

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

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Revision Date: 10/01/2004

24-hours Road Emergency Phone: 1-800-535-5053
PRODUCT TRADE NAME: BRW WASH

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	% by Wt Range	CAS Number	EXPOSURE LIMITS 8 hr. TWA (PPM)	
			OSHA PEL	ACGIH TLV
Petroleum naphtha	15.00-35.00	64742-48-9	Not Established	Not Established
Aromatic naphtha	35.00-55.00	64742-95-6	Not Established	Not Established

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear colorless liquid mixture with hydrocarbon odor. Caution! Flammable liquid and Vapor, FP =105°F(41°C). Keep liquid and vapor away from heat, sparks, static electricity, all ignition sources, and flame. Surfaces that are sufficiently hot may ignite liquid product even in the absence of sparks or flame. Vapors may accumulated and travel to ignition sources distant from the handling site; Flash fire can result. Contact with liquid may cause eye and skin irritation. Inhalation and ingestion may cause respiratory and digestive tract irritation, central nervous system depression characterized by headache, nausea, vomiting, dizziness, shortness of breath, narcosis, drowsiness, respiratory failure, and coma.

Target Organs: Central nervous system, kidney and liver damage.

HMIS HAZARD CLASS

HEALTH	(Blue)	2
FLAMMABILITY	(Red)	2
REACTIVITY	(Yellow)	0
PROTECTIVE EQUIPMENT		B

HAZARDS INDEX:

0 = Minimal Hazard 1 = Slight Hazard 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:** Aspiration of this product into the lungs may cause chemical pneumonitis, which may be fatal. Ingestion may result in gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration pneumonitis may be evidenced by coughing. Labored breathing and cyanosis (Bluish Skin). **INHALATION:** Short-term inhalation toxicity is low. Breathing high concentrations of vapor may cause irritation of the nose, throat, respiratory tract, and nervous system depression characterized by headache, dizziness, unconsciousness and coma.

CHRONIC 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:** Over exposure to this product has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects, blood abnormalities, cardiac sensitization, liver abnormalities cataracts, kidney damage and liver abnormalities. Reports have associated repeated and prolonged occupational over exposure to solvents with permanent brain & nervous system damage (Sometimes referred to as solvent or painter's syndrome). International misuse by deliberately concentrating & inhaling this product may be harmful or fatal.

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:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent Aspiration of liquid into the lungs. 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: 105°F(41°C), TCC. **FLAMMABLE LIMITS in air, Volume:** LFL: 1.00 ; UFL: 7.00

EXTINGUISHING MEDIA: Use regular foam, dry chemical or CO2. Do not use direct stream of water. Product will float and can be righted on surface of water. **FIRE FIGHTING INSTRUCTIONS:** Caution. Combustible. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear (Helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water. **FIRE & EXPLOSION HAZARDS:** containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

6. ACCIDENTAL RELEASE MEASURES: Caution. Combustible. Handling equipment must be non-sparking materials and grounded.

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. Remove with vacuum trucks or pump to storage/salvage vessels. 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 inhalation. 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 flames. 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. To avoid sudden release of pressure, loosen closure cautiously before opening. Ground containers before and while dispensing. Maintain good housekeeping.

FOR INDUSTRY USE ONLY.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering controls: Use explosion-proof ventilation as required to control vapor concentrations. Local exhaust ventilation may be necessary to keep airborne concentrations below the permissible exposure limits-SEE SECTION 2.

PERSONAL PROTECTIVE EQUIPMENT (PPE): 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 DFR 1910.133). **SKIN:** Wear solvent resistant 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: Clear colorless liquid. **Odor:** Hydrocarbon solvent mixture odor **Boiling Point °F:** 300 °F **Vapor Density:** > 1
Solubility in Water: Insoluble.(This product contains surfactants and will form an emulsion when mixed with water.) **Specific Gravity:** 0.83
Density: 6.92 lb/gallon **pH:** Not Applicable
Volatile Organic Content (VOC, EPA Method 24): 6.37 lb/gallon; 764 gm/liter.
VOC Composite Partial Pressure, mm Hg at 20 °C: 1.2
Photochemical Reactivity SCAQMD Rule 443: Photochemically Reactive (92.00% By Volume)

10. STABILITY AND REACTIVITY: **STABILITY:** Stable under normal ambient temperature and pressure in closed containers.

CONDITIONS TO AVOID: Incompatible materials, excessive temperature, and strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Has not been reported.

INCOMPATIBILITY WITH OTHER MATERIALS: Incompatible with strong oxidizers. Can react dangerously with potassium, sodium, lithium, and finely powdered aluminum and magnesium.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, and various hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Chemical Name	CAS Number	LC50 PPM (Inhalation rat)	LD 50 mg/kg (Oral, rat)
Petroleum naphtha	64742-48-9	>580 ppm/4H (rat)	13.3 ml/Kg (rat)
Aromatic naphtha	6472-95-6	>3670 ppm/8H (rat)	4.7 G/Kg (rat)
1,2,4-Trimethylbenzene,	95-63-6	18 g/m ³ /4H (rat)	12.7 G/Kg (rat)

12. ECOLOGICAL CONSIDERATIONS: No aquatic toxicity data available for the mixture. Under EPA-CWA, Solvent naphtha, a major ingredient in this product is considered an Oil under Section 311. Spills into or leading to surface waters that causes sheen must be reported to the National Response Center. 800-424-8802. NB: This product contains surfactants and will form an emulsion when mixed with water.

13. DISPOSAL CONSIDERATION: Dispose in a manner consistent with federal, state, and local regulations. If this product becomes a waste material, it would be RCTA Ignitable Hazardous Waste Number D001. Refer to latest EPA or State Regulations regarding proper disposal.

14. TRANSPORT INFORMATION: This product is hazardous material for (DOT) shipping.

D.O.T. SHIPPING description: Flammable liquids, N.O.S. (Naphtha, Petroleum) HAZARD CLASS:3

UN Number: 1993 Packing Group: III

IMO: SHIPPING NAME: Flammable liquids, N.O.S. (Naphtha, Petroleum) HAZARD CLASS:3.3

UN Number: 1993 Packing Group: III

IATA: SHIPPING NAME: Flammable liquids, N.O.S. (Naphtha, Petroleum) HAZARD CLASS: 3

UN Number: 1993 Packing Group: III

15. REGULATORY INFORMATION: -CALIFORNIA PROPOSITION 65: "WARNING: This product contains chemicals known to the state of California to cause cancer, Birth defects, and other reproductive harm."

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
1,2,4-Trimethylbenzene,	15.00-37.00	95-63-6	25 ppm	25 ppm
Xylene	0.50-2.00	1330-20-7	100 ppm	100 ppm
Cumene	0.50-2.00	98-82-8	50 ppm	50 ppm

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.