-0)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	> 2 mg/l, 96 hours

Phenanthrene (CAS 85-01-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	0.185 - 0.243 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	0.438 - 0.523 mg/l, 96 hours

Fluoranthene (CAS 206-44-0)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	0.0054 - 0.0085 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)	
METHYL ETHYL KETONE	0.29
TOLUENE	2.73

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F  
D035: Waste Methyl ethyl ketone  
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### US RCRA Hazardous Waste U List: Reference

1,2-benzanthracene (CAS 56-55-3)	U018
1,2-benzphenanthrene (CAS 218-01-9)	U050
Benzo(a) Pyrene (CAS 50-32-8)	U022
Dibenz[a,h]anthracene (CAS 53-70-3)	U063
Dibenzo[a,i]pyrene (CAS 189-55-9)	U064
Fluoranthene (CAS 206-44-0)	U120
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)	U137
Naphthalene (CAS 91-20-3)	U165

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

<b>UN number</b>	UN1139
<b>UN proper shipping name</b>	Coating Solution (include surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) (TOLUENE RQ = 4545 LBS, METHYL ETHYL KETONE RQ = 166667 LBS)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB2, T7, TP1, TP8, TP28
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	242

#### IATA

<b>UN number</b>	UN1139
<b>UN proper shipping name</b>	Coating Solution (include surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) (TOLUENE, METHYL ETHYL KETONE)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	3H
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

#### IMDG

<b>UN number</b>	UN1139
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**UN proper shipping name** Coating Solution (include surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) (TOLUENE, METHYL ETHYL KETONE), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 3

**Subsidiary risk** -

**Packing group** II

**Environmental hazards**

**Marine pollutant** Yes

**EmS** F-E, S-E

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

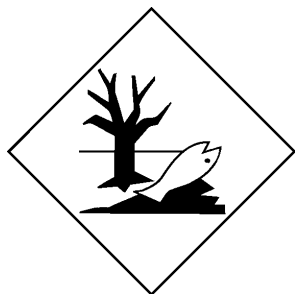
**DOT**



**IATA; IMDG**



**Marine pollutant**



**General information** IMDG Regulated Marine Pollutant.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Coal Tar Pitch (CAS 8007-45-2) 0.1 % One-Time Export Notification only.

### CERCLA Hazardous Substance List (40 CFR 302.4)

1,2-benzanthracene (CAS 56-55-3)	Listed.
1,2-benzphenanthrene (CAS 218-01-9)	Listed.
Acenaphthene (CAS 83-32-9)	Listed.
Benzo (b) Fluoranthene (CAS 205-99-2)	Listed.
Benzo(a) Pyrene (CAS 50-32-8)	Listed.

Benzo[ghi]perylene (CAS 191-24-2)	Listed.
Benzo[k]fluoranthene (CAS 207-08-9)	Listed.
Dibenz[a,h]anthracene (CAS 53-70-3)	Listed.
Dibenzo[a,i]pyrene (CAS 189-55-9)	Listed.
Fluoranthene (CAS 206-44-0)	Listed.
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)	Listed.
METHYL ETHYL KETONE (CAS 78-93-3)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Phenanthrene (CAS 85-01-8)	Listed.
Pyrene (CAS 129-00-0)	Listed.
TOLUENE (CAS 108-88-3)	Listed.

**SARA 304 Emergency release notification**

Pyrene (CAS 129-00-0) 5000 LBS

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Pyrene	129-00-0	5000		1000	10000
<b>Classified hazard categories</b>	Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single or repeated exposure) Aspiration hazard Hazard not otherwise classified (HNOC)				

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
TOLUENE	108-88-3	20 - < 30
1,2-benzanthracene	56-55-3	0.7 - 1
1,2-benzphenanthrene	218-01-9	0.7 - 1
Benzo (b) Fluoranthene	205-99-2	0.5 - 0.7
Benzo(a) Pyrene	50-32-8	0.7 - 1
Benzo[ghi]perylene	191-24-2	0.5 - 1
Benzo[j]fluoranthene	205-82-3	0.4 - 0.5
Benzo[k]fluoranthene	207-08-9	0.4 - 0.5
Dibenz[a,h]anthracene	53-70-3	0.15 - 0.15
Dibenzo(a,e)pyrene	192-65-4	0.15 - 0.25
Dibenzo(a,h)pyrene	189-64-0	0.4 - 0.6
Dibenzo[a,i]pyrene	189-55-9	0.15 - 0.15
Fluoranthene	206-44-0	2 - 2.75
Indeno[1,2,3-cd]pyrene	193-39-5	0.5 - 0.7
Naphthalene	91-20-3	0.02 - 0.15
Phenanthrene	85-01-8	1.8 - 2.5

