SAFETY DATA SHEET

1. Identification

Product identifier **RTS White DTM Enamel Primer**

Other means of identification

Product code MFI-580W (all sizes)

Recommended use Primer

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. (Chemtrec) 800-424-9300

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2B
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Highly flammable liquid and vapor. Harmful if swallowed. May cause an allergic skin reaction. Causes eye irritation. Harmful if inhaled. May cause genetic defects. May cause cancer. 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. Avoid breathing 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 swallowed: Call a poison center/doctor if you feel unwell. 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. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.
Storage	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	81.82% of the mixture consists of component(s) of unknown acute oral toxicity. 59.11% of the mixture consists of component(s) of unknown acute inhalation toxicity. 91.26% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 89.44% 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	%
Tert Butyl Acetate		540-88-5	35 - < 55
Titanium Dioxide		13463-67-7	5 - < 20
Methyl n-Amyl Ketone		110-43-0	0 - < 10
N-Butyl Acetate		123-86-4	0 - < 10
Talc		14807-96-6	0 - < 10
Solvent Naphtha, petroleum, light aromatic		64742-95-6	0 - < 5
Trimethyl Benzene		25551-13-7	0 - < 5
Trimetyl Benzene		95-63-6	0 - < 5
1-methoxy-2-propanol		107-98-2	0< 1
Aliphatic Petroleum Distillates Regulatory		64742-88-7	0< 1
Aluminum Hydroxide		21645-51-2	0< 1
Cobalt Neodecanoate		27253-31-2	0< 1
Crystalline Quartz		14808-60-7	0< 1
Isopropyl Benzene		98-82-8	0< 1
Methyl Ethyl Ketoxime		96-29-7	0< 1
Mineral Spirits		8052-41-3	0< 1
Neo C9-13 Acid, Cobalt Salts		68955-83-9	0< 1
Silica		7631-86-9	0< 1
Silicon dioxide		112945-52-5	0< 1
tert-Butyl Alcohol		75-65-0	0< 1
Xylene		1330-20-7	0< 1
Other components below reportable levels			10 - < 20

*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.
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.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Headache. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	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.
General information	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

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	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.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	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. Avoid inhalation of vapors and spray mists. 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.

Methods and materials for containment and cleaning up

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.

Environmental precautions

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. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. 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
Isopropyl Benzene (CAS 98-82-8)	PEL	245 mg/m3	
		50 ppm	
Methyl n-Amyl Ketone (CAS 110-43-0)	PEL	465 mg/m3	
		100 ppm	
Mineral Spirits (CAS 8052-41-3)	PEL	2900 mg/m3	
		500 ppm	
N-Butyl Acetate (CAS 123-86-4)	PEL	710 mg/m3	
		150 ppm	

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

Components	Type	Value	Form
Tert Butyl Acetate (CAS 540-88-5)	PEL	950 mg/m3	
		200 ppm	
tert-Butyl Alcohol (CAS 75-65-0)	PEL	300 mg/m3	
		100 ppm	
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	PEL	435 mg/m3	
		100 ppm	

