



MATERIAL SAFETY DATA SHEET

(According to ANSI Z400.1-2004)

PRODUCT NAME: STA-SHARP ADHERING LIQUID

Previous Issue: May 5, 2013

Date Prepared: August 30, 2013

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Name: **STA-SHARP ADHERING LIQUID**
 Company: ULANO® CORPORATION
 110 Third Avenue
 Brooklyn, NY 11217
 Phone: 718-237-4700
 Fax: 718-802-1119
 Emergency contact: 1-800-424-9300 (CHEMTREC)

MSDS prepared by: P. Drago

Recommended use: Solvent blend for film adhesion to screen fabric for screenprinting

2. HAZARD IDENTIFICATION OF THE PREPARATION

This preparation is classified as a flammable hazardous according to 29CFR 1910-1200.

Appearance:	liquid
Odor:	solvent aroma
Potential Health Effects:	See Section 11 for more information
Potential Health Effects: Eyes	This product may be irritating to the eyes.
Potential Health Effects: Skin.	Repeated exposure may cause skin dryness or Cracking. Some absorption expected.
Potential Health Effects: Ingestion	Ingestion of this product may be irritating to the digestive system. Aspiration into lungs can produce severe lung damage and is a medical emergency.
Potential Health Effects: Inhalation	Inhalation of this product may be irritating to the respiratory system. Vapors may cause drowsiness and dizziness.
F	Highly flammable
N	Dangerous to the environment
Xn	Harmful
11	Highly flammable
36/38	Irritating to eyes and skin
50/53	Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
66	Repeated exposure may cause skin dryness or cracking
67	Vapors may cause drowsiness and dizziness.

Target Organs: skin, eyes and respiratory system

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This product contains 2-propanol, listed by the IARC as "3", not classifiable as to carcinogenicity to humans. There are no carcinogens or potential carcinogens as listed by OSHA or the NTP

Potential Environmental Effects: See Section 12 for more information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the below mentioned materials

Hazardous components:

EINECS-No CAS-No.	Name R-phrases	Hazard	%content
205-500-4 141-78-6	Ethyl Acetate 11-36-66-67	Xi, F	10.0-30.0%
205-563-8 142-82-5	Heptane 11-65-38-67-50/53	F, Xn, N	30.0-60.0%
204-658-1 123-86-4	n-Butyl Acetate 10-66-67		1.0-5.0%
200-661-7 67-63-0	2-Propanol 11-36-67	F, Xi	10.0-30.0%

Additional information:

For full text of risk phrases see Section 16.

4. FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Get medical attention. Place in stable side position and seek medical advice. If breathing is irregular or has stopped, apply artificial respiration. Aspiration into lungs can produce severe lung damage and is a medical emergency.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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5. FIRE-FIGHTING MEASURES

Flammable:	yes
Means of extinction:	foam, dry powder, carbon dioxide
Unsuitable extinguishing media:	Hard water stream
Flash point:	10.0-19.0°F (-12.2 to -17.2°C)
Upper flammable limit:	12.0%
Explosion data impact:	Not known
Lower flammable limit:	1.1%
Explosion data static:	above flashpoint yes
Hazardous combustion products:	typical carbon oxygen compounds.
Autoignition temp:	unknown

Fire fighters should wear SCBA for fighting fires in enclosed areas.

6. ACCIDENTAL RELEASE MEASURES

Do not empty into drains. Keep away sources of ignition. Ensure sufficient ventilation. Prevent unauthorized access. Collect with liquid absorbing material and proceed according to local waste disposal regulations.

7. HANDLING AND STORAGE

Keep container tightly closed and in a cool and well ventilated place. Ensure adequate ventilation, especially when using a spray-gun. Avoid contact with skin and eyes. Avoid flammable explosive air / vapor mixtures. Prevent concentrations exceeding the exposure limits.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limit:

CAS #	Name	OSHA TWA	ACGIH TWA
141-78-6	Ethyl Acetate	400 ppm	400 ppm
142-82-5	Heptane	500 ppm	400 ppm
123-86-4	n-Butyl Acetate	150 ppm	150 ppm
67-63-0	2-Propanol	400 ppm	400 ppm

Engineering controls

General- not required
 Local exhaust- recommended
 Other- none

Personal Protection

Gloves- solvent impermeable recommended
 Respirator- yes if local or general exhaust is not used
 Eye- protective goggles recommended
 Protective footwear- not required
 Protective clothing- not required
 Other- none

