

## 1. Identification

**Product identifier** Hardhead Coatings White Protective Textured Coating

**Other means of identification**

**Product code** MFI-8003

**Recommended use** Bedliner

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** MFI Systems™ a division of Teknol Inc.

**Address** 5751 N. Webster Street  
Dayton, Ohio 45414  
United States

**Telephone** TECH SUPPORT 937-890-6547  
SALES 937-890-6547  
PHONE 800-257-6547

**Website** www.mfisystems.com

**E-mail** info@rubber-seal.net

**Emergency phone number** EMERGENCY 24 Hrs. 800-424-9300  
(Chemtrec)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Specific target organ toxicity, repeated exposure	Category 1	
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**



**Signal word** Danger

**Hazard statement** Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

## 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. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

### Response

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 in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

### Storage

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

58.32% of the mixture consists of component(s) of unknown acute inhalation toxicity. 85.83% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 85.2% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Acetone		67-64-1	10 - < 30
Titanium Dioxide		13463-67-7	5 - < 20
parachlorobenzotrifluoride		98-56-6	5 - < 15
Toluene		108-88-3	5 - < 15
Xylene		1330-20-7	5 - < 15
Methyl n-Propyl Ketone		107-87-9	0 - < 5
Silicon dioxide		112945-52-5	0 - < 5
Aluminum Hydroxide		21645-51-2	0 < 1
Bis(1, 2, 2, 6, 6-Pentamethyl-4-piperidiny) Sebacate		41556-26-7	0 < 1
Butyl Cellosolve/Glycol Ether EB		111-76-2	0 < 1
Carbon Black		1333-86-4	0 < 1
Dibutyltin Dilaurate		77-58-7	0 < 1
Ethylbenzene		100-41-4	0 < 1
Methyl n-Amyl Ketone		110-43-0	0 < 1
Silica		7631-86-9	0 < 1
Other components below reportable levels			30 - < 40

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

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. 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 warm. 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>	Alcohol resistant foam. Water fog. 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). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. 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. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. 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. 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. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. 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 original 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

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

Components	Type	Value	Form
Acetone (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm	
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	PEL	240 mg/m3 50 ppm	
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m3	
Dibutyltin Dilaurate (CAS 77-58-7)	PEL	0.1 mg/m3	
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3	
Methyl n-Amyl Ketone (CAS 110-43-0)	PEL	100 ppm 465 mg/m3	
Methyl n-Propyl Ketone (CAS 107-87-9)	PEL	100 ppm 700 mg/m3	
Titanium Dioxide (CAS 13463-67-7)	PEL	200 ppm 15 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	PEL	435 mg/m3 100 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. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Silica (CAS 7631-86-9)	TWA	0.8 mg/m3

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value
Silicon dioxide (CAS 112945-52-5)	TWA	20 mppcf
		0.8 mg/m3
		20 mppcf

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Aluminum Hydroxide (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	TWA	20 ppm	
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Dibutyltin Dilaurate (CAS 77-58-7)	STEL	0.2 mg/m3	
	TWA	0.1 mg/m3	
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
Methyl n-Amyl Ketone (CAS 110-43-0)	TWA	50 ppm	
Methyl n-Propyl Ketone (CAS 107-87-9)	STEL	150 ppm	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Toluene (CAS 108-88-3)	TWA	20 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

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

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m3
		250 ppm
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	TWA	24 mg/m3
		5 ppm
Carbon Black (CAS 1333-86-4)	TWA	0.1 mg/m3
Dibutyltin Dilaurate (CAS 77-58-7)	TWA	0.1 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
	TWA	125 ppm
		435 mg/m3
Methyl n-Amyl Ketone (CAS 110-43-0)	TWA	100 ppm
		465 mg/m3
Methyl n-Propyl Ketone (CAS 107-87-9)	TWA	100 ppm
		530 mg/m3
Silica (CAS 7631-86-9)	TWA	150 ppm
		6 mg/m3
Silicon dioxide (CAS 112945-52-5)	TWA	6 mg/m3
Toluene (CAS 108-88-3)	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm

## Biological limit values

### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in 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	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

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

## Exposure guidelines

### US - California OELs: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Can be absorbed through the skin.
Dibutyltin Dilaurate (CAS 77-58-7)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

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

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Skin designation applies.
Dibutyltin Dilaurate (CAS 77-58-7)	Skin designation applies.
Toluene (CAS 108-88-3)	Skin designation applies.

