

MATERIAL SAFETY DATA SHEET

E-Z FURNITURE REFINISHING LIQUID

EMERGENCY CONTACT: FOR CHEMICAL EMERGENCY - SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT,
CALL CHEMTREC AT 1-(800)-424-9300, DAY OR NIGHT.

<u>INDEX</u>	<u>HMIS</u>		<u>NFPA</u>	
4 - Severe	Health	*2	Health	2
3 - Serious	Flammability	3	Flammability	3
2 - Moderate	Reactivity	0	Reactivity	0
1 - Slight				
0 - Insignificant				

* denotes chronic hazard

Section 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient(s)</u>	<u>CAS Number</u>	<u>% (by volume)</u>
TOLUENE	108-88-3	36.0 - 36.0
METHYL ALCOHOL	67-56-1	28.0 - 28.0
ACETONE	67-64-1	21.0 - 25.0
METHYLENE CHLORIDE	75-09-2	14.0 - 14.0

Section 3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYE:

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

SKIN:

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Widespread skin contact with methylene chloride may cause an intense burning feeling followed by a cold, numb feeling which lessens after contact ends. Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

SWALLOWING:

Swallowing this material may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

INHALATION:

Breathing of vapor or mist is possible. Breathing this material may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

SYMPTOMS OF EXPOSURE:

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: metallic taste, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, leg cramps, muscle weakness, pain in the abdomen and lower back, blurred vision, shortness of breath, loss of coordination, confusion, irregular heartbeat, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), elevated carbon monoxide levels the blood, high blood sugar, visual impairment (including blindness), coma, and death.

TARGET ORGAN EFFECTS:

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Prolonged intentional toluene abuse may lead to damage to many organ systems having effects on: central and peripheral

nervous systems, vision, hearing, liver, kidneys, heart and blood. Such abuse has been associated with brain damage characterized by disturbances in gait, personality changes and loss of memory. Comparable central nervous system effects have not been shown to result from occupational exposure to toluene. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. In addition, while noise is known to cause hearing loss in humans, it has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: blood abnormalities, respiratory tract damage (nose, throat, and airways), kidney damage, effects on hearing, liver damage, central nervous system damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: kidney damage, visual impairment.

DEVELOPMENTAL INFORMATION:

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans. Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain.

CANCER INFORMATION:

Methylene chloride has been shown to cause liver and lung cancer in laboratory mice. Follow-up studies suggest that cancer is specific to the mouse and may not be relevant to humans. Methylene chloride has not been shown to be carcinogenic in humans. It is listed as carcinogenic by the International Agency for Research on Cancer and the National Toxicology Program.

OTHER HEALTH EFFECTS:

No data

PRIMARY ROUTE(S) OF ENTRY:

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

Section 4. FIRST AID MEASURES

EYES:

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

SKIN:

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

SWALLOWING:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

INHALATION:

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

NOTE TO PHYSICIANS:

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3-Swallowing) when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, pancreas, heart, blood-forming system, auditory system. Exposure to this material may

aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material

Section 5. FIRE FIGHTING MEASURES

FLASH POINT:

< 20.0 F (-6.6 C) TCC

EXPLOSIVE LIMIT:

(for component) Lower 1.2% Upper 36.0%

AUTOIGNITION TEMPERATURE:

No data

HAZARDOUS PRODUCTS OF COMBUSTION:

May form: carbon dioxide and carbon monoxide, chlorine, hydrogen chloride, phosgene, various hydrocarbons.

FIRE AND EXPLOSION HAZARDS:

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

EXTINGUISHING MEDIA:

Regular foam, water fog, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS:

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

Section 6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Eliminate all sources of ignition such as flares, flames (including pilot lights) and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

LARGE SPILL:

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

Section 7. HANDLING AND STORAGE

HANDLING:

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Precautions during use: avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. **WARNING.** Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

STORAGE:

Aluminum equipment should not be used for storage and/or transfer, e.g. pumps, mixers, fittings, storage tanks, etc. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions. Do not store near extreme heat, open flame or sources of ignition.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

SKIN PROTECTION:

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY PROTECTIONS:

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

ENGINEERING CONTROLS:

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

EXPOSURE GUIDELINES:

Component

TOLUENE (108-88-3)

OSHA PEL 200.000 ppm - TWA

OSHA PEL 300.000 ppm - Ceiling

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 150.000 ppm - STEL

ACGIH TLV 50.000 ppm - TWA (Skin)

ACGIH TLV 150.000 ppm - STEL (Skin)

METHYL ALCOHOL (67-56-1)

OSHA PEL 200.000 ppm - TWA

OSHA VPEL 200.000 ppm - TWA (Skin)

OSHA VPEL 250.000 ppm - STEL (Skin)

ACGIH TLV 200.000 ppm - TWA (Skin)