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

Components	Type	Value	Form
Crystalline Quartz (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
Silicon dioxide (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1-methoxy-2-propanol (CAS 107-98-2)	STEL	100 ppm	
	TWA	50 ppm	
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
Aluminum Hydroxide (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Cobalt Neodecanoate (CAS 27253-31-2)	TWA	0.02 mg/m3	
Crystalline Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Isopropyl Benzene (CAS 98-82-8)	TWA	50 ppm	
Methyl n-Amyl Ketone (CAS 110-43-0)	TWA	50 ppm	
Mineral Spirits (CAS 8052-41-3)	TWA	100 ppm	
N-Butyl Acetate (CAS 123-86-4)	STEL	200 ppm	
	TWA	150 ppm	
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)	TWA	0.02 mg/m3	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
Tert Butyl Acetate (CAS 540-88-5)	TWA	200 ppm	
tert-Butyl Alcohol (CAS 75-65-0)	TWA	100 ppm	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Trimethyl Benzene (CAS 25551-13-7)	TWA	25 ppm	
Trimetyl Benzene (CAS 95-63-6)	TWA	25 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
1-methoxy-2-propanol (CAS 107-98-2)	STEL	540 mg/m3	
		150 ppm	
	TWA	360 mg/m3	
		100 ppm	
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)	TWA	100 mg/m3	
Crystalline Quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Isopropyl Benzene (CAS 98-82-8)	TWA	245 mg/m3	
		50 ppm	
Methyl n-Amyl Ketone (CAS 110-43-0)	TWA	465 mg/m3	
		100 ppm	
Mineral Spirits (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	
N-Butyl Acetate (CAS 123-86-4)	STEL	950 mg/m3	
		200 ppm	
	TWA	710 mg/m3	
		150 ppm	
Silica (CAS 7631-86-9)	TWA	6 mg/m3	
Silicon dioxide (CAS 112945-52-5)	TWA	6 mg/m3	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
Tert Butyl Acetate (CAS 540-88-5)	TWA	950 mg/m3	
		200 ppm	
tert-Butyl Alcohol (CAS 75-65-0)	STEL	450 mg/m3	
		150 ppm	
	TWA	300 mg/m3	
		100 ppm	
Trimetyl Benzene (CAS 95-63-6)	TWA	125 mg/m3	
		25 ppm	

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Methyl Ethyl Ketoxime (CAS 96-29-7)	TWA	36 mg/m3
		10 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cobalt Neodecanoate (CAS 27253-31-2)	15 µg/l	Cobalt	Urine	*
	1 µg/l	Cobalt	Blood	*

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)	15 µg/l	Cobalt	Urine	*
	1 µg/l	Cobalt	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

1-methoxy-2-propanol (CAS 107-98-2) Can be absorbed through the skin.

Isopropyl Benzene (CAS 98-82-8) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Isopropyl Benzene (CAS 98-82-8) Skin designation applies.

US - Tennessee OELs: Skin designation

Isopropyl Benzene (CAS 98-82-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Isopropyl Benzene (CAS 98-82-8) Can be absorbed through the skin.

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

Isopropyl Benzene (CAS 98-82-8) 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. Eye wash fountain and emergency showers are recommended.

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. Suitable gloves can be recommended by the glove supplier.

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

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

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Keep away from food and drink. 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

Physical state Liquid.

Form Liquid.

Color White

Odor Solvent.

Odor threshold Not available.

pH Not available.

Melting point/freezing point -31.9 °F (-35.5 °C) estimated

Initial boiling point and boiling range 208.04 °F (97.8 °C) estimated

Flash point 61.9 °F (16.6 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1 % estimated
Flammability limit - upper (%)	7.9 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	930.3 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	740 °F (393.33 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.64 g/cm3 estimated
Flammability class	Flammable IB estimated
Percent volatile	39.03 w/w % By Weight 52.53 v/v % By Volume
Specific gravity	1.64 estimated
VOC (Weight %)	1.38 lb/gal (Actual VOC - With Water With Exempts) 2.09 lb/gal (Regulatory VOC - Less Water Less Exempts) 165.45 g/L (Actual VOC - With Water With Exempts) 250.15 g/L (Regulatory VOC - Less Water Less Exempts)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful if swallowed. May cause an allergic skin reaction.