### US - Tennessee OELs: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Can be absorbed through the skin.
Dibutyltin Dilaurate (CAS 77-58-7)	Can be absorbed through the skin.

### US ACGIH Threshold Limit Values: Skin designation

Dibutyltin Dilaurate (CAS 77-58-7)	Can be absorbed through the skin.
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### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Can be absorbed through the skin.
Dibutyltin Dilaurate (CAS 77-58-7)	Can be absorbed through the skin.

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

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Can be absorbed through the skin.
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## 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. Eye wash facilities and emergency shower must be available when handling this product.

## Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Chemical respirator with organic vapor cartridge and full facepiece.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
<b>Other</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
<b>Respiratory protection</b>	Chemical respirator with organic vapor cartridge and full facepiece.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.

## General hygiene considerations

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. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	White
<b>Odor</b>	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>	132.89 °F (56.05 °C) estimated
<b>Flash point</b>	-4.0 °F (-20.0 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	1.3 % estimated
<b>Flammability limit - upper (%)</b>	12.8 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	939.99 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>	869 °F (465 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	1.51 g/cm <sup>3</sup> estimated
<b>Flammability class</b>	Flammable IB estimated
<b>Percent volatile</b>	38.94 w/w % By Weight 50.13 v/v % By Volume
<b>Specific gravity</b>	1.51 estimated
<b>VOC (Weight %)</b>	1.23 lb/gal (Actual VOC - With Water With Exempts) 1.85 lb/gal (Regulatory VOC - Less Water Less Exempts) 12.44 % (VOC Weight % With Water and Exempts) 147.30 g/L (Actual VOC - With Water With Exempts) 221.53 g/L (Regulatory VOC - Less Water Less Exempts)

## 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>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Halogens.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Harmful if inhaled. Narcotic effects. May cause an allergic skin reaction.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Acetone (CAS 67-64-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	20000 mg/kg 20 ml/kg
<b>Inhalation</b>		
LC50	Rat	76 mg/l, 4 Hours 50.1 mg/l, 8 Hours
<b>Oral</b>		
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
Aluminum Hydroxide (CAS 21645-51-2)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	400 mg/kg
<b>Inhalation</b>		
LC50	Mouse	700 ppm, 7 Hours
	Rat	450 ppm, 4 Hours
<b>Oral</b>		
LD50	Guinea pig	1.2 g/kg
	Mouse	1.2 g/kg
	Rabbit	0.32 g/kg
	Rat	560 mg/kg
Carbon Black (CAS 1333-86-4)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 8000 mg/kg
Dibutyltin Dilaurate (CAS 77-58-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	175 mg/kg



Components	Species	Test Results
Ethylbenzene (CAS 100-41-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	17800 mg/kg
<b>Oral</b>		
LD50	Rat	3500 mg/kg
Methyl n-Amyl Ketone (CAS 110-43-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12600 mg/kg
<b>Oral</b>		
LD50	Mouse	730 mg/kg
	Rat	1.67 g/kg
Methyl n-Propyl Ketone (CAS 107-87-9)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	3.73 g/kg
Silica (CAS 7631-86-9)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
Silicon dioxide (CAS 112945-52-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
Toluene (CAS 108-88-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12124 mg/kg 14.1 ml/kg
<b>Inhalation</b>		
LC50	Mouse	5320 ppm, 8 Hours 400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours 12200 ppm, 2 Hours 8000 ppm, 4 Hours
<b>Oral</b>		
LD50	Rat	2.6 g/kg
Xylene (CAS 1330-20-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 43 g/kg
<b>Inhalation</b>		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
<b>Oral</b>		
LD50	Mouse	1590 mg/kg

Components	Species	Test Results
	Rat	3523 - 8600 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Suspected of causing cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.
Carbon Black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
Silicon dioxide (CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

<b>Reproductive toxicity</b>	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging the unborn child.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 4740 - 6330 mg/l, 96 hours
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)		
<b>Aquatic</b>		
Fish	LC50	Inland silverside (Menidia beryllina) 1250 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 7.5 - 11 mg/l, 96 hours
Methyl n-Amyl Ketone (CAS 110-43-0)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 126 - 137 mg/l, 96 hours

Components	Species	Test Results
Methyl n-Propyl Ketone (CAS 107-87-9)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 1190 - 1290 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 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
Xylene (CAS 1330-20-7)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) 7.711 - 9.591 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

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

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Acetone	-0.24
Butyl Cellosolve/Glycol Ether EB	0.83
Dibutyltin Dilaurate	3.12
Ethylbenzene	3.15
Methyl n-Amyl Ketone	1.98
Methyl n-Propyl Ketone	0.91
Toluene	2.73
Xylene	3.12 - 3.2

**Mobility in soil** No data available.

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

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**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**

The following transportation information is provided based on the manufacturer's interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking, and labeling prior to offering for transport.

