



MATERIAL SAFETY DATA SHEET

Inhalation:	High vapor concentration may irritate the mucous membranes. Breathing small amounts during normal handling is not likely to cause harmful effects; Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.
Sub-Chronic Effects:	May cause headaches, nausea, vomiting and narcotic effect if over-exposed.

Section 4. First Aid Measures

First Aid for Eye:	Immediately flush with water for at least 15 minutes, including under eyelids. Seek medical attention if discomfort persists.
First Aid for Skin:	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if discomfort persist.
First Aid for Inhalation:	If large amounts are inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, and call a physician.
First Aid for Ingestion:	If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Seek medical attention for advice about whether to induce vomiting. If possible do not leave individual unattended.

Section 5. Fire Fighting Measures

Flash Point (°F/°C):	68°F/20°C (tagged closed)
Flammable Limit (vol%):	400 ppm%
Auto-ignition Temp. (vol%)	750° F - 900° F
Extinguisher Media:	Foam, Dry Chemical or Cold Water Spray
Fire Fighting Instructions:	Wear self-contained breathing apparatus and full protective gear. USE WATER WITH CAUTION. Water spray may be used to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a safe distance and protected location.
Unusual Hazards:	Flammable. When exposed to heat and flame, material is a fire explosion hazard. It may produce toxic products CO, carbon dioxide and oxides of nitrogen. Vapors may cause a flash fire or ignite explosively. Vapors may travel a considerable distance to a source of ignition and flash back. prevent buildup of vapors or gases to explosive concentrations.

Section 6. Accidental Release Measures



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Spill or Release Procedures: Eliminate all sources of heat and ignition. Use absorbent material for spills and dike it, wash spill material into retaining containers. Place containers in a well ventilated area. Consult an expert on disposal regulations.

Section 7. Handling and Storage

Handling: Keep away from heat, sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use adequate ventilation. Wash skin thoroughly after handling.

Storage: Keep container closed when not in use. Store in a well ventilated place. Store @ 70 + 15 ° F, allow some air space above liquid level.

Explosion Hazard: Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking or other ignition sources at locations distant from material handling point. Never use welding or cutting on or near drum (even empty) because product (even just residue) can ignite explosively.

Section 8. Exposure Controls / Personal Protective Equipment

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

General: For open systems where contact is likely, wear long sleeves, chemical resistant gloves and chemical goggles. Provide eye wash stations and safety showers.

Eye Protection: Wear chemical splash goggles in compliance with OSHA regulations are advised ; however, OSHA regulations also permit other type of safety glasses.

Skin Protection: Wear impervious protective clothing, including boots, gloves to prevent skin contact.

Respiratory Protection: Use organic vapor mask and local exhaust systems.

Section 9. Physical and Chemical Properties

Appearance @ 25°C:	Clear, viscous liquid	Viscosity (RVT):	300-400 cps
Odor @ 25°C:	Fruity ester-like	Vapor Pressure:	N/DA
pH	Not applicable	Vapor Density:	N/DA
Specific Gravity:	0.98	Evaporation Rate:	N/DA
Ignition:	Not applicable	% Volatiles:	W/W % : 99+
Boiling Point:	170° F		
Solubility in Water	Insoluble		



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Section 10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Heated material produces NO₂, CO₂, CO

Incompatibility (Materials to Avoid):
Avoid oxidizing agents, acids & bases (heat)

Hazardous Polymerization:
May occur

Conditions to Avoid: Heat, flame, ignition sources.

Section 11. Toxicological Information

Acute Oral Toxicity: No data available

Acute Dermal Toxicity: No data available

Acute Inhalation: No data available

Mutagenicity: No data available

Section 12. Ecological Information

Chemical Fate Information: Biodegradability: N/DA

Chemical Oxygen Demand: N/DA

Section 13. Disposable Considerations

Dispose of diking materials and absorbent in compliance with State, Local, and Federal regulations. Residual vapors may explode on ignition; do not cut, drill or weld on or near the container. Mix with compliance chemical which is less flammable and incinerate.

