

**Material Safety Data Sheet**  
(According to ANSI Z400.1-2004)

Product: 25022  
Date: 8/29/2007

**PREGAN COMBI-CLEAN**  
Revision date: 9/92008

**1. IDENTIFICATION OF PRODUCT AND COMPANY**

Product Code: 25022  
Product Name: **PREGAN COMBI-CLEAN**  
Company: KIWO, Inc.  
1929 Marvin Circle  
Seabrook, TX 77586 USA  
Phone: 281-474-9777  
Fax: 281-474-7325  
Emergency Contact: 1-800-255-3924 (Chemtel)  
MSDS prepared by: Fred Widman  
Recommended use: Screen Printing Screen Cleaner

**2. HAZARD IDENTIFICATION OF THE PREPARATION**

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

**EMERGENCY OVERVIEW**

Appearance / Odor: liquid / clear, odorless

Potential Health Effects: See Section 11 for more information

Likely routes of exposure: Eye and skin contact and ingestion

Potential Health Effects: Eyes

This product may be irritating to the eyes.

Potential Health Effects: Skin

This product may be mildly irritating to the skin

Some absorption expected

Potential Health Effects: Ingestion

Ingestion of this product may be irritating to the digestive system. Symptoms may include nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

Inhalation of this product may be irritating to the respiratory system.

Xi	Irritant
36/38	Irritating to eyes and skin
52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment in the aquatic environment.

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 and non-hazardous substances

Hazardous components:

<b>EINECS-No</b>	<b>Name</b>	<b>Hazard</b>	<b>%content</b>
<b>CAS-No.</b>	<b>R-phrases</b>		
None	2(2-Methoxymethylethoxy)		
25498-49-1	-methylethoxypropanol	Xi	40.0-70.0%

**Material Safety Data Sheet**  
(According to ANSI Z400.1-2004)

Product: 25022  
Date: 8/29/2007

**PREGAN COMBI-CLEAN**  
Revision date: 9/9/2008

<b>EINECS-No</b>	<b>Name</b>	<b>Hazard</b>	<b>%content</b>
<b>CAS-No.</b>	<b>R-phrases</b>		
204-626-7	4-Hydroxy-4-methylpentane-2-one		
123-42-2	36	Xi	10.0-30.0%
212-828-1	N-Methyl-2-pyrrolidone		
872-50-4	36/38	Xi	15.0-40.0%

**Additional information:**

For full text of risk phrases see Section 16.

**4. FIRST AID MEASURES**

**After skin contact:**

Clean thoroughly with soap and water.

**After eye contact:**

Remove contact lenses; keep eyelids 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, do not administer anything orally. Place in stable side position and seek medical advice. If breathing is irregular or has stopped, apply artificial respiration. Aspiration into lungs can produce severe lung damage and is a medical emergency.

**After Inhalation:**

If symptoms are experienced, remove from source of contamination or move victim to fresh air. If breathing has stopped, apply artificial respiration. Seek medical advice.

**Note to Physicians:** Treat as exposure to organic solvents

**5. FIRE-FIGHTING MEASURES**

Flammable: combustible, Means of extinction: foam, dry powder, carbon dioxide

Unsuitable extinguishing media: Hard water stream

Flash point: 200°F (93°C) (TCC)

Upper flammable limit: 9.4%

Explosion data impact: Not known

Lower flammable limit: 1.1%

Explosion data static: above flashpoint yes

Hazardous combustion products: typical carbon oxygen compounds.

Fire fighters should wear SCBA for fighting fires in enclosed areas.

Autoignition temp: 370 °C

**6. ACCIDENTAL RELEASE MEASURES**

Do not empty large quantities into drains. Keep away sources of ignition. Ensure adequate ventilation. Prevent unauthorized access.

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, 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 limit:

<b>CAS #</b>	<b>Name</b>	<b>OSHA PEL</b>	<b>ACGIH TWA</b>
2598-49-1	2(2-Methoxymethylethoxy) -methylethoxypropanol	Not established	Not established
123-42-2	4-Hydroxy-4-methylpentane-2-one	Not established	50 ppm
872-50-4	N-Methyl-2-pyrrolidone	Not established	Not established

**Engineering controls**

General- not required

Local exhaust- recommended. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition for details.