**DOT**

<b>UN number</b>	UN1139
<b>UN proper shipping name</b>	Coating solution (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)
<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>	149, IB2, T4, TP1, TP8
<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 (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<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.
<b>Cargo aircraft only</b>	Allowed.

**IMDG**

<b>UN number</b>	UN1139
<b>UN proper shipping name</b>	COATING SOLUTION (includes surface treatments or coatings used for industrial purposes such as vehicle under-coating, drum or barrel lining)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-E, S-E
<b>Special precautions for user</b>	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**



## 15. Regulatory information

### US federal regulations

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

One or more components are not listed on TSCA.

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

Not regulated.

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

Acetone (CAS 67-64-1)	Listed.
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Methyl n-Propyl Ketone (CAS 107-87-9)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (CAS 1330-20-7)	Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### 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 - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Toluene	108-88-3	5 - < 15
Xylene	1330-20-7	5 - < 15
Butyl Cellosolve/Glycol Ether EB	111-76-2	0< 1
Ethylbenzene	100-41-4	0< 1

### Other federal regulations

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

Ethylbenzene (CAS 100-41-4)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

#### 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

Acetone (CAS 67-64-1)	6532
Toluene (CAS 108-88-3)	6594

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

Acetone (CAS 67-64-1)	35 %WV
Toluene (CAS 108-88-3)	35 %WV

#### DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1)	6532
Toluene (CAS 108-88-3)	594

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

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

Acetone (CAS 67-64-1)

Bis(1, 2, 2, 6, 6-Pentamethyl-4-piperidiny) Sebacate (CAS 41556-26-7)  
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)  
Carbon Black (CAS 1333-86-4)  
Ethylbenzene (CAS 100-41-4)  
Titanium Dioxide (CAS 13463-67-7)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

**US. Massachusetts RTK - Substance List**

Acetone (CAS 67-64-1)  
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)  
Carbon Black (CAS 1333-86-4)  
Ethylbenzene (CAS 100-41-4)  
Methyl n-Amyl Ketone (CAS 110-43-0)  
Methyl n-Propyl Ketone (CAS 107-87-9)  
Silica (CAS 7631-86-9)  
Silicon dioxide (CAS 112945-52-5)  
Titanium Dioxide (CAS 13463-67-7)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

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

Acetone (CAS 67-64-1)  
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)  
Carbon Black (CAS 1333-86-4)  
Ethylbenzene (CAS 100-41-4)  
Methyl n-Amyl Ketone (CAS 110-43-0)  
Methyl n-Propyl Ketone (CAS 107-87-9)  
Silica (CAS 7631-86-9)  
Titanium Dioxide (CAS 13463-67-7)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Acetone (CAS 67-64-1)  
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)  
Carbon Black (CAS 1333-86-4)  
Ethylbenzene (CAS 100-41-4)  
Methyl n-Amyl Ketone (CAS 110-43-0)  
Methyl n-Propyl Ketone (CAS 107-87-9)  
Silica (CAS 7631-86-9)  
Silicon dioxide (CAS 112945-52-5)  
Titanium Dioxide (CAS 13463-67-7)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

**US. Rhode Island RTK**

Acetone (CAS 67-64-1)  
Butyl Cellosolve/Glycol Ether EB (CAS 111-76-2)  
Ethylbenzene (CAS 100-41-4)  
Toluene (CAS 108-88-3)  
Xylene (CAS 1330-20-7)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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

Carbon Black (CAS 1333-86-4)	Listed: February 21, 2003
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

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

Toluene (CAS 108-88-3)	Listed: January 1, 1991
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**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Toluene (CAS 108-88-3)	Listed: August 7, 2009
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**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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

**Issue date** 06-21-2016

**Version #** 01

**Disclaimer** MFI Systems cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.