SAFETY DATA SHEET

1. Identification

Product identifier	Maxx Kote Silver Metallic		
Other means of identification			
Product Code	8217, 9853, 8380		
Recommended use	Not available.		
Manufacturer/Importer/Supplier/	Distributor information		
Company name Address	Tifco Industries, Inc. PO Box 40277 Houston, TX 77240		
Telephone	United States 281-571-6000		
Emergency phone number	Chemtrec Phone	800-424-9300	
2. Hazard(s) identification			
Physical hazards	Flammable aerosols		Category 2
	Gases under pressure		Liquefied gas
Health hazards	Acute toxicity, oral		Category 4
	Skin corrosion/irritation		Category 2
	Serious eye damage/eye irritation	on	Category 2A
	Reproductive toxicity		Category 2
	Specific target organ toxicity, sin	ngle exposure	Category 3 narcotic effects
	Specific target organ toxicity, re exposure	peated	Category 2
Environmental hazards	Hazardous to the aquatic environ hazard	onment, acute	Category 2
	Hazardous to the aquatic enviro long-term hazard	onment,	Category 2
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Warning		
Hazard statement	Causes skin irritation. Causes s Suspected of damaging fertility	erious eye irrita or the unborn o	ure; may explode if heated. Harmful if swallowed. ation. May cause drowsiness or dizziness. shild. May cause damage to organs through atic life. Toxic 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.

prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Response	If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. 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 occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
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	40.01% of the mixture consists of component(s) of unknown acute oral toxicity. 83.27% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 83.27% 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	30 to <40
PROPANE		74-98-6	10 to <20
TOLUENE		108-88-3	10 to <20
METHYL ETHYL KETONE		78-93-3	5 to <10
N-BUTANE		106-97-8	5 to <10
PROPYLENE GLYCOL METHYL ETHER ACETATE		108-65-6	5 to <10
ALUMINUM		7429-90-5	1 to <5
Other components below reportable	e levels		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	Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. 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.
Ingestion	Not likely, due to the form of the product. 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	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. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. 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	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

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

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	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. 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
Environmental precautions	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. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Do not breathe mist or vapor. Do not taste or swallow. 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 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. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Store in a well-ventilated place. 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	Туре	Value	Form
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
ALUMINUM (CAS	PEL	5 mg/m3	Respirable dust.
7429-90-5)			
		15 mg/m3	Total dust.
	PEL	590 mg/m3	
(CAS 78-93-3)		200 ppm	
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
JS. OSHA Table Z-2 (29 CFR 1910	.1000)		
Components	Туре	Value	
OLUENE (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	
US. ACGIH Threshold Limit Value			
Components	Туре	Value	Form
-			
ACETONE (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
ALUMINUM (CAS	TWA	1 mg/m3	Respirable fraction.
7429-90-5) METHYL ETHYL KETONE	STEL	300 ppm	
(CAS 78-93-3)	<u><u></u></u>		
	TWA	200 ppm	
N-BUTANE (CAS 106-97-8)	STEL	1000 ppm	
N-DUTAINE (CAS 100-97-0)	OILL	1000 ppin	
· · · · · · · · · · · · · · · · · · ·	TWA	20 ppm	
TOLUENE (CAS 108-88-3)	TWA		
TOLUENE (CAS 108-88-3) JS. NIOSH: Pocket Guide to Chen	TWA		Form
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components	TWA nical Hazards Type	20 ppm Value	Form
TOLUENE (CAS 108-88-3) JS. NIOSH: Pocket Guide to Chen Components	TWA nical Hazards	20 ppm Value 590 mg/m3	Form
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1)	TWA nical Hazards Type	20 ppm Value	Form Respirable.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS	TWA nical Hazards Type TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3	Respirable.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS	TWA nical Hazards Type TWA	20 ppm Value 590 mg/m3 250 ppm	Respirable. Welding fume or
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS	TWA nical Hazards Type TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5)	TWA nical Hazards Type TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3	Respirable. Welding fume or
TOLUENE (CAS 108-88-3) JS. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE	TWA nical Hazards Type TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE	TWA nical Hazards Type TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) JS. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE	TWA nical Hazards Type TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) JS. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE	TWA nical Hazards Type TWA TWA STEL	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3)	TWA nical Hazards Type TWA TWA STEL	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3)	TWA nical Hazards Type TWA TWA STEL TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8)	TWA nical Hazards Type TWA TWA STEL TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8)	TWA nical Hazards Type TWA TWA STEL TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA nical Hazards Type TWA TWA STEL TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA nical Hazards Type TWA TWA STEL TWA TWA TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3 1000 ppm 560 mg/m3 150 ppm	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA nical Hazards Type TWA TWA STEL TWA TWA TWA TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3 1000 ppm 560 mg/m3 150 ppm 375 mg/m3	Respirable. Welding fume or pyrophoric powder.
N-BUTANE (CAS 108-87-8) TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3)	TWA nical Hazards Type TWA TWA STEL TWA TWA TWA STEL	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3 1000 ppm 560 mg/m3 150 ppm	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3)	TWA nical Hazards Type TWA TWA STEL TWA TWA TWA STEL TWA STEL TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3 1000 ppm 560 mg/m3 150 ppm 375 mg/m3	Respirable. Welding fume or pyrophoric powder.
TOLUENE (CAS 108-88-3) US. NIOSH: Pocket Guide to Chen Components ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6)	TWA nical Hazards Type TWA TWA STEL TWA TWA TWA STEL TWA STEL TWA	20 ppm Value 590 mg/m3 250 ppm 5 mg/m3 5 mg/m3 10 mg/m3 885 mg/m3 300 ppm 590 mg/m3 200 ppm 1900 mg/m3 800 ppm 1800 mg/m3 1000 ppm 560 mg/m3 150 ppm 375 mg/m3	Respirable. Welding fume or pyrophoric powder.