ACGIH TLV 250.000 ppm - STEL (Skin)

ACETONE (67-64-1)

OSHA PEL 1000.000 ppm - TWA

OSHA VPEL 750.000 ppm - TWA

OSHA VPEL 1000.000 ppm - STEL

ACGIH TLV 500.000 ppm - TWA

ACGIH TLV 750.000 ppm - STEL

METHYLENE CHLORIDE (75-09-2)

OSHA PEL 25.000 ppm - TWA

OSHA PEL 125.000 ppm - STEL

OSHA VPEL 25.000 ppm - TWA

OSHA VPEL 125.000 ppm - STEL

ACGIH TLV 50.000 ppm - TWA

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:

(for component) 102.9 - 104.7 F (39.3 - 40.3 C)

VAPOR PRESSURE:

(for component) 355.000 mmHg

SPECIFIC VAPOR DENSITY:

> 1.000 @ AIR=1

SPECIFIC GRAVITY:

.876 - .912 @ 68.00 F

LIQUID DENSITY:

7.450 lbs/gal @ 68.00 F

.876 - .912 kg/l @ 20.00 C

PERCENT VOLATILES:

No data

EVAPORATION RATE:

SLOWER THAN ETHYL ETHER
APPEARANCE:
CLEAR AND PARTICLE FREE
STATE:
LIQUID
PHYSICAL FORM:
HOMOGENEOUS SOLUTION
COLOR:
WATER WHITE
ODOR:
No data
pH:
Not applicable

Section 10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION:
Product will not undergo hazardous polymerization.
HAZARDOUS DECOMPOSITION:
May form: carbon dioxide and carbon monoxide, chlorine, hydrogen chloride, phosgene, various hydrocarbons.
Open flame, welding arcs, resistance heaters, etc., which can result in thermal decomposition releasing hydrogen chloride and small amounts of phosgene and chlorine.
CHEMICAL STABILITY:
Stable. Gross contamination with water can cause hydrolysis, producing small amounts of hydrochloric acid.
INCOMPATIBILITY:
Avoid contact with: acids, amines, calcium hypochlorite, reactive metals such as aluminum and magnesium, sodium, strong alkalies, strong oxidizing agents, zinc.

Section 11. TOXICOLOGICAL INFORMATION

No data

Section 12. ECOLOGICAL INFORMATION

No data

Section 13. DISPOSAL CONSIDERATION

WASTE MANAGEMENT INFORMATION:
Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Section 14. TRANSPORT INFORMATION

DOT INFORMATION - 49 CFR 172.101
DOT DESCRIPTION & [CONTAINER MODE]:
PAINT RELATED MATERIAL, 3, UN1263, II [55 Gal Drum/5 Gal Pail/Gallon]
DOT DESCRIPTION & [CONTAINER MODE]:
CONSUMER COMMODITY, ORM-D [Quart]
NOS COMPONENT:
Not applicable

RQ (REPORTABLE QUANTITY) - 49 CFR 172.101

<u>Product Quantity (lbs)</u>	<u>Component</u>
2857	TOLUENE
5000	DICHLOROMETHANE
20000	METHANOL
25001	ACETONE

OTHER TRANSPORTATION INFORMATION

The DOT Transport Information may vary with the container and mode of shipment.

Section 15. REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4 (a)

<u>Component</u>	<u>RQ (lbs)</u>
TOLUENE	1000
METHYL ALCOHOL	5000
ACETONE	5000
METHYLENE CHLORIDE	1000

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate (X)	Delayed (X)	Fire (X)	Reactive ()
Sudden Release of Pressure ()			

SARA 313 Components - 40 CFR 372.65

<u>Section 313 Component(s)</u>	<u>CAS Number</u>	<u>%</u>
TOLUENE	108-88-3	35.83
METHANOL	67-56-1	28.11
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	13.53

OSHA PROCESS SAFETY MANAGEMENT 29 CFR 1910

None Listed

EPA ACCIDENTAL RELEASE PREVENTION 40 CFR 68

None listed

INTERNATIONAL REGULATIONS:

INVENTORY STATUS

Not determined

STATE AND LOCAL REGULATIONS:

CALIFORNIA PROPOSITION 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.

DICHLOROMETHANE (METHYLENE CHLORIDE)

BENZENE

ACETALDEHYDE

FORMALDEHYDE (GAS)

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.

TOLUENE

BENZENE

NEW JERSEY RTK LABEL INFORMATION:

TOLUENE	108-88-3
METHYL ALCOHOL	67-56-1
ACETONE	67-64-1
METHYLENE CHLORIDE	75-09-2

PENNSYLVANIA RTK LABEL INFORMATION:

BENZENE, METHYL-	108-88-3
METHANOL	67-56-1

2-PROPANONE
METHANE, DICHLORO-

67-64-1
75-09-2

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