

SAFETY DATA SHEET

1. Identification

Product identifier	MANKO 20110US	
Other means of identification		
Product Code	07844 101783 604	
Recommended use	Not available.	
Manufacturer/Importer/Supplier/ Manufacturer	Distributor information	
Company name Address	Quest Industrial Products, LLC N92 W14701 Anthony Avenue Menomonee Falls, WI 53051 United States	
Telephone Website E-mail	Phone quest-ip.com info@quest-ip.com	(262) 255-9500
Emergency phone number	Chemtrec Phone	800-424-9300

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Serious eye damage/eye irritation	Category 2A
	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
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic 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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. 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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse Response 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 eye irritation persists: Get medical advice/attention.

Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	58.36% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 58.28% 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	20 to <30
PROPANE		74-98-6	10 to <20
ETHYL ACETATE		141-78-6	5 to <10
METHYL ETHYL KETONE		78-93-3	5 to <10
N-BUTANE		106-97-8	5 to <10
TITANIUM DIOXIDE		13463-67-7	5 to <10
TOLUENE		108-88-3	5 to <10
AMORPHOUS PRECIPITATED SILICA		112926-00-8	1 to <5
N-BUTYL ACETATE		123-86-4	1 to <5
PROPYLENE GLYCOL METHYL ETHER ACETATE		108-65-6	1 to <5
XYLENE		1330-20-7	1 to <5
ETHYLBENZENE		100-41-4	0.1 to <1
Other components below reportable leve	els		10 to <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. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	No adverse effects due to skin contact are expected. Wash off with soap and water. Get medical attention if irritation develops and persists.
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. If eye irritation persists: Get medical advice/attention. No specific first aid measures noted.
Ingestion	Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	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.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing	Do not use water jet as an extinguisher, as this will spread the fire.

media	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Material name: MANKO 20110US

Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. 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.
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. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes. 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 in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage,	Level 2 Aerosol.
including any incompatibilities	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Secure cylinders in an upright position at all times, close all valves when not in use. Store in a well-ventilated place. Store away from incompatible

8. Exposure controls/personal protection

Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
ETHYL ACETATE (CAS	PEL	1400 mg/m3	

materials (see Section 10 of the SDS).

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

Components	Туре	Value	Form
ETHYLBENZENE (CAS 100-41-4)	PEL	435 mg/m3	
		100 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	PEL	590 mg/m3	
		200 ppm	
N-BUTYL ACETATE (CAS 123-86-4)	PEL	710 mg/m3	
PROPANE (CAS 74-98-6)	PEL	150 ppm 1800 mg/m3	
		1000 ppm	T .(.), (
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-2 (29 CFR 1910.10	000)		
Components	Туре	Value	
TOLUENE (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	
US. OSHA Table Z-3 (29 CFR 1910.10	000)		
Components	Туре	Value	
AMORPHOUS PRECIPITATED SILICA (CAS 112926-00-8)	TWA	0.8 mg/m3	
(CAS 112920-00-0)		20 mppcf	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	
ACETONE (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
ETHYL ACETATE (CAS 141-78-6)	TWA	400 ppm	
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm	
METHYL ETHYL KETONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
N-BUTANE (CAS 106-97-8)	STEL	1000 ppm	
N-BUTYL ACETATE (CAS 123-86-4)	STEL	200 ppm	
	TWA	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 Chemic			
Components	Туре	Value	
ACETONE (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
AMORPHOUS PRECIPITATED SILICA (CAS 112926-00-8)	TWA	6 mg/m3	
ETHYL ACETATE (CAS 141-78-6)	TWA	1400 mg/m3	
,		400 ppm	

