

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Name: Version: DP
4148 Adhering Fluid
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

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2
Skin irritation : Category 2
Eye irritation : Category 2A
Specific target organ tox : Category 3 (Central nervous system)
icity - single exposure
Aspiration hazard : Category 1

GHS Label element

Signal word : Danger
Hazard statements : H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
Hazard pictograms :



H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

Disposal:

Potential Health Effects

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

- ACGIH** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
- NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Emergency Overview

Physical state	liquid
Colour	Clear, Colorless
Hazard Summary	No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical Name	Concentration (%)
64742-49-0 / 426260-76-6 / 64742-89-8	Naphtha (pet), hydrotreated It AND/OR Heptane, branched, cyclic and linear AND/OR Solvent naphtha (pet), It aliph.	30 - 50
67-63-0	Isopropyl alcohol	30 - 50
141-78-6	Ethyl acetate	20 - 30
142-82-5	Heptane	10 - 20
123-86-4	n-Butyl acetate	1 - 5

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
- Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : Consult a physician after significant exposure.
If unconscious place in recovery position and seek medical advice.

- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

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

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.

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

IATA (International Air Transport Association): UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE, BRANCHED, CYCLIC AND LINEAR, ISOPROPYL ALCOHOL) , 3, II, Flash Point:-9 °C(16 °F)

IMDG (International Maritime Dangerous Goods): UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE, BRANCHED, CYCLIC AND LINEAR, ISOPROPYL ALCOHOL), 3, II, Marine Pollutant (HEPTANE, BRANCHED, CYCLIC AND LINEAR, TOLUENE)

DOT (Department of Transportation): UN1993, Flammable liquids, n.o.s., (HEPTANE, BRANCHED, CYCLIC AND LINEAR, ISOPROPYL ALCOHOL), 3, II

15. REGULATORY INFORMATION

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Flammable liquid, Specific target organ toxicity - single exposure, Moderate skin irritant, Moderate eye irritant, Aspiration hazard

WHMIS Classification : B2: Flammable liquid
D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethyl acetate	141-78-6	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489):

67-63-0	Isopropyl alcohol	30.3 %
141-78-6	Ethyl acetate	27.7 %
123-86-4	n-Butyl acetate	3.6 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

123-86-4	n-Butyl acetate	3.6 %
108-88-3	**Toluene	0.0383 %
71-43-2	**Benzene	0.0003 %
100-41-4	**Ethylbenzene	0.0003 %

91-20-3 **Naphthalene 0.0003 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

123-86-4 n-Butyl acetate 3.6 %
 108-88-3 **Toluene 0.0383 %
 71-43-2 **Benzene 0.0003 %
 100-41-4 **Ethylbenzene 0.0003 %
 91-20-3 **Naphthalene 0.0003 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

67-63-0 Isopropyl alcohol 30 - 50 %
 141-78-6 Ethyl acetate 20 - 30 %
 142-82-5 Heptane 10 - 20 %
 123-86-4 n-Butyl acetate 1 - 5 %
 71-43-2 **Benzene 0 - 0.1 %

Pennsylvania Right To Know

64742-49-0 / Naphtha (pet), hydrotreated It 30 - 50 %
 426260-76-6 AND/OR Heptane, branched, cyclic /
 64742-89-8 and linear AND/OR Solvent
 naphtha (pet), It aliph.
 67-63-0 Isopropyl alcohol 30 - 50 %
 141-78-6 Ethyl acetate 20 - 30 %
 142-82-5 Heptane 10 - 20 %
 123-86-4 n-Butyl acetate 1 - 5 %
 108-88-3 **Toluene 0 - 0.1 %

New Jersey Right To Know

64742-49-0 / Naphtha (pet), hydrotreated It 30 - 50 %
 426260-76-6 AND/OR Heptane, branched, cyclic /
 64742-89-8 and linear AND/OR Solvent
 naphtha (pet), It aliph.
 67-63-0 Isopropyl alcohol 30 - 50 %
 141-78-6 Ethyl acetate 20 - 30 %
 142-82-5 Heptane 10 - 20 %
 123-86-4 n-Butyl acetate 1 - 5 %

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.
 98-82-8 **Cumene
 71-43-2 **Benzene
 100-41-4 **Ethylbenzene
 91-20-3 **Naphthalene
 WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
 108-88-3 **Toluene
 71-43-2 **Benzene

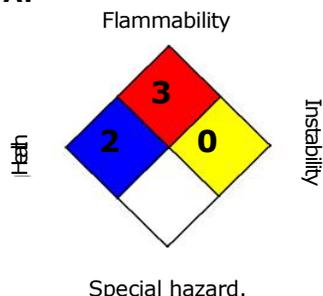
The components of this product are reported in the following inventories:

United States TSCA Inventory	:	y (positive listing) (On TSCA Inventory)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	n (Negative listing) (Not in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	n (Negative listing) (Not in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	n (Negative listing) (Not in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	n (Negative listing) (Not in compliance with the inventory)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	:	n (Negative listing) (Not in compliance with the inventory)

Special Notes: : ** Other substances in the product which may present a health or environmental hazard.

SECTION 16. OTHER INFORMATION Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

16. OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
> =	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
< =	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System

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.

DISCLAIMER OF RESPONSIBILITY:

This document is generated for the purpose of distributing health, safety and environmental data. It is not a specification sheet nor should any displayed data be construed as a specification. The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of this product.