

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

Product: 20713
Date: 8/16/2002

KIWODUR 933 RAPID
Revision date: 2/02/2010

1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Code: 200713
Product Name: **KIWODUR 933 RAPID**
Company: KISSEL + WOLF GmbH
In den Ziegelwiesen 6
D-69168 Wiesloch
Phone: +49 6222 578 0
Importer: 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: Hardener for KIWOBOND adhesives

2. HAZARD IDENTIFICATION OF THE PREPARATION

EMERGENCY OVERVIEW

This preparation is classified as a flammable liquid according to 29CFR 1910-1200 and.

Appearance / Odor: liquid / typical

Potential Health Effects: See Section 11 for more information

Likely routes of exposure: Eye and skin contact, inhalation and ingestion

Potential Health Effects: Eyes

This product may be irritating to the eyes.

Potential Health Effects: Skin

Repeated exposure may cause skin dryness or cracking

Some absorption expected

Potential Health Effects: Ingestion

Ingestion of this product may be irritating to the digestive system.

Potential Health Effects: Inhalation

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

Vapours may cause drowsiness and dizziness

F	Flammable liquid
Xn	Harmful
11	Highly Flammable
20	Harmful by inhalation
36/37/38	Irritating to eyes, respiratory system and skin
42	May cause sensitization by inhalation
66	Repeated exposure may cause skin dryness and cracking
67	Vapors may cause drowsiness and dizziness

Target Organs: Not known

This product contains ingredients that are rated Group 3 by IARC (not classifiable as to carcinogenicity to humans). They are not listed by OSHA or NTP as

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disposal regulations.

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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.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limit:

CAS #	Name	OSHA PEL	ACGIH TWA
141-78-6	ethyl acetate	400 ppm	500 ppm
9016-87-9	diphenylmethane-4,4'-diisocyanate, polymeric isomers and homologues mixture with CAS 101-68-8	Not listed	Not listed

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: typical ester

Flash point: 25°F (-4° C)

Ignition temperature: 860°F (460°C)

Density: 1.03 g/cm³

Viscosity: 12 s 4mm

Explosion limits: 2.1 – 11.5 Vol %

Boiling point: 169°F (76° C)

Vapour density: Not known

Vapour pressure: 68 mbar

Freezing point: not applicable

pH: not applicable

Coefficient of water/ oil distribution: not known

Volatile Organic Compound (VOC) content: 699 GRAMS / LITER, 5.83 LBS / GALLON

10. STABILITY AND REACTIVITY

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

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Store as a flammable liquid

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Possible Harmful Reactions: None known

11. TOXICOLOGICAL INFORMATION

Effects of acute exposure:

COMPONENT	CAS#	LD ₅₀	LC ₅₀
Ethyl Acetate	141-78-6	5620 mg/kg, oral, rat	200 gm/m ³ , inhalation, rat
Diphenylmethane-4,4'-diisocyanate, polymeric isomers and homologues	9016-87-9	>5000 mg/kg oral, rat	490 mg/m ³ rat, inhalation 4 hour

General information:

Effects of acute exposure- irritation

Repeated exposure may lead to permanent respiratory disability.

Irritancy of product- yes

Skin sensitization- possible

Respiratory sensitization- possible

Carcinogenicity- no

IARC- Ingredient listed as Group 3

ACGIH- no

Reproductive toxicity-No known effect

Teratogenicity - No known effect

Embryotoxicity – No known effect

Mutagenicity – No known effect

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

Dispose of as a flammable hazardous waste

Empty container: scrap metal recycling or re-conditioning

Soiled container: (treatment like product itself)

14. TRANSPORT INFORMATION

ADR/RID/DOT: Class: 3

UN: 1866

Resin solution, flammable

(vapor pressure 110 kPa maximum @ 50°C)

Packaging group: II

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IMDG: Class: 3
EMS: FE, S-E
UN: 1866
Resin solution
Marine pollutant: n.a.
Packaging group: II

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 B2, 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

F Highly flammable

Xn Harmful

contains diphenylmethane-4,4'-diisocyanate, isomers and homologues mixture with CAS# 101-68-8

R-phrases:

11 Highly flammable.

20 Harmful by inhalation

36/37/38 Irritating to eyes, respiratory system and skin

42 May cause sensitization by inhalation.

66 Repeated exposure may cause skin dryness and cracking

67 Vapors may cause drowsiness and dizziness

S-phrases:

16 Keep away from sources of ignition - No smoking.

23 Do not breathe gas/fumes/vapour/spray.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

Special labeling :

91 Contains isocyanates. See information supplied by the manufacturer

National Regulation for Germany:

Water pollution class: 2

Ingredient	--Canada--			
	TSCA	EC	DSL	NDSL
Ethyl Acetate (141-78-6)	Yes	Yes	Yes	No
diphenylmethane-4,4'-diisocyanate (9016-87-9)	Yes	Yes	Yes	No

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Ingredient	RQ	TPQ	List	RQ	261.33	8(d)
Ethel Acetate	No	No	No	U112	5,000 LBS	No
Diphenylmethane- 4,4'-diisocyanate mixture	Yes	1%	No	No	No	No

16. OTHER INFORMATION

HMIS: Health 2, Flammability 2, Reactivity 0

Text of risk phrases mentioned in Section 2:

- 11 Highly flammable
- 20 Harmful by inhalation
- 36/37/38 Irritating to eyes, respiratory system and skin
- 42 May cause sensitization by inhalation
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

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.

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