Revision Date: 08/17/15

1. Product and Company Information

U500 Adhesive

Superflite, Inc. 3701 Hwy 162

Granite City, IL 62040 USA

24-Hour Emergency Response Information:

CHEMTREC 1-800-424-9300

Product use: Solvent-based Adhesive

2. Hazards Information

GHS Classification:

Flammable liquids, Category 2 Eye irritation, Category 2A Skin irritation, Category 2

Specific target organ toxicity following single exposure, Category 3.





Signal Word: Danger.

Hazard Statements:

H225: Highly flammable liquid and vapor.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H315: Causes skin irritation.

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241: Use explosion-proof

electrical/ventilation/lighting/equipment.

P242: Use only non-sparking tools.

P240: Ground/bond container and receiving equipment.

P243: Take precautionary measures against static charges.

P233+P403+P235+P405: Keep container tightly closed and in a well-ventilated place. Keep cool. Store locked up.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing mist, vapors, and spray

P264: Wash skin thoroughly after handling. P280: Wear protective gloves, eye protection, face protection.

Precautionary Statements (continued):

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention. P303+P361+P353: If on skin (or hair), take off immediately all

contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P302+P303+P352+P362: IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P308+P310+P101+P312+P313: If exposed or concerned:

Immediately call a POISON CENTER or physician. If medical attention is needed, have product container or label at hand.

P370+P378: In case of fire, use foam, dry chemical, or CO2 for extinction.

P501: Dispose of contents/containers in accordance with applicable regulations.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	CAS No.	<u>Wt. %</u>
Methyl Ethyl Ketone	78-93-3	52-58
Synthetic Rubber & Resins*	N.A.	42-48

^{*} The specific chemical identities and/or exact percentages have been withheld as a trade secret.

4. First Aid Measures

INHALATION: Remove to fresh air and keep at rest. If breathing has stopped, apply artificial respiration and get medical attention immediately.

SKIN CONTACT: Immediately wash with soap and plenty of water. Remove contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention.

EYE CONTACT: Hold eyelids apart and flush eyes with large quantities of water for 15 minutes. Remove contact lenses, if present, after the first 5 minutes and continue rinsing eye. Get medical attention.

INGESTION: Get medical attention immediately. Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.

5. Fire-Fighting Measures

Flash Point: 16 °F/ -9 °C

Flammable Limits (% by Volume): Lower Explosion Limit: 1.4, Upper Explosion Limit: 11.4

FIRE FIGHTING MEASURES:

Fire extinguishing media: CO₂, dry chemical, foam.

SPECIAL FIREFIGHTING PROCEDURES: Do not use water as it may be ineffective. Water may be used to cool closed containers. Wear self-contained breathing apparatus and protective clothing in fighting fires to avoid inhalation of smoke and vapors.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors may cause flash fire! Vapors may ignite explosively!

6. Accidental Release Measures

Personal precautions: Use personal protective clothing and equipment. Ensure adequate ventilation. Remove all ignition sources. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Do not allow discharge to drains, surface water, or groundwater. Dike the spill as needed.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove or extinguish all sources of flame, heat & sparks. Turn off all electric motors in area. Ventilate the area. Transfer liquid to a holding container suitable for flammable solvents.

WASTE DISPOSAL METHOD: Dispose of as a hazardous waste in accordance with national, state and local regulations.

7. Handling and Storage

Highly flammable liquid. Avoid heat, sparks, open flames. Vapors are heavier than air and may spread along floors. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentrations higher than the occupational exposure limits. Use grounding wires when transferring product from one container to another. Avoid breathing vapors and contact with skin and eyes. Provide adequate general and local exhaust ventilation. Hazardous residue may remain in emptied container. Do not reuse empty containers without commercial cleaning or reconditioning. Store product in a cool, well-ventilated place. Keep containers tightly sealed when not in use.