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	Туре	9	Val	ue
ETHYLBENZENE (CAS 100-41-4)	STE	L	545	5 mg/m3
,			125	5 ppm
	TWA	N Contraction of the second se	435	5 mg/m3
) ppm
METHYL ETHYL KETONE (CAS 78-93-3)	STE	L	885	5 mg/m3
() ppm
	TWA	N) mg/m3
) ppm
N-BUTANE (CAS 106-97-8)) TWA	N .		00 mg/m3
N-BUTYL ACETATE (CAS	STE	L) ppm) mg/m3
123-86-4)			200) ppm
	TWA) mg/m3
	1 • • • •	,) ppm
PROPANE (CAS 74-98-6)	TWA	N N		00 mg/m3
= (=				00 ppm
TOLUENE (CAS 108-88-3)	STE	L) mg/m3
· · · · · · · · · · · · · · · · · · ·) ppm
	TWA	N .	375	5 mg/m3
			100) ppm
US. Workplace Environme Components	ental Exposure Level (Type		Val	ue
	51		50	
	TWA	N .	50	ppm
PROPYLENE GLYCOL METHYL ETHER ACETATE (CAS 108-65-6) logical limit values	5	A	50	ppm
METHYL ETHER ACETATE (CAS 108-65-6)	5	Determinant	50 Specimen	sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposu	= re Indices			
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS	re Indices Value	Determinant Acetone Sum of	Specimen	Sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1)	re Indices Value 50 mg/l	Determinant Acetone Sum of mandelic acid	Specimen Urine	Sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS	re Indices Value 50 mg/l	Determinant Acetone Sum of mandelic acid and	Specimen Urine Creatinine in	Sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) ogical limit values ACGIH Biological Exposu Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS	re Indices Value 50 mg/l	Determinant Acetone Sum of mandelic acid and phenylglyoxylic	Specimen Urine Creatinine in	Sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS	re Indices Value 50 mg/l 0.15 g/g	Determinant Acetone Sum of mandelic acid and	Specimen Urine Creatinine in	Sampling Time
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3)	re Indices Value 50 mg/l 0.15 g/g 2 mg/l	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK	Specimen Urine Creatinine in urine Urine	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposu Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE	re Indices Value 50 mg/l 0.15 g/g 2 mg/l	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with	Specimen Urine Creatinine in urine Urine Creatinine in	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3)	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis	Specimen Urine Creatinine in urine Urine Creatinine in urine	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3)	Te Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3)	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine Blood Creatinine in	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7)	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine Blood	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposus Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, plea	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine Blood Creatinine in	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, plea osure guidelines	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine Blood Creatinine in	Sampling Time * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, plea osure guidelines US - California OELs: Skir PROPYLENE GLYCOL	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids sument.	Specimen Urine Creatinine in urine Urine Creatinine in urine Urine Blood Creatinine in	Sampling Time * * * * * * * * * * * * * * * * * * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, pleas osure guidelines US - California OELs: Skir PROPYLENE GLYCOL (CAS 108-65-6)	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc n designation . METHYL ETHER ACE	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Toluene Methylhippuric acids sument.	Specimen Urine Creatinine in urine Urine Creatinine in urine Blood Creatinine in urine e absorbed throug	Sampling Time * * * * * * * * * * * * * * * * * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, pleas osure guidelines US - California OELs: Skir PROPYLENE GLYCOL (CAS 108-65-6) TOLUENE (CAS 108-8-	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc n designation . METHYL ETHER ACE 8-3)	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Toluene Methylhippuric acids sument.	Specimen Urine Creatinine in urine Urine Blood Creatinine in urine in	Sampling Time * * * * * * * * * * * * * * * * * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposus Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, plea osure guidelines US - California OELs: Skir PROPYLENE GLYCOL (CAS 108-65-6) TOLUENE (CAS 108-8 US - Minnesota Haz Subs:	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc a designation . METHYL ETHER ACE 8-3) Skin designation app	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids sument.	Specimen Urine Creatinine in urine Urine Creatinine in urine Blood Creatinine in urine e absorbed throug	Sampling Time * * * * * * * * * * * * * * * * * *
METHYL ETHER ACETATE (CAS 108-65-6) logical limit values ACGIH Biological Exposur Components ACETONE (CAS 67-64-1) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) * - For sampling details, pleas osure guidelines US - California OELs: Skir PROPYLENE GLYCOL (CAS 108-65-6) TOLUENE (CAS 108-8-	re Indices Value 50 mg/l 0.15 g/g 2 mg/l 0.3 mg/g 0.03 mg/l 0.02 mg/l 1.5 g/g ase see the source doc n designation . METHYL ETHER ACE 8-3) Skin designation app 8-3)	Determinant Acetone Sum of mandelic acid and phenylglyoxylic acid MEK o-Cresol, with hydrolysis Toluene Toluene Methylhippuric acids sument. ETATE Can b Can b Diles Skin d	Specimen Urine Creatinine in urine Urine Creatinine in urine Blood Creatinine in urine e absorbed throug e absorbed throug	Sampling Time * * * * * * * * * * * * * * * * * *

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).	
Skin protection Hand protection	For prolonged or repeated skin contact use suitable protective gloves.	
Other	Wear suitable protective clothing.	
Respiratory protection	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.	
Thermal hazards	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.	

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Aerosol. Liquefied gas.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-305.68 °F (-187.6 °C) estimated
Initial boiling point and boiling range	-43.78 °F (-42.1 °C) estimated
Flash point	-156.0 °F (-104.4 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	osive limits
Flammability limit - lower (%)	1.3 % estimated
Flammability limit - upper (%)	12.8 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	2713.89 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	550 °F (287.78 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	6.59 lbs/gal
Flammability class	Flammable IA estimated
Heat of combustion (NFPA 30B)	25.2 kJ/g estimated
Percent volatile	79.83
Specific gravity	0.79
VOC	398.561269 g/l Material 564.454139 g/l Regulatory

3.326155 lbs/gal Material 4.7105981 lbs/gal Regulatory

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	Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Ammonia. Amines. Isocyanates. Fluorine. Caustics. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of	exposure
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	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.

