KIWO ON PRESS CLEANER
Revision date: 2/18/2005

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1.IDENTIFICATION OF PRODUCT AND COMPANY

Product Code: 23238

Product: 23238

Date: 2/18/2005

Product Name: KIWO ON PRESS CLEANER

Company: KIWO, Inc.

1929 Marvin Circle

Seabrook, TX 77586 USA

Phone: 281-474-9777
Fax: 281-474-7325
Supplier: Screenflex-Fotoflex

C5, 6215 - 3 Street S.E. Calgary, AB T2H 2L2

Phone: (403)253-3272 Fax: (403)252-5492

MSDS prepared by: Clark E. King Recommended use: Cleaner / reducer

2. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the below mentioned materials and non-hazardous substances Hazardous components:

CAS-No.	Name	% content
103-65-1	propylbenzene	1 - 5
108-67-8	mesitylene	1 - 5
95-63-6	1,2,4-trimethyl-benzene	5 - 10
64742-95-6	Naphtha (petroleum distillates)	30 -60
108-65-6	2-methoxy-1-methylethyl acetate	15 -40
1569-01-3	2-methoxypropanol	10 - 30

3. HAZARD IDENTIFICATION OF THE PREPARATION

Emergency Overview This product has been classified in accordance with hazard criteria of the Controlled Product Regulations and the MSDS contains all the information required by the Controlled Products Regulations. This material is hazardous according to criteria specified by the Canadian Hazardous Products Act and its regulations.

Signal Word: WARNING.

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Hazards: Moderately combustible liquid. May form reactive peroxides. WHMIS

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Physical State: Liquid. Color: Colorless.

Odor: Aromatic, fruity odor.

Odor Threshold: No Data Available.

Potential Health Effects

Routes of Exposure: Eye Inhalation Skin.
Signs and Symptoms of Acute Exposure:

Moderate health hazard. Moderate eye irritant. Mucous membrane irritant. Slight inhalation hazard. Slight ingestion hazard. Slight skin absorption hazard. 1-Methoxy-2-propanol acetate Moderate eye irritant. Mucous membrane irritant. 2-Methoxy-1-propanol acetate Moderate eye irritant. Mucous membrane irritant. Skin: No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact. Possible systemic toxicity by skin absorption. Frequent or prolonged contact may aggravate existing dermatitis.

Inhalation: Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness, drunkenness or other CNS effects, including death.

Eye: May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Ingestion: Ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy, or diarrhea. Apiration into the lungs may cause injury or death. Minimal toxicity.

Chronic Health Effects:

Repeated or prolonged exposure may irritate the mucous membranes.

1-Methoxy-2-propanol acetate Repeated or prolonged exposure may irritate the mucous membranes.

2-Methoxy-1-propanol acetate May damage developing fetus. See section 11. This product contains ethylbenzene. The International Agency for Research on Cancer has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

Conditions Aggravated by Exposure:

Any pre-existing disorders or diseases of the eye. This material may affect mucous tissue and/or aggravate mucous membrane dysfunction.

4. FIRST AID MEASURES

After skin contact, clean thoroughly with soap and water. After eye contact, (remove contact lenses) keep eyelid open, rinse under running water for at least 10 minutes. If irritation continues, seek medical advice. After ingestion, do not induce vomiting - seek medical advice. If unconscious, to not administer anything orally. Place in stable side position and seek medical advice.

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If breathing is irregular or has stopped, apply artificial respiration.

5. FIRE-FIGHTING MEASURES

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Flash Point / Method: 44 °C (TCC) Auto-Ignition Temperature: 471 °C

Flammable Limits: LOWER: 1.9 vol% UPPER: 12.6 vol%

Hazardous Combustion Products:Carbon Monoxide and other toxic vapors.

Special Conditions to Avoid:

When heated above the flash point, releases flammable vapors. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays/mists may be combustible at temperatures below normal flash point.

Suitable: SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Extinguishing Media:

Unsuitable: Do not use solid water stream.

Fire Fighting Instructions:

Protective Equipment/Clothing: Do not enter fire area without proper protection. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection. **INSTRUCTIONS:** Fight fire from a safe distance/protected location. Heat may build enough pressure to rupture closed containers/spreading fire/increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water. Although water soluble, may not be practical to extinguish fire by water dilution. Notify authorities immediately if liquid enters sewer/public waters.