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS: General and local exhaust. General dilution ventilation of sufficient volume and pattern to keep vapor concentration below 200 <u>PPM.</u>

RESPIRATORY PROTECTION: If required, use NIOSH approved respirator for organic vapor and mist in compliance with OSHA Standard 29 CFR 1910.134.

SKIN PROTECTION: impermeable gloves to minimize skin contact.

EYE PROTECTION: Wear goggles, face shield, or safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT: Eye bath and safety shower.

HYGIENIC PRACTICES: Wash with soap and water before eating, drinking, smoking or using toilet facilities.

9. Physical and Chemical Properties

Appearance and Odor: Green color, mobile liquid, Methyl Ethyl Ketone solvent odor.

Boiling Point (°F): 174.0 Specific Gravity $(H_2O=1)$: 0.96 Vapor Pressure (mm Hg): 78.0 Percent Volatile (By Volume): 66 Vapor Density (AIR=1): 2.5 Evaporation Rate (Butyl Acetate = 1) Greater Solubility in Water: Appreciable Evaporation Rate (Ethyl Ether = 1) Less

Flash Point: 16 °F/ -9 °C Flammable Limits (% by Volume):

Auto-ignition Temperature: 759 °F/ 404 °C Lower Explosion Limit: 1.4, Upper Explosion Limit: 11.4

10. Stability and Reactivity

STABILITY: This product is stable under normal storage conditions.

CONDITIONS TO AVOID: Fire, Excessive heat.

INCOMPATIBILITY (Materials to avoid): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION or BYPRODUCTS: CO, CO₂, HCL CL₂, Hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

CONDITIONS TO AVOID: N/A

11. Toxicological Information

PRIMARY ROUTE(S) OF ENTRY: INHALATION, SKIN CONTACT, SKIN ABSORPTION, INGESTION, EYE CONTACT.

Component Analysis LC50/LD50:

Methyl Ethyl Ketone	Inhalation LC50 Rat 23,500 mg/m3 8 h; Oral LD50 Rat
	2737 mg/kg; Dermal LD50 Rabbit 6480 mg/kg.

Carcinogenic Categories (IARC/NTP): None of the ingredients listed.

WARNING: TARGET ORGAN EFFECTS: This product is comprised of multiple ingredients both hazardous and non-hazardous materials. Since the quantity of each ingredient varies from less than 1% to as much as 99%, it is not possible to determine precise exposures to each individual material within the mixture. With regard to target organs, one or more of the following may be affected out of normal use or misuse of the product: Human and unborn human lungs, skin, brain, heart, kidneys, liver, reproductive organs, central nervous system and the blood.

INGESTION: can cause gastrointestinal irritation, nausea, vomiting and diarrhea. aspiration of material into lungs can cause chemical pneumonitis and pulmonary edema.

INHALATION: excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, nausea, impairment of coordination and even asphyxiation. Can cause motor neuropathy and parathesia in distal extremities upon excessive exposure.

SKIN CONTACT: prolonged and repeated skin contact can cause defatting and drying of the skin which can result in skin irritation and dermatitis.

EYE CONTACT: can cause severe irritation, redness, tearing, blurred vision.

CHRONIC HAZARDS: Overexposure may cause headache, nausea, dizziness, impairment of coordination.

12. Ecological Information

Volatile Organic Compounds (VOCS): 4.40 lbs/gal, 528 gms/ltr

Toxicity information not available for this mixture.

13. Disposal Considerations

Dispose of as a hazardous waste in accordance with national, state and local regulations.

14. Transport Information

DOT PROPER SHIPPING NAME: ADHESIVES

DOT HAZARD CLASS: 3 HAZARD SUBCLASS: DOT UN/NA NUMBER: UN1133 PACKING GROUP: II

RESP, GUIDE Number: 127

15. Regulatory Information

This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

16. Other Information

HMIS RATINGS: HEALTH: 1 FLAMMABILITY: 3 REACTIVITY: 0

The information contained on this MSDS may be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Notice: The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The

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