Biological limit values ACGIH Biological Exposu	re Indices			
Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
METHYL ETHYL KETONE (CAS 78-93-3)	-	MEK	Urine	*
TOLUENE (CAS 108-88-3)		o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
* - For sampling details, ple	ase see the source doc	ument.		
Exposure guidelines				
US - California OELs: Ski	n designation			
PROPYLENE GLYCO (CAS 108-65-6)	_ METHYL ETHER ACE	ETATE Can be	absorbed throu	gh the skin.
TOLUENE (CAS 108-8			absorbed through	gh the skin.
US - Minnesota Haz Subs				
TOLUENE (CAS 108-8	,		esignation applie	
Appropriate engineering controls	should be matched or other engineerin exposure limits hav	to conditions. If app g controls to mainta re not been establis	blicable, use prod in airborne levels ned, maintain air	our) should be used. Ventilation rates cess enclosures, local exhaust ventilation, s below recommended exposure limits. If borne levels to an acceptable level. Eye e when handling this product.
Individual protection measure	s, such as personal p	rotective equipme	nt	
Eye/face protection	Wear safety glasse	s with side shields (or goggles).	
Skin protection Hand protection	Wear appropriate c supplier.	hemical resistant gl	oves. Suitable gl	loves can be recommended by the glove
Other	Wear appropriate c	hemical resistant cl	othing.	
Respiratory protection	In case of insufficie		•	ory equipment.
Thermal hazards	Wear appropriate the		•	, , ,
General hygiene considerations	and drink. Always o	bserve good perso e eating, drinking, ar	nal hygiene mea	using do not smoke. Keep away from food sures, such as washing after handling the Routinely wash work clothing and protective

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 exp	losive 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	2145.04 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	6.24 lbs/gal
Explosive properties	Not explosive.
Flammability class	Flammable IA estimated
Heat of combustion (NFPA 30B)	29.36 kJ/g estimated
Oxidizing properties	Not oxidizing.
Percent volatile	88.85
Specific gravity	0.75
VOC	3.26 lbs/gal Material 390.14 g/l Material 598.66 g/l Regulatory 5 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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Nitrates. 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.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	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.
Information on toxicological ef	fects

Acute toxicity	Harmful if swallowed. Narcotic effects.		
Components	Species	Test Results	
ACETONE (CAS 67-64-1)			
Acute			
Dermal			
LD50	Rabbit	> 15800 mg/kg	

