MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Nikken Printing Supply U.S.A., Inc.

1117 Tower Road, Schaumburg, IL 60173, U.S.A. Business Phone: (847) 885-1163 Fax: (847) 885-1932

Preparation Date: 6/01/2003

EVDOCUDE LIMITC 9 h. TWA (DDM)

24-hours Road Emergency Phone: 1-800-535-5053 INFOTRAC **PRODUCT TRADE NAME:**

Defoamer

2. COMPOSITION / INFORMATION ON INGREDIENTS

| | | EAPUSUKE LIMITS 8 III. TWA (PPWI) | |
|----------------------|---|---|---|
| <u>% by Wt Range</u> | CAS Number | OSHA PEL | ACGIH TLV |
| 60.00-80.00 | 7732-18-5 | None | None |
| 10.00-30.00 | 63148-62-9 | None | None |
| 5.00-10.00 | 1338-41-6 | None | None |
| 1.00-5.00 | 9004-99-3 | None | None |
| 1.00-5.00 | 68909-20-6 | 10 ppm | 15 ppm |
| | 60.00-80.00 10.00-30.00 5.00-10.00 1.00-5.00 | 60.00-80.00 7732-18-5 10.00-30.00 63148-62-9 5.00-10.00 1338-41-6 1.00-5.00 9004-99-3 | % by Wt Range CAS Number OSHA PEL 60.00-80.00 7732-18-5 None 10.00-30.00 63148-62-9 None 5.00-10.00 1338-41-6 None 1.00-5.00 9004-99-3 None |

3. HAZARDS IDENTIFICATION

Milky white liquid mixture and odorless. May cause eye irritation. Target Organs: None known.

| | HMIS HAZAF | RD CLASS | | | |
|---|---------------------------|--------------------------|-------------------|-------------------------|----------------------------|
| | HEALTH | (Blue) | 0 | | |
| | FLAMMABI | LITY (Red) | 0 | | |
| | REACTIVITY | Y (Yellow) | 0 | | |
| | PROTECTIV | E EQUIPMENT | В | | |
| HAZARDS IDEX: | B: | Safety glasses and glove | s | _ | |
| 0 = Minimal Hazard | 1= Slight Hazard | 2 = Moderate Haza | rd 3 | = Serious Hazard | 4 = Severe Hazard |
| POTENTIAL HEALTH EFF | ECTS | | | | |
| EYE: Exposure may cause ey | e irritation. | | | | |
| SKIN CONTACT: Exposure | may cause skin irritation | l. | | | |
| SKIN ABSORPTION: None | known. | | | | |
| INGESTION: None known. | | | | | |
| INHALATION: None known | L. | | | | |
| CHRONIC (CANCER) INFORMATION: This product has not been identified as possible cancer hazard by NTP, IARC, or OSHA. | | | | | |
| ACUTE EFFECTS: May cau | se eye irritation. | | - | | |
| OTHER HEALTH HAZARD | S: None | | | | |
| | | | | | |
| 4. FIRST AID MEASURES: | EYES: Immediately flu | ish eyes with water. Af | er initial flushi | ing, remove any contact | t lenses and continue flus |

4. FIF shing for at least 5 minutes. Get medical attention if irritation persists. SKIN: Wash off in flowing water or shower. Get medical attention if irritation develops and persists. Remove contaminated clothing. INGESTION: Give two glasses of water and induce vomiting. Get medical attention. INHALATION: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

NOTE TO PHYSICIAN: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

FLASH POINT: N/A

EXTINGUISHING MEDIA: Use water, carbon dioxide, and dry chemical.

FIRE FIGHTING INSTRUCTIONS: Firemen should wear a self-contained breathing apparatus and full protective clothing. Burning of confined ammonium nitrate could lead to detonation.

FIRE & EXPLOSION HAZARDS: Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES: ***Large Spills*** Eliminate potential sources of ignition. Wear appropriate respirator and other protective clothing. Shut off source of leak only if it is safe to do so. Dike and contain. If vapor cloud forms, water fog may be used to suppress. Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking containers and seal tightly for proper disposal. Flush area with water to remove trace residue. Dispose of flush solution as above.

7. HANDLING AND STORAGE: Causes eye irritation. Do not get in eyes, on skin, on clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Empty containers retain product residue, (liquid and/vapor), and can be dangerous. Empty drums should be completely drained, properly bunged, and promptly returned and disposed of. Prevent build up of vapors to explosive concentration.

Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Use with adequate ventilation. Maintain good housekeeping. FOR INDUSTRY USE ONLY.

Defoamer

LD 50 mg/kg (Oral, rat)

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering controls: Local exhaust ventilation may be necessary to keep airborne concentrations below the permissible exposure limits-SEE SECTION 2.

<u>PERSONAL PROTECTIVE EQUIPMENT (PPE)</u>: RESPIRATORY PROTECTION: Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits (SEC. 2) use a NIOSH-Approved respirator to prevent overexposure. In accord with 29 CFR 1910.134. Use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

EYE PROTECTION: Use safety glasses or goggles as appropriate (29 CFR 1910.133).

SKIN: Wear rubber gloves.

<u>OTHER CLOTHING AND EQUIPMENT:</u> It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance: Milky white liquid. | Odor: Odorless | <u>Boiling Point °F:</u> 100 °F (37.8 °C) | Vapor Density: Unknown | | |
|---|---------------------------------|---|---------------------------|--|--|
| Solubility in Water: Soluble in water | Specific Gravity: 1.00 | Density: 982.6 kg/m3 | <u>pH:</u> Not applicable | | |
| Volatile Organic Content (VOC, EPA | <u>A Method 24):</u> Not Tested | | | | |
| <u>VOC Composite Partial Pressure, mm Hg at 20 °C:</u> <1 | | | | | |
| Photochemical Reactivity SCAOMD R | ule 443: None Photochemical | v Reactive | | | |

<u>10. STABILITY AND REACTIVITY:</u> STABILITY: Stable under normal ambient temperature and pressure. <u>CONDITIONS TO AVOID:</u> None known. <u>HAZARDOUS POLYMERIZATION:</u> Will not occur. <u>INCOMPATIBILITY WITH OTHER MATERIALS:</u> None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, silicon dioxide, and formaldehyde.

 11. TOXICOLOGICAL INFORMATION

 Chemical Name
 CAS Number

 None
 CAS Number

12. ECOLOGICAL INFORMATION: No aquatic toxicity data available for the mixture.

<u>13. DISPOSAL CONSIDERATIONS</u>: Dispose in a manner consistent with federal, state, and local regulations. Refer to latest EPA or State Regulations regarding proper disposal.

LC50 PPM (Inhalation rat)

14. TRANSPORT INFORMATION: This product is not hazardous material for (DOT) shipping.

D.O.T. SHIPPING description: Not Regulated. IMO: SHIPPING NAME: Not Regulated. IATA: SHIPPING NAME: Not Regulated.

15. REGULATORY INFORMATION:

SARA Section 313: The following ingredients subject to reporting requirements of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.65:

| | | | EXPOSURE LIMITS 8hr. TWA(PPM) | |
|---------------|----------------------|------------|-------------------------------|-----------|
| Chemical Name | <u>% by Wt Range</u> | CAS Number | OSHA PEL | ACGIH TLV |
| None | | | | |

<u>16. OTHER INFORMATION</u>: All information appearing herein is based upon Data obtained from Manufacturer and/or recognized technical sources. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the material 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 the handling, storage, use, disposal of the material. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

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Prepared for Nikken Printing Supply