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 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 and prevent concentrations exceeding the exposure limits,

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limits:

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Component	ACGIH suggested	OSHA PEL
103-65-1	50 ppm	50 ppm
propylbenzene		
108-67-8	25 ppm	Not established
mesitylene		
95-63-6	25 ppm	25 ppm
1,2,4-trimethyl-benzene		
64742-95-6 Naphtha	100 ppm *	Not established
(petroleum distillates		
108-65-6 2-methoxy -	Not established	Not established
propanol acetate		
107-98-2	100 ppm	100 ppm
1-Methoxy-2-propanol		

^{*} not listed, supplier recommendation

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygendeficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Polyvinyl alcohol (PVA) is a recommended material for personal protective equipment.

Eve Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form: liquid

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Color: clear transparent Odor: typical ester

Density : 0.92 g/cm³ Viscosity : 11 s 4 mm

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable when properly handled and stored. **Conditions to Avoid:** Extended contact with air or oxygen. In contact with moisture, this hygroscopic (i.e., absorbs water from the air) material may degrade or become contaminated. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

Incompatibility with: Strong oxidizing agents. Moisture and humidity. May react with oxygen to form peroxides. However, there is no known evidence that it has nearly the peroxide forming potential as, for example, diethyl ether, etc.

Decomposition Products: Carbon Monoxide and other toxic vapors.

Hazardous Polymerization: Not expected to occur.

Reactions with Air andWater: May react with oxygen to form peroxides.

11. TOXICOLOGICAL INFORMATION

Product Summary: No additional toxicology information is available for this material.

Component	LD ₅₀	LC ₅₀
103-65-1	6040 mg/kg (oral-rat)	20,000 mg/m₃ (inhalation-mouse)
propylbenzene		
108-67-8	8,970 mg/kg (rat,oral)	>2,400 ppm (rat,
mesitylene		inhalation)
95-63-6	Oral LD50 5000 mg/kg (rat)	
1,2,4-trimethyl-benzene		
64742-95-6 Naphtha	Oral LD50 >6800 mg/kg (rat)	Inhalative LC50/4 h >10.2 mg/l
(petroleum distillates	Dermal LD50 >3400 mg/kg (rab)	(rat)
108-65-6 2-methoxy -	8500 mg/kg (rat, oral)	
propanol acetate	.> 5 gm/kg (Rabbit, Skin)	
107-98-2	6600 mg/kg (rat, oral)	15,000 PPM (rat,
1-Methoxy-2-propanol		inhalation)

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Repeated Dose Toxicity 2-Methoxy-1-propanol has been shown to cause developmental effects in offspring of female rabbits exposed to 0, 145, 225, 350, and 545 ppm by inhalation during pregnancy. 145 ppm was the no observed effect level (NOEL) in this study. The acetate of 2-methoxy-1-propanol also has been tested for developmental effects. Information for the acetate is pertinent since the acetate portion of this molecule is quickly removed in a living organism to yield 2-methoxy-1-propanol. The offspring of rats exposed to concentrations of 0, 110, 550, or 2,700 ppm developed vertebral incisions at the highest exposure level, in the presence of maternal toxicity. Rabbits exposed to 0, 36, 145, or 550 ppm of 2-methoxy-1-propanol acetate bore offspring that showed malformations of sternum, paws, major blood vessels and the heart at the highest exposure level. A concentration of 145 ppm was the no observed effect level (NOEL) for adverse developmental effects from the acetate of 2-methoxy-1-propanol.

Reproductive / Development Effects May damage developing fetus.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No Data Available.

Environmental Fate: It may enter soil and may contaminate water.

Biodegradation: Data for a closely related material suggest it will be inherently

biodegradable.

13. WASTE DISPOSAL INFORMATION

Contaminated product, soil, or water may be hazardous waste. (See 40 U.S. Code of Federal Regulations (CFR) 261 and 29 CFR 1910). Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids. Avoid flame-outs. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations

Empty container: scrap metal recycling or re-conditioning

Soiled container: (treatment like product itself)

14.TRANSPORT INFORMATION

Special Requirements: The following proper shipping name, hazard class, and packing group are in accordance to the Canadian Transport for Dangerous Goods Regulations (TDGR).

Proper Shipping Name: Paint related materials

UN/NA ID: UN 1263

NAER Guidebook: 128 Marine Pollutant: p – solvent naphtha

Labels: Flammable liquid.

DOT Hazard Class: 3, PG III **IMDG Hazard Class:** 3, PG III **ADR/VLG Hazard Class:** 3 **ICAO/IATA Hazard Class:** 3, PG III

ADNR/VBG Hazard Class: 3 RID/VSG Hazard Class: 3

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15. REGULATORY INFORMATION

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Regulatory Status: All components of this product appear on the Domestic Substances List of the Canadian Environmental Protection Act (CEPA). All components of this product are listed or are exempt from listing on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and this MSDS contains all the information required by the CPR. WHMIS Class: B3. D2B.

16. OTHER INFORMATION

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.