Components	Species	Test Results
1-methoxy-2-propanol (CAS 107-98-2)		
Acute		
Dermal		
LD50	Rabbit	13 g/kg
Inhalation		
LC50	Guinea pig	15000 mg/l, 10 Hours
	Rat	54.6 mg/l, 4 Hours
Oral		
LD50	Dog	4.6 g/kg
	Mouse	10.8 g/kg
	Rabbit	5.3 g/kg
	Rat	5.71 g/kg
Aluminum Hydroxide (CAS 21645-51-2)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Isopropyl Benzene (CAS 98-82-8)		
Acute		
Inhalation		
LC50	Mouse	2000 ppm, 7 Hours
		24.7 mg/l, 2 Hours
	Rat	8000 ppm, 4 Hours
Oral		
LD50	Rat	1400 mg/kg
Methyl n-Amyl Ketone (CAS 110-43-0)		
Acute		
Dermal		
LD50	Rabbit	12600 mg/kg
Oral		
LD50	Mouse	730 mg/kg
	Rat	1.67 g/kg
N-Butyl Acetate (CAS 123-86-4)		
Acute		
Inhalation		
LC50	Wistar rat	160 mg/l, 4 Hours
Oral		
LD50	Rat	14000 mg/kg
Silica (CAS 7631-86-9)		
Acute		
Oral		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
Silicon dioxide (CAS 112945-52-5)		
Acute		
Oral		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg

Components	Species	Test Results
tert-Butyl Alcohol (CAS 75-65-0)		
Acute		
Oral		
LD50	Rabbit	3.6 g/kg
	Rat	3.5 g/kg
Trimethyl Benzene (CAS 25551-13-7)		
Acute		
Oral		
LD50	Rat	8970 mg/kg
Trimetyl Benzene (CAS 95-63-6)		
Acute		
Dermal		
LD50	Rabbit	> 3160 mg/kg
Inhalation		
LC50	Rat	> 2000 ppm, 48 Hours
Oral		
LD50	Rat	6 g/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg

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

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.
Isopropyl Benzene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
Mineral Spirits (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity 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.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Crystalline Quartz (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects 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
Isopropyl Benzene (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (Artemia sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
Methyl Ethyl Ketoxime (CAS 96-29-7)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	777 - 914 mg/l, 96 hours
Methyl n-Amyl Ketone (CAS 110-43-0)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	126 - 137 mg/l, 96 hours
N-Butyl Acetate (CAS 123-86-4)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	17 - 19 mg/l, 96 hours
Tert Butyl Acetate (CAS 540-88-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	296 - 362 mg/l, 96 hours
tert-Butyl Alcohol (CAS 75-65-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	4607 - 6577 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	6130 - 6700 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
Trimetyl Benzene (CAS 95-63-6)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	7.19 - 8.28 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
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)	
Isopropyl Benzene	3.66
Methyl n-Amyl Ketone	1.98
Mineral Spirits	3.16 - 7.15
N-Butyl Acetate	1.78
Tert Butyl Acetate	1.76
tert-Butyl Alcohol	0.35
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

UN number	UN1263
UN proper shipping name	Paint related material including paint thinning, drying, removing, or reducing compound
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	149, B52, IB2, T4, TP1, TP8, TP28
Packaging exceptions	150
Packaging non bulk	173
Packaging bulk	242

IATA

UN number	UN1263
UN proper shipping name	Paint related material (including paint thinning or reducing compounds)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1263
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
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

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)

1-methoxy-2-propanol (CAS 107-98-2)	Listed.
Cobalt Neodecanoate (CAS 27253-31-2)	Listed.
Isopropyl Benzene (CAS 98-82-8)	Listed.
N-Butyl Acetate (CAS 123-86-4)	Listed.
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)	Listed.
Tert Butyl Acetate (CAS 540-88-5)	Listed.
tert-Butyl Alcohol (CAS 75-65-0)	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.
Trimetyl Benzene	95-63-6	0 - < 5
Isopropyl Benzene	98-82-8	0< 1

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
tert-Butyl Alcohol	75-65-0	0< 1
Xylene	1330-20-7	0< 1

Other federal regulations

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

Cobalt Neodecanoate (CAS 27253-31-2)
Isopropyl Benzene (CAS 98-82-8)
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)
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.