Section 14. Transportation Information

<DOT Information>

Proper Shipping Name:

Flammable liquids, NOS, (ethyl acetate, isobutyl acetate), 3,
UN1993, PGII



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Section 15. Regulatory Information

Federal Regulatory Status:

Resource Conservation & Recover Act (RCRA) Classification:

This product contains the following chemicals considered to be hazardous waste under RCRA (40 CFR 261)

Ethyl Acetate CAS # 141-78-6 RCRA Code: U112, Methyl Ketone CAS # 78-93-3 RCRA Code: U159, Xylene CAS # 1330-20-7 RCRA Code: U239

FDA: This product has not been approved by the FDA for use in food packaging and/or other applications as an indirect food additive.

Clean Water Act: This product contains the following chemicals listed under the U.S Clean Water Act Hazardous Substances List: Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0. The following chemicals are listed as primary pollutants: None

Clean Air Act: HAP/ODS: This product contains the following hazardous air pollutants (HAP) and ODS's as defined by the U.S Clean Air Act; Methyl Ethyl Ketone CAS # 78-93-3, Benzophenone CAS # 119-61-9 (HAP) This product does not contain any ODS substances.

Occupational Safety and Health Act: This Product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard. Its hazards are: Immediate (acute) health hazard. Fire Hazard

SARA Title III: Section 302: None

Sara Title III: Section 304: This product chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List).

Ethyl Acetate CAS # 141-78-6, RQ (Lbs): 5000

Isobutyl acetate CAS # 110-19-0, RQ (Lbs): 5000

Methyl Ethyl Ketone CAS # 78-93-3, RQ (Lbs): 5000

Xylene CAS # 1330-20-7, RQ (Lbs): 100

SARA Hazard Categories (311/312): Fire Hazard. Immediate (Acute) Health Hazard.

SARA Title III: Section 313: This product contains chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Methyl Ethyl Ketone CAS # 78-93-3, RQ (Lbs): 5000

Xylene CAS # 1330-20-7, RQ (Lbs): 100

TSCA Section 8(b): Inventory: This product contains chemicals listed on the TSCA inventory or otherwise complies with TSCA premanufacture notification requirements.

State Regulatory Status:

The following chemical are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

MA Right-to-Know Law:

Ethyl Acetate CAS # 141-78-6, Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0, Methyl Ethyl Ketone CAS # 78-93-3



MATERIAL SAFETY DATA SHEET

NJ Right-to Know Law:

Ethyl Acetate CAS # 141-78-6, Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0, Methyl Ethyl Ketone CAS # 78-93-3

PA Right-to-Know:

Ethyl Acetate CAS # 141-78-6, Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0, Methyl Ethyl Ketone CAS # 78-93-3

FL Right-to-Know:

Ethyl Acetate CAS # 141-78-6, Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0, Methyl Ethyl Ketone CAS # 78-93-3

MN Right-to-Know:

Benzophenone CAS # 119-619, Ethyl Acetate CAS # 141-78-6, Xylene CAS # 1330-20-7, Isobutyl acetate CAS # 110-19-0, Methyl Ethyl Ketone CAS # 78-93-3

International Regulations:

CDSL: Canadian Inventory (on Canadian Transitional List)

Ethyl Acetate CAS # 141-78-6 on DSL. WHMIS = B2, D2B

Isobutyl acetate CAS # 110-19-0 on DSL. WHMIS = n/da

Methyl Ethyl Ketone CAS # 78-93-3 on DSL. WHMIS = B2, D2A

Hydroxy propyl cellulose CAS # 9004-64-2 on DSL. WHMIS n/da

Benzophenone CAS # 119-619 on DSL. WHMIS n/da

Xylene CAS # 1330-20-7 on DSL. WHMIS n/da

EINECS: European Inventory

Isobutyl Acetate (203-745-1)

Hazard Symbol (F), R Values (r11), S Values (S9, S16, S23, S29, S33)

Ethyl Acetate (205-500-4)

Hazard Symbol (XI F), R Values (R11, R36, R66, R67), S Values (S16, S26, S33)

MEK (201-159-0)

Hazard Symbol (XI F), R Values (R11, R36, R66, R67), S Values (S9, S16)

Hydroxypropyl cellulose (unlisted)

Hazard Symbol (n/da), R Values (n/da), S Values (S24/25, S28A, S37, S45)

Xylene (215-535-7)

Hazard Symbol (XN), R Values (R10, R20/21, R38), S Values (S25)

Benzophenone (204-337-6)

Hazard Symbol (n/da), R Values (n/da), S Values (n/da)

Section 16. Other Information

HMIS:

Health=1

Flammability=3

Reactivity=1