**Other federal regulations**

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

- 1,2-benzanthracene (CAS 56-55-3)
- 1,2-benzphenanthrene (CAS 218-01-9)
- Acenaphthene (CAS 83-32-9)
- Benzo (b) Fluoranthene (CAS 205-99-2)
- Benzo(a) Pyrene (CAS 50-32-8)
- Benzo[ghi]perylene (CAS 191-24-2)
- Benzo[j]fluoranthene (CAS 205-82-3)
- Benzo[k]fluoranthene (CAS 207-08-9)
- Dibenz[a,h]anthracene (CAS 53-70-3)
- Dibenzo(a,e)pyrene (CAS 192-65-4)
- Dibenzo(a,h)pyrene (CAS 189-64-0)
- Dibenzo[a,i]pyrene (CAS 189-55-9)

Fluoranthene (CAS 206-44-0)  
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)  
Naphthalene (CAS 91-20-3)  
Phenanthrene (CAS 85-01-8)  
Pyrene (CAS 129-00-0)  
TOLUENE (CAS 108-88-3)

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

METHYL ETHYL KETONE (CAS 78-93-3) 6714  
TOLUENE (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

METHYL ETHYL KETONE (CAS 78-93-3) 35 %WV  
TOLUENE (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

METHYL ETHYL KETONE (CAS 78-93-3) 6714  
TOLUENE (CAS 108-88-3) 594

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

METHYL ETHYL KETONE (CAS 78-93-3) Low priority

**US state regulations**

**California Proposition 65**



**WARNING:** This product can expose you to chemicals including Indeno[1,2,3-cd]pyrene, which is known to the State of California to cause cancer, and TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

1,2-benzanthracene (CAS 56-55-3) Listed: July 1, 1987  
1,2-benzphenanthrene (CAS 218-01-9) Listed: January 1, 1990  
Benzo (b) Fluoranthene (CAS 205-99-2) Listed: July 1, 1987  
Benzo(a) Pyrene (CAS 50-32-8) Listed: July 1, 1987  
Benzo[j]fluoranthene (CAS 205-82-3) Listed: July 1, 1987  
Benzo[k]fluoranthene (CAS 207-08-9) Listed: July 1, 1987  
Carbazole (CAS 86-74-8) Listed: May 1, 1996  
Dibenz[a,h]anthracene (CAS 53-70-3) Listed: January 1, 1988  
Dibenzo(a,e)pyrene (CAS 192-65-4) Listed: January 1, 1988  
Dibenzo(a,h)pyrene (CAS 189-64-0) Listed: January 1, 1988  
Dibenzo[a,i]pyrene (CAS 189-55-9) Listed: January 1, 1988  
Indeno[1,2,3-cd]pyrene (CAS 193-39-5) Listed: January 1, 1988  
Naphthalene (CAS 91-20-3) Listed: April 19, 2002

**California Proposition 65 - CRT: Listed date/Developmental toxin**

TOLUENE (CAS 108-88-3) Listed: January 1, 1991

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1,2-benzanthracene (CAS 56-55-3)  
1,2-benzphenanthrene (CAS 218-01-9)  
Acenaphthene (CAS 83-32-9)  
Benzo (b) Fluoranthene (CAS 205-99-2)  
Benzo(a) Pyrene (CAS 50-32-8)  
Benzo[ghi]perylene (CAS 191-24-2)  
Benzo[j]fluoranthene (CAS 205-82-3)  
Benzo[k]fluoranthene (CAS 207-08-9)  
Carbazole (CAS 86-74-8)  
Coal Tar Pitch (CAS 8007-45-2)  
Dibenz[a,h]anthracene (CAS 53-70-3)  
Dibenzo(a,e)pyrene (CAS 192-65-4)  
Dibenzo(a,h)pyrene (CAS 189-64-0)  
Dibenzo[a,i]pyrene (CAS 189-55-9)  
Fluoranthene (CAS 206-44-0)  
Indeno[1,2,3-cd]pyrene (CAS 193-39-5)

METHYL ETHYL KETONE (CAS 78-93-3)  
 Naphthalene (CAS 91-20-3)  
 Phenanthrene (CAS 85-01-8)  
 Pitch, Coal Tar, High-temp. (CAS 65996-93-2)  
 Pyrene (CAS 129-00-0)  
 TOLUENE (CAS 108-88-3)

#### 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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & 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).

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

<b>Issue date</b>	05-19-2015
<b>Revision date</b>	01-11-2019
<b>Version #</b>	03
<b>HMIS® ratings</b>	Health: 3* Flammability: 3 Physical hazard: 0
<b>NFPA ratings</b>	Health: 2 Flammability: 3 Instability: 0
<b>Disclaimer</b>	The information offered in this data sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however, no guarantee is made to its accuracy. 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 other process. This material is intended for industrial use only. No warranty, expressed or implied is made.
<b>Revision information</b>	Product and Company Identification: Product and Company Identification Accidental release measures: Methods and materials for containment and cleaning up Transport information: General information