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))

1-methoxy-2-propanol (CAS 107-98-2)
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)
Cobalt Neodecanoate (CAS 27253-31-2)
Crystalline Quartz (CAS 14808-60-7)
Isopropyl Benzene (CAS 98-82-8)
Mineral Spirits (CAS 8052-41-3)
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)
Solvent Naphtha, petroleum, light aromatic (CAS 64742-95-6)
Talc (CAS 14807-96-6)
tert-Butyl Alcohol (CAS 75-65-0)
Titanium Dioxide (CAS 13463-67-7)
Trimethyl Benzene (CAS 25551-13-7)
Trimetyl Benzene (CAS 95-63-6)
Xylene (CAS 1330-20-7)

US. Massachusetts RTK - Substance List

1-methoxy-2-propanol (CAS 107-98-2)
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)
Crystalline Quartz (CAS 14808-60-7)
Isopropyl Benzene (CAS 98-82-8)
Methyl n-Amyl Ketone (CAS 110-43-0)
Mineral Spirits (CAS 8052-41-3)
N-Butyl Acetate (CAS 123-86-4)
Silica (CAS 7631-86-9)
Silicon dioxide (CAS 112945-52-5)
Talc (CAS 14807-96-6)
Tert Butyl Acetate (CAS 540-88-5)
tert-Butyl Alcohol (CAS 75-65-0)
Titanium Dioxide (CAS 13463-67-7)
Trimethyl Benzene (CAS 25551-13-7)
Trimetyl Benzene (CAS 95-63-6)
Xylene (CAS 1330-20-7)

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

1-methoxy-2-propanol (CAS 107-98-2)
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)
Cobalt Neodecanoate (CAS 27253-31-2)
Crystalline Quartz (CAS 14808-60-7)
Isopropyl Benzene (CAS 98-82-8)
Methyl n-Amyl Ketone (CAS 110-43-0)
N-Butyl Acetate (CAS 123-86-4)
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)
Silica (CAS 7631-86-9)
Talc (CAS 14807-96-6)
Tert Butyl Acetate (CAS 540-88-5)

tert-Butyl Alcohol (CAS 75-65-0)
Titanium Dioxide (CAS 13463-67-7)
Trimethyl Benzene (CAS 25551-13-7)
Trimetyl Benzene (CAS 95-63-6)
Xylene (CAS 1330-20-7)

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

1-methoxy-2-propanol (CAS 107-98-2)
Aliphatic Petroleum Distillates Regulatory (CAS 64742-88-7)
Crystalline Quartz (CAS 14808-60-7)
Isopropyl Benzene (CAS 98-82-8)
Methyl n-Amyl Ketone (CAS 110-43-0)
Mineral Spirits (CAS 8052-41-3)
N-Butyl Acetate (CAS 123-86-4)
Silica (CAS 7631-86-9)
Silicon dioxide (CAS 112945-52-5)
Talc (CAS 14807-96-6)
Tert Butyl Acetate (CAS 540-88-5)
tert-Butyl Alcohol (CAS 75-65-0)
Titanium Dioxide (CAS 13463-67-7)
Trimethyl Benzene (CAS 25551-13-7)
Trimetyl Benzene (CAS 95-63-6)
Xylene (CAS 1330-20-7)

US. Rhode Island RTK

Cobalt Neodecanoate (CAS 27253-31-2)
Isopropyl Benzene (CAS 98-82-8)
N-Butyl Acetate (CAS 123-86-4)
Neo C9-13 Acid, Cobalt Salts (CAS 68955-83-9)
Tert Butyl Acetate (CAS 540-88-5)
tert-Butyl Alcohol (CAS 75-65-0)
Trimetyl Benzene (CAS 95-63-6)
Xylene (CAS 1330-20-7)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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

Crystalline Quartz (CAS 14808-60-7)	Listed: October 1, 1988
Isopropyl Benzene (CAS 98-82-8)	Listed: April 6, 2010
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	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 06-17-2016
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.