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form: liquid
 Color: colorless
 Odor: solvent
 Flash point: 10.0-19.0°F
 Ignition temperature: n.a
 Density: 0.79 g/cm³
 Viscosity: unknown
 Explosion limits: 1.1-12.0 Vol %
 Boiling point: 169°F (76° C)
 Vapour density: >1(air=1)
 Vapour pressure: 76 mm Hg @ 20°C
 Freezing point: not known
 pH: not applicable
 Coefficient of water/ oil distribution: not known
 Volatile Organic Compounds: 790 GRAMS / LITER, 6.58 LBS / GAL

10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions
 (see Section 7).
 Store as a flammable liquid
 INCOMPATIBILITY: Strong oxidizers

11. TOXICOLOGICAL INFORMATION

Effects of acute exposure:

COMPONENT	CAS#	LD ₅₀	LC ₅₀
Ethyl Acetate	141-78-6	5620 mg/kg oral, rat	1600 ppm inhalation 8 hour, rat
Heptane	142-82-5	No data	103 g/m ³ /4H, inhalation, rat
n-Butyl Acetate	123-86-4	10.8 g/kg, oral, rat	2000 ppm/4H inhalation, rat
2-Propanol	67-63-0	5045 mg/kg, oral, rat	16,000 ppm/8H inhalation, rat

General information:

Effects of acute exposure: Repeated or prolonged contact causes local irritation of skin and mucous membranes, particularly the eyes. Inhalation of high concentrations may cause nausea, dizziness, narcotic effect.

Irritancy of product- yes
 Skin sensitization- none reported
 Respiratory sensitization- none known
 Carcinogenicity- no
 IARC- 2-propanol is classified "3", not classifiable as to carcinogenicity to humans.

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ACGIH -	no
Reproductive toxicity -	none known
Teratogenicity -	none known
Embryotoxicity -	none known
Mutagenicity -	none known
Name of synergistic products/effects-	none known

12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do not empty into drains or release into open water.

Do not store at public waste disposal sites.

13. WASTE DISPOSAL INFORMATION

Dispose of as a flammable hazardous waste

Empty container: scrap metal recycling or re-conditioning

Soiled container: (treatment like product itself)

14. TRANSPORT INFORMATION

ADR/RID/DOT:	Class: 3 UN: 1993 Flammable liquid, nos (heptane, ethyl acetate, 2-propanol)
Packaging group:	II
IMDG:	Class: 3 EMS: F-E, <u>S-E</u> UN: 1993 Flammable liquid, nos (heptane, ethyl acetate, 2-propanol)
Marine pollutant:	No
Packaging group:	II

15. REGULATORY INFORMATION

Labeling:

F Flammable liquid

R-phrases:

11 Highly flammable

36/38 Irritating to eyes and skin

50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

66 Repeated exposure may cause skin dryness or cracking

67 Vapors may cause drowsiness and dizziness

S-phrases:

7/9 Keep container tightly closed and in a well-ventilated place

16 Keep away from sources of ignition – No smoking

24 Avoid contact with skin

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

PRODUCT NAME: STA-SHARP ADHERING LIQUID**Date Prepared: August 30, 2013****Special labeling:** n.a

National Regulation for Germany: Water pollution class: 2

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is classified as a Code B2, D2B hazardous material.

--Canada--

Ingredient	TSCA	EC	DSL	NDSL
Ethyl Acetate (141-78-6)	Yes	Yes	Yes	No
Heptane (142-82-5)	Yes	Yes	Yes	No
n-Butyl Acetate (123-86-4)	Yes	Yes	Yes	No
2-Propanol (67-63-0)	Yes	Yes	Yes	No

Ingredient	-SARA 302-	SARA 313	-RCRA-	CERCLA	- TSCA	
	RQ	TPQ	List	RQ	261.33	8(d)
Ethyl Acetate	No	No	No	U112	5,000	No
Heptane	No	No	No	No	No	Yes
n-Butyl Acetate	No	No	No	No	5000	No
2-Propanol	No	No	Yes	No	No	No

16. OTHER INFORMATION**HMIS: Health 2, Flammability 2, Reactivity 0**

Text of risk phrases mentioned in Section 2:

11	Highly flammable
36/38	Irritating to eyes and skin
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66	Repeated exposure may cause skin dryness or cracking
67	Vapors may cause drowsiness and dizziness

For further information please refer to our technical information sheet. Data in this MSDS correspond with our current level of knowledge, but do not represent any assurance of product properties. The user personally is responsible for compliance with all legal requirements.

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