MATERIAL SAFETY DATA SHEET
(According to ANSI Z400.1-2004)

PRODUCT NAME: DOUBLE DUTY DIRECT EMULSION
Version: original Date Prepared: Jan. 9, 2015

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Name: DOUBLE DUTY DIRECT EMULSION
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: Paul Drago
Recommended use: Manufacture of stencils for screenprinting

2. HAZARD IDENTIFICATION OF THE PREPARATION

This preparation is not classified as hazardous according to 29CFR 1910-1200.

Appearance / Odor: viscous liquid / mild odor

Potential Health Effects:

- Eyes: This product may be irritating to the eyes.
- Skin: Repeated exposure may cause irritation to skin.
- Ingestion: Ingestion of this product may be irritating to the digestive system.
- Inhalation: No known effect

Target Organs: not known

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Potential Environmental Effects: See Section 12 for more information.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the below mentioned materials
Hazardous components:

<table>
<thead>
<tr>
<th>EINECS-No</th>
<th>Name</th>
<th>Hazard</th>
<th>%content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Acrylates 36</td>
<td>Xi</td>
<td>5.0-25.0%</td>
</tr>
</tbody>
</table>

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.

**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.

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

5. FIRE-FIGHTING MEASURES

**Flammable:** no
**Means of extinction:** treat surrounding fire
**Unsuitable extinguishing media:** Hard water stream
**Flash point:** n.a
**Upper flammable limit:** n.a
**Lower flammable limit:** n.a
**Explosion data impact:** n.a
**Explosion data static:** n.a

**Hazardous combustion products:** typical carbon oxygen compounds.
**Autoignition temp:** n.a
**Fire fighters should wear SCBA for fighting fires in enclosed areas.**
6. ACCIDENTAL RELEASE MEASURES

Do not empty large quantities directly into drains. 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. Avoid contact with skin and eyes.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Occupational exposure limit:</th>
<th>CAS #</th>
<th>Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exposure limits established for ingredients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Engineering controls**
- General- not required
- Local exhaust- recommended
- Other- none

**Personal Protection**
- Gloves- recommended
- Respirator- not required
- Eye- protective goggles recommended
- Protective footwear- not required
- Protective clothing- not required
- Other- none

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form: viscous liquid
- Color: Olive Grey
- Odor: mild
- Flash point: n.a
- Ignition temperature: n.a
- Solids: 40.7%
- Viscosity: ~12,000 cps @ 25°C (unsensitized)
- Explosion limits: n.a
- Boiling point: ~212°F (100° C)
- Vapor density: >1 (air=1)
- Vapor pressure: 25hPa @ 25°C
- Freezing point: not known
- pH: 4.96
- Coefficient of water/oil distribution: not known
- Volatile Organic Compounds: less than 0.1%
10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see Section 7).
Store as a non-hazardous liquid

INCOMPATIBILITY: Strong oxidizers

11. TOXICOLOGICAL INFORMATION

Effects of acute exposure:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS#</th>
<th>LD$_{50}$</th>
<th>LC$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylates</td>
<td>Trade Secret</td>
<td>&gt;5,000 mg/kg, oral rat</td>
<td>Not established</td>
</tr>
</tbody>
</table>

General information:
Effects of acute exposure: Repeated or prolonged contact causes local irritation of skin and mucous membranes, particularly the eyes.
Irritancy of product: possible
Skin sensitization: none reported
Respiratory sensitization: none known
Carcinogenicity: no
IARC: no
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

Do not empty into drains or release into open water.
Do not store at public waste disposal sites.
This emulsion is fully biodegradable.

13. WASTE DISPOSAL INFORMATION

Dispose of as a non-hazardous aqueous waste
Empty container: scrap metal recycling or re-conditioning
Soiled container: (treatment like product itself)
14. TRANSPORT INFORMATION

<table>
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<tr>
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</thead>
<tbody>
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<td>ADR: (Europe)</td>
<td>Class: Not regulated</td>
</tr>
<tr>
<td>RID (Europe: RAIL)</td>
<td>Class: Not regulated</td>
</tr>
<tr>
<td>DOT: (USA)</td>
<td>Class: Not regulated</td>
</tr>
<tr>
<td>IATA: (AIR)</td>
<td>Class: Not regulated</td>
</tr>
<tr>
<td>IMDG: (Ocean)</td>
<td>Class: not regulated</td>
</tr>
<tr>
<td>UN #</td>
<td>n.a</td>
</tr>
<tr>
<td>Packaging group:</td>
<td>n.a</td>
</tr>
<tr>
<td>EMS:</td>
<td>n.a</td>
</tr>
<tr>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
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</table>

15. REGULATORY INFORMATION

Global Inventories (components):
- TSCA: United States - included
- DSL: Canada - included
- ENCS: Japan - included
- EINECS: Europe - included

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

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 not classified as a hazardous material.

Labeling

Xi

R-phrases:
36 Irritating to eyes

S-phrases:
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention

Special labeling:
n.a

National Regulation for Germany:
Water pollution class: 1
16. OTHER INFORMATION

HMIS: Health 1, Flammability 0, Reactivity 0

Text of risk phrases mentioned in Section 2:

Xi Irritant
36 Irritating to eyes

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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Editor’s notes: ENGLISH ONLY: do not translate this section.

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<th>VERSION</th>
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<td>US_DOUBLE DUTY_orig15</td>
<td>orig</td>
<td>0</td>
<td>1/15</td>
<td>Former DP790 product</td>
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