Components	Species	Test Results
Inhalation		
LC50	Rat	76 mg/l, 4 Hours
Oral		
LD50	Mouse	3000 mg/kg
	Rat	5800 mg/kg
ETHYL ETHYL KETONE (CAS	78-93-3)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 8000 mg/kg
Inhalation		
LC50	Mouse	11000 ppm, 45 Minutes
	Rat	11700 ppm, 4 Hours
Oral		
LD50	Mouse	670 mg/kg
	Rat	2300 - 3500 mg/kg
I-BUTANE (CAS 106-97-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
ROPANE (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
OLUENE (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	12124 mg/kg
		14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
0		8000 ppm, 4 Hours
Oral	Det	
LD50	Rat	2.6 g/kg
* Estimates for product may b	e based on additional component	data not shown.
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye	Causes serious eye irritation.	
rritation		
Respiratory or skin sensitization	n	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to	cause skin sensitization.
erm cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered	to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
	Evaluation of Carcinogenicity	
TOLUENE (CAS 108-88-		3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulate Not regulated.	d Substances (29 CFR 1910.1001-1050)		
US. National Toxicology Program (NTP) Report on Carcinogens			
Not listed.			
Reproductive toxicity	Suspected of damaging fertility or the unborn child.		
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.		
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.		

12. Ecological information

toxicity Toxic to		quatic life with long lasting effects.		
Components		Species	Test Results	
ACETONE (CAS 67-64	4-1)			
Aquatic				
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	
ALUMINUM (CAS 742	9-90-5)			
Aquatic				
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.16 mg/l, 96 hours	
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	
TOLUENE (CAS 108-8	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	

* 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-octa	anol / water (log Kow)	
ACETONE	-0.24	
METHYL ETHYL KETONE	0.29	
N-BUTANE	2.89	
PROPANE	2.36	
TOLUENE	2.73	
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

DOT	
UN number	UN1950
UN proper shipping name	UN1950, Aerosols, Flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, Flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	No.
	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed.
aircraft	Alleward
Cargo aircraft only	Allowed.
IMDG	
UN number	UN1950
UN proper shipping name	Aerosols, Flammable, MARINE POLLUTANT
Transport hazard class(es)	2 4
Class	2.1
Subsidiary risk	- 2.1
Label(s)	Not applicable.
Packing group Environmental hazards	Not applicable.
	Vee
Marine pollutant	Yes Not available.
EmS Special processions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	Not established.
the IBC Code	





IMDG Regulated Marine Pollutant. Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

15. Regulatory information

US federal regulations

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

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETONE (CAS 67-64-1)	Listed.
METHYL ETHYL KETONE (CAS 78-93-3)	Listed.
N-BUTANE (CAS 106-97-8)	Listed.
PROPANE (CAS 74-98-6)	Listed.
TOLUENE (CAS 108-88-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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 No chemical SARA 313 (TRI reporting) **Chemical name CAS** number % by wt. 10 to <20 TOLUENE 108-88-3 ALUMINUM 7429-90-5 1 to <5 Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List TOLUENE (CAS 108-88-3) 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 6594 TOLUENE (CAS 108-88-3) 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 FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace ACETONE (CAS 67-64-1) Low priority METHYL ETHYL KETONE (CAS 78-93-3) Low priority **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) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) TOLUENE (CAS 108-88-3) US. Massachusetts RTK - Substance List ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3)

METHYL ETHYL KETONE (CAS 7 N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3) New Jersey Worker and Commun

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

ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3)

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

ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3)

US. Rhode Island RTK

ACETONE (CAS 67-64-1) ALUMINUM (CAS 7429-90-5) METHYL ETHYL KETONE (CAS 78-93-3) N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3)

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

4-Methyl-2-pentanone (CAS 108-10-1)	Listed: November 4, 2011		
CARBON BLACK (CAS 1333-86-4)	Listed: February 21, 2003		
ETHYL ALCOHOL (CAS 64-17-5)	Listed: April 29, 2011		
	Listed: July 1, 1988		
ETHYLBENZENE (CAS 100-41-4)	Listed: June 11, 2004		
US - California Proposition 65 - CRT: Listed date/Developmental toxin			
4-Methyl-2-pentanone (CAS 108-10-1)	Listed: March 28, 2014		
ETHYL ALCOHOL (CAS 64-17-5)	Listed: October 1, 1987		
METHANOL (CAS 67-56-1)	Listed: March 16, 2012		
TOLUENE (CAS 108-88-3)	Listed: January 1, 1991		
US - California Proposition 65 - CRT: Listed date/Female reproductive toxin			
TOLUENE (CAS 108-88-3)	Listed: August 7, 2009		

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	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	05-05-2017
Revision date	05-16-2017
Version #	02
HMIS® ratings	Health: 2* Flammability: 3 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 3 Instability: 0

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