

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

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Revision Date: 10/1/2006

24-hours Road Emergency Phone: 1-800-535-5053 INFOTRAC

PRODUCT TRADE NAME:

PP Clean H Fountain Solution

SYNONYMS:

Water base mixture

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>% by Wt Range</u>	<u>CAS Number</u>	<u>EXPOSURE LIMITS 8 hr. TWA (PPM)</u>		
			<u>OSHA PEL</u>	<u>ACGIH</u>	<u>TLV</u>
Water	25.00-60.00	7732-18-5	None	None	
Malonic acid	1.00-5.00	141-82-2	Not Established	Not Established	
Adipic Acid	2.00-10.00	124-04-9	Not Established	Not Established	
Sodium Carbonate	1.00-5.00	497-19-8	Not Available	Not Available	
Sodium Benzoate	1.00-5.00	532-32-1	Not Available	Not Available	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Tan color, clear liquid, with glycol odor. Caution! Irritant liquid and Vapor, FP>200°F(>93.5°C). Contact with liquid may cause eye, skin, nose, throat, and respiratory tract irritation.

Target Organs: Eyes and skin.

HMIS HAZARD CLASS

HEALTH	(Blue)	1
FLAMMABILITY	(Red)	0
REACTIVITY	(Yellow)	0
PROTECTIVE EQUIPMENT		B

HAZARDS INDEX:

0 = Minimal Hazard

1 = Slight Hazard

B: Safety glasses and gloves

2 = Moderate Hazard

3 = Serious Hazard

4 = Severe Hazard

POTENTIAL HEALTH EFFECTS

EYE: Exposure may cause eye irritation, stinging, tearing, redness, and swelling.

SKIN CONTACT: Exposure may cause skin irritation.

SKIN ABSORPTION: Prolonged or repeated liquid contact can result in defatting, cracking, burning, and drying of the skin which may result in skin irritation and dermatitis.

INGESTION: Swallowing large amounts may cause gastric irritation and abdominal spasms.

INHALATION: Inhalation toxicity is low. Exposure may be harmful.

CHRONIC (CANCER) INFORMATION: This product has not been identified as possible cancer hazard by NTP, IARC, or OSHA.

ACUTE EFFECTS: May cause skin, eye and digestive tract irritation.

OTHER HEALTH HAZARDS: Not known

4. FIRST AID MEASURES: **EYES:** Immediately flush eyes with water. After initial flushing, remove any contact lenses and continue flushing 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: >200°F(>93.5°C). TCC.

FLAMMABLE LIMITS in air, Volume: LFL: Not Applicable ; UFL: Not Applicable.

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

FIRE FIGHTING INSTRUCTIONS: Firemen should wear a self-contained breathing apparatus and full protective clothing.

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: Wear appropriate respirator and other protective clothing. Shut off source of leak only if it is safe to do so. Dike and contain. 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 and skin irritation. Do not get in eyes, on skin, on clothing. Avoid ingestion and skin contact. Wash thoroughly after handling. Empty containers retain product residue, (liquid and/vapor), and can be dangerous. Do not cut, weld, pressurize, braze, solder, grind, drill, or expose such containers to heat, sparks or open flame. 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.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering controls: Good general ventilation should be sufficient to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT (PPE): RESPIRATORY PROTECTION: For most conditions, no respiratory protection should be needed; however, in misty atmospheres, use an approved acid mist respirator. Avoid contact with skin and eyes. Avoid prolonged or repeated breathing of vapors and mists.

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

SKIN: Wear rubber gloves.

OTHER CLOTHING AND EQUIPMENT: 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: Faint, tan color. **Odor:** Glycol ether odor **Boiling Point °F:** 212 °F (100 °C) **Vapor Density:** 1

Solubility in Water: Soluble in water **Specific Gravity:** 1.04 **Density:** 8.67 lb/gallon **pH:** 4.4

Volatiles Organic Content (VOC, EPA Method 24): 0.83 lb/gallon; 100 gm/liter.

VOC Composite Partial Pressure, mm Hg at 20 °C: <1

Photochemical Reactivity SCAQMD Rule 443: None Photochemically Reactive

10. STABILITY AND REACTIVITY:

STABILITY: Stable under normal ambient temperature and pressure.

CONDITIONS TO AVOID: Open flame and excessive heat.

HAZARDOUS POLYMERIZATION: Has not been reported.

INCOMPATIBILITY WITH OTHER MATERIALS: Incompatible materials and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, carbon dioxide, carbon monoxide, and oxides of phosphor.

11. TOXICOLOGICAL INFORMATION

Chemical Name	CAS Number	LC50 PPM (Inhalation rat)	LD 50 mg/kg (Oral, rat)
Adipic acid	124-04-9	None	1900 mg/kg (oral-mouse)
Malonic acid	141-82-2	None	1310 mg/kg (oral-rat)
Sodium carbonate	497-19-8	None	117 mg/kg (IPR-Mouse)
Sodium benzoate	532-32-1	None	1440 mg/kg (IV-Mouse)

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

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

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

D.O.T. SHIPPING description: Not Regulated product

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:

Chemical Name	% by Wt Range	CAS Number	EXPOSURE LIMITS 8hr. TWA (PPM)	
			OSHA PEL	ACGIH TLV
Adipic Acid	2.00-10.00	124-04-9	None	None

16. OTHER INFORMATION: 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.

To the best of our knowledge, the information contained herein is accurate. However, neither Nikken Printing Supply, nor any of its distributors assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

Prepared for Nikken Printing Supply

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