Information on toxicological effects

Acute toxicity	Narcotic effects.	
Components	Species	Test Results
ACETONE (CAS 67-64-1)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 15800 mg/kg
Inhalation		
LC50	Rat	76 mg/l, 4 Hours
Oral		
LD50	Mouse	3000 mg/kg
	Rat	5800 mg/kg
AMORPHOUS PRECIPIT	TATED SILICA (CAS 112926-00-8)	
<u>Acute</u>		
Oral		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
ETHYL ACETATE (CAS	141-78-6)	
<u>Acute</u>		
Inhalation		
LC50	Rat	16000 ppm, 6 Hours
LD50	Mouse	1500 ppm, 4 Hours
	Rabbit	2500 ppm, 4 Hours
	Rat	4000 ppm, 4 Hours
Oral		
LD50	Mouse	0.44 g/kg
	Rabbit	4.9 g/kg
	Rat	11.3 ml/kg

Components	Species	Test Results
		5.6 g/kg
ETHYLBENZENE (CAS 100-4	41-4)	
Acute		
Dermal		17000
LD50	Rabbit	17800 mg/kg
Oral LD50	Pat	2500 mg/kg
	Rat	3500 mg/kg
METHYL ETHYL KETONE (C	(AS 78-93-3)	
<u>Acute</u> Dermal		
LD50	Rabbit	> 8000 mg/kg
Inhalation	Rabbit	2 0000 mg/kg
LC50	Mouse	11000 ppm, 45 Minutes
2000		11700 ppm, 4 Hours
	Rat	11700 ppill, 4 Hours
Oral LD50	Mouse	670 ma/ka
LDOU	Mouse	670 mg/kg
	Rat	2300 - 3500 mg/kg
N-BUTANE (CAS 106-97-8)		
<u>Acute</u>		
Inhalation LC50	Mouse	680 mg/l, 2 Hours
LC30		
	Rat	658 mg/l, 4 Hours
N-BUTYL ACETATE (CAS 12	(3-86-4)	
Acute		
Inhalation LC50	Wistar rat	160 mg/l, 4 Hours
	WISIAI TAL	roo nigh, 4 Houis
Oral LD50	Rat	14000 mg/kg
	Rai	14000 Hig/kg
PROPANE (CAS 74-98-6)		
<u>Acute</u> Inhalation		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
	Rat	> 1442.047 mg/r, 10 minutes
TOLUENE (CAS 108-88-3) <u>Acute</u>		
Dermal		
LD50	Rabbit	12124 mg/kg
		14.1 ml/kg
Inhalation		i i i i i i i i i i i i i i i i i i i
LC50	Mouse	5320 ppm, 8 Hours
2000		400 ppm, 24 Hours
	Pot	
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours
Oral		6 6 1
LD50	Rat	2.6 g/kg
XYLENE (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 43 g/kg

Components	Species	Test Results
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 b	be based on additional compo	nent data not shown.
Skin corrosion/irritation	Prolonged skin contact ma	y cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritatio	on.
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not a respiratory sensitizer	
Skin sensitization	This product is not expected	d to cause skin sensitization.
Germ cell mutagenicity	No data available to indica mutagenic or genotoxic.	te product or any components present at greater than 0.1% are
Carcinogenicity	Suspected of causing cano	er.
IARC Monographs. Overall	Evaluation of Carcinogenic	ity
AMORPHOUS PRECIPI 112926-00-8)	TATED SILICA (CAS	3 Not classifiable as to carcinogenicity to humans.
ETHYLBENZENE (CAS		2B Possibly carcinogenic to humans.
TITANIUM DIOXIDE (CA TOLUENE (CAS 108-88		2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
XYLENE (CAS 1330-20-		3 Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulate	•	
Not listed.		
Reproductive toxicity		t have been shown to cause birth defects and reproductive disorders in cted of damaging the unborn child.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	Causes damage to organs	through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may b harmful. Prolonged exposure may cause chronic effects.	
12. Ecological information	n	

	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.		
Components		Species	Test Results
ACETONE (CAS 67-64	4-1)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
ETHYL ACETATE (CA	S 141-78-6)		
Aquatic			
Fish	LC50	Indian catfish (Heteropneustes fossilis)	200.32 - 225.42 mg/l, 96 hours
ETHYLBENZENE (CA	S 100-41-4)		
Aquatic			
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

Components		Species	Test Results
METHYL ETHYL KET	ONE (CAS 78-93-3)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours
N-BUTYL ACETATE ((CAS 123-86-4)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	17 - 19 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
TOLUENE (CAS 108-	·88-3)		
Aquatic			
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 1330-2	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-octan	iol / water (log Kow)
ACETONE	-0.24
ETHYL ACETATE	0.73
ETHYLBENZENE	3.15
METHYL ETHYL KETONE	0.29
N-BUTANE	2.89
N-BUTYL ACETATE	1.78
PROPANE	2.36
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. Contents under pressure. Do not puncture, incinerate or crush. 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. Do not re-use empty containers.