Other- none

**Personal Protection**

Gloves- solvent impermeable recommended

Respirator- yes if local or general exhaust is not used

Eye- NIOSH approved protective goggles recommended

Protective footwear- not required

Protective clothing- not required

Other- none

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form : liquid

Color: clear / transparent

Odor: odorless

Flash point: 200°F (93° C)

Ignition temperature: 370° C

Density: 0.99 g/cm<sup>3</sup>

Viscosity: 200 mpas

Explosion limits: 1.1 – 9.4 Vol %

Boiling point: ~180° C

Vapour density: Not known

Vapour pressure: <0.2 mm Hg

Freezing point: not applicable

pH: not applicable

Coefficient of water/ oil distribution: not known

Volatile Organic Compound (VOC) content: 856 GRAMS / LITER, 6.56 LBS / GALLON

**10. STABILITY AND REACTIVITY**

Stable under recommended storage and handling conditions  
(see Section 7).

Store as a combustible liquid

Possible Harmful Reactions: None known

**11. TOXICOLOGICAL INFORMATION**

**Effects of acute exposure:**

**Material Safety Data Sheet**  
(According to ANSI Z400.1-2004)

Product: 25022  
Date: 8/29/2007

**PREGAN COMBI-CLEAN**  
Revision date: 9/92008

COMPONENT	CAS#	LD <sub>50</sub>	LC <sub>50</sub>
4-Hydroxy-4-methylpentane-2-one	123-42-2	12,565 mg/kg oral, rat	Not available
2(2-methoxymethylethoxy)-methylethoxypropanol	25498-49-1	3200 mg/kg, oral, rat 20 ml/kg, skin rabbit	Not available
N-Methyl-2-pyrrolidone	872-50-4	7000 mg/kg, oral, rat	Not available

**General information:**

Effects of acute exposure- irritation  
Repeated exposure on skin may lead to dermatitis or slight irritation.  
Irritancy of product- yes  
Skin sensitization- possible  
Respiratory sensitization- possible  
May cause minor eye irritation and reversible corneal opacity. Effects of eye irritation is reversible.  
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**

This preparation has been classified by the conventional method (calculating procedure) of EG directive 1999/45/EG and according to its ecotoxic properties, -\*001 (see Sections 2 and 15 for detailed information).  
Do not empty into drains or release into open water. Do not store at public waste disposal sites.

**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**

ADR/RID/DOT: Class: not regulated  
UN: 1263  
Paint related material  
Packaging group: n.a.

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IMDG: Class: not regulated  
EMS: n.a.  
UN: 1263  
Paint related material  
Marine pollutant: no  
Packaging group: n.a.

**15. REGULATORY INFORMATION**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR and is classified as a D2B hazardous material.

All ingredients are listed on the TSCA registry.

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.

**Labeling**

Xi Irritant

**R-phrases:**

36/38 Irritating to eyes and skin

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**S-phrases:**

24/25 Avoid contact with skin and eyes

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: 2

Ingredient	TSCA	--Canada--	
		EC	DSL NDSL
N-Methyl Pyrrolidone (872-50-4)	Yes	Yes	Yes No
4-Hydroxy-4-methylpentanepropanol	Yes	Yes	Yes No
2(2-Methoxymethylethoxy)-methylethoxypropanol (25498-49-1)	Yes	Yes	Yes No

Ingredient	-SARA 302-		SARA 313 List	-RCRA- RQ	CERCLA - 261.33	TSCA 8(d)
	RQ	TPQ				
N-Methyl Pyrrolidone	No	No	Yes	No	No	No
4-Hydroxy-4-methylpentanepropanol	No	No	No	No	No	No
2(2-Methoxymethylethoxy)-methylethoxypropanol	No	No	No	No	No	No

**Material Safety Data Sheet**  
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Product: 25022  
Date: 8/29/2007

**PREGAN COMBI-CLEAN**  
Revision date: 9/9/2008

**16. OTHER INFORMATION**

**HMIS: Health 1, Flammability 1, Reactivity 0**

Text of risk phrases mentioned in Section 2:

Xi	Irritant
36/38	Irritating to eyes and skin

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.

**DISCLAIMER OF RESPONSIBILITY:**

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