14. Transport information

DOT	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, 2.1
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, 2.1
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No.
	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Forbidden.
aircraft	Fashiddan
Cargo aircraft only	Forbidden.
IMDG	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, 2.1
Transport hazard class(es)	
Class	Not available.
Subsidiary risk Packing group	- Not applicable.
Environmental hazards	not applicable.
	No
Marine pollutant EmS	Not available.
	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETONE (CAS 67-64-1)	Listed.	
ETHYL ACETATE (CAS 141-78-6)	Listed.	
ETHYLBENZENE (CAS 100-41-4)	Listed.	
METHYL ETHYL KETONE (CAS 78-93-3)	Listed.	
N-BUTANE (CAS 106-97-8)	Listed.	
N-BUTYL ACETATE (CAS 123-86-4)	Listed.	
PROPANE (CAS 74-98-6)	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)

categories	Immediate Hazard - Yes
-	Delaved 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 No

chemical

Hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
TOLUENE	108-88-3	5 to <10
XYLENE	1330-20-7	1 to <5
ETHYLBENZENE	100-41-4	0.1 to <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)

N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)

Safe Drinking Water Act Not regulated.

(SDWA)

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	
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))		
ACETONE (CAS 67-64-1)	35 %WV	
METHYL ETHYL KETONE (CAS 78-93-3)	35 %WV	
TOLUENE (CAS 108-88-3)	35 %WV	
DEA Exempt Chemical Mixtures Code Number		
ACETONE (CAS 67-64-1)	6532	
METHYL ETHYL KETONE (CAS 78-93-3)	6714	
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) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3) XYLENE (CAS 130-20-7)

US. Massachusetts RTK - Substance List

ACETONE (CAS 67-64-1) AMORPHOUS PRECIPITATED SILICA (CAS 112926-00-8) ETHYL ACETATE (CAS 141-78-6) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) N-BUTYL ACETATE (CAS 123-86-4) PROPANE (CAS 74-98-6) 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) AMORPHOUS PRECIPITATED SILICA (CAS 112926-00-8) ETHYL ACETATE (CAS 141-78-6) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) N-BUTYL ACETATE (CAS 123-86-4) PROPANE (CAS 74-98-6) 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) ETHYL ACETATE (CAS 141-78-6) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) N-BUTYL ACETATE (CAS 123-86-4) PROPANE (CAS 74-98-6) 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) ETHYL ACETATE (CAS 141-78-6) ETHYLBENZENE (CAS 100-41-4) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) N-BUTYL ACETATE (CAS 123-86-4) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7)

4-Methyl-2-pentanone (CAS 108-10-1)

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.

Listed: November 4, 2011

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

aterial name: MANKO 20110US	6		SDS US
Europe	European List of Notified Cl	hemical Substances (ELINCS)	No
Europe	European Inventory of Exise Substances (EINECS)	ting Commercial Chemical	No
China	Inventory of Existing Chemi	cal Substances in China (IECSC)	No
Canada	Non-Domestic Substances	List (NDSL)	Yes
Canada	Domestic Substances List (DSL)	No
Australia	Australian Inventory of Che	mical Substances (AICS)	No
ternational Inventories Country(s) or region	Inventory name		On inventory (yes/no)*
TOLUENE (CAS	108-88-3)	Listed: August 7, 2009	
•	osition 65 - CRT: Listed date/Fe	•	
TOLUENE (CAS	,	Listed: January 1, 1991	
4-Methyl-2-pentanone (CAS 108-10-1) ETHYL ALCOHOL (CAS 64-17-5) METHANOL (CAS 67-56-1)		Listed: March 16, 2012	
		Listed: October 1, 1987	
	RROLIDONE (CAS 872-50-4)	Listed: June 15, 2001 Listed: March 28, 2014	
	osition 65 - CRT: Listed date/De	-	
	IDE (CAS 13463-67-7)	Listed: September 2, 2011	
ETHYLBENZEN	E (CAS 100-41-4)	Listed: June 11, 2004	
	E (CAS 04-17-5)	Listed: July 1, 1988	
<i>,</i> , ,	DL (CAS 64-17-5)	Listed: April 29, 2011	

Country(s) or region	Inventory name	On inventory (yes/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	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

Issue date	04-15-2015
Version #	01
HMIS® ratings	Health: 2* Flammability: 4 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 4 Instability: 0
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