

U-POL™

SAFETY DATA SHEET

UP2311, UP2312, UP2313, UP2314, UP2315 2K SYSTEM 20 EXTRA FAST HARDENER

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Issued: 25/09/2006

Revision No: 3

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: UP2311, UP2312, UP2313, UP2314, UP2315 2K SYSTEM 20 EXTRA FAST HARDENER

Product code: S2031

Use / description of product: HARDENER CONTAINS ISOCYANATE, XYLENE, MIXTURE OF SOLVENTS

Company name: U-Pol Limited

US Representatives :

Sanders and Associates Inc.,

1263 Route 31 South

Lebanon

NJ 08833

USA

Fax: 1-800-787-5150

Emergency tel: 1-800-424-9300 (CHEMTREC)

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: XYLENE 1-10%

EINECS: 215-535-7 CAS: 1330-20-7

[-] R10; [Xn] R20/21; [Xi] R38

- N-BUTYL ACETATE 50-70%

EINECS: 204-658-1 CAS: 123-86-4

[-] R10; [Xi] R66; [-] R67

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. 1-10%

EINECS: 265-199-0 CAS: 64742-95-6

[F+] R12; [Xi] R38; [N] R51/53; [Xn] R65

- HEXAMETHYLENE DIISOCYANATE OLIGOMERS 30-50%

EINECS: 500-060-2 CAS: 28182-81-2

[Sens.] R43

[cont...]

3. HAZARDS IDENTIFICATION

Main hazards: Flammable. May cause sensitisation by inhalation and skin contact. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Other hazards: Harmful in contact with skin. May cause sensitisation by skin contact.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

4. FIRST AID MEASURES (ACTION)

Skin contact: Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Do not induce vomiting. Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Carbon dioxide. Dry chemical powder. Alcohol or polymer foam. Do not use water.

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Highly flammable.

Protection of fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to section 8 of SDS for personal protection details.

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

Clean-up procedures: Absorb into dry earth or sand. Wash the spillage site with large amounts of water. Avoid all incompatible materials in clean-up procedure - see section 10 of SDS.

7. HANDLING AND STORAGE

Handling requirements: Ensure there is sufficient ventilation of the area. Smoking is forbidden.

Storage conditions: Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure limits

WEL (8 hr exposure limit): 0.02 mg/m³

WEL (15 min exposure limit): 0.07 mg/m³

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Hazardous ingredients: XYLENETWA 220 mg/m³ STEL 441 mg/m³

• N-BUTYL ACETATE

TWA 724 mg/m³ STEL 966 mg/m³

• HEXAMETHYLENE DIISOCYANATE OLIGOMERS

TWA 0.02 - 0.07 mg/m³**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.**Respiratory protection:** Compressed airline breathing apparatus (EN139).**Hand protection:** Nitrile gloves.**Eye protection:** Face-shield.**Skin protection:** Protective clothing with elasticated cuffs and closed neck.**9. PHYSICAL AND CHEMICAL PROPERTIES****State:** Liquid**Colour:** Colourless**Odour:** Aromatic**Evaporation rate:** Moderate**Solubility in water:** Insoluble**Also soluble in:** Most organic solvents.**Viscosity:** Non-viscous**Viscosity value:** 100 cps**Flammability limits %: lower:** 1.1**upper:** 6.6**Flash point°C:** 24**Autoflammability°C:** 480**Relative density:** 1.0**VOC g/l:** 585 (4.92 lb/gal)**10. STABILITY AND REACTIVITY****Stability:** Stable under normal conditions.**Conditions to avoid:** Heat. Sources of ignition. Flames.**Materials to avoid:** Acids. Bases. Oxidising agents. Amines.**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.**11. TOXICOLOGICAL INFORMATION****Hazardous ingredients:** XYLENE

ORL MUS LD50 2119 mg/kg

ORL RAT LD50 4300 mg/kg

SCU RAT LD50 1700 mg/kg

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- N-BUTYL ACETATE
ORL MUS LD50 6 gm/kg
ORL RAT LD50 10768 mg/kg
- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM),
LIGHT AROM.
ORL RAT LD50 8400 mg/kg

Chronic toxicity: May cause sensitisation by skin contact.

Routes of exposure: Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

12. ECOLOGICAL INFORMATION

Mobility: Insoluble in water.

Persistence and degradability: Not biodegradable.

Bioaccumulative potential: No data available.

Other adverse effects: Very toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal operations: D10 Incineration on land.
R1 Solvent reclamation/regeneration.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION**ADR / RID**

UN no: 1263	ADR Class: 3
Packing group: III	Classification code: F1
Shipping name: PAINT RELATED MATERIAL	
Labelling: 3	Hazard ID no: 30

**IMDG / IMO**

UN no: 1263	Class: 3
Packing group: III	EmS: F-E,S-E
Marine pollutant: .	Labelling: 3

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IATA / ICAO

UN no: 1263 **Class:** 3
Packing group: III **Packing instructions:** 309(P&CA); 310(CAO)
Labelling: 3

15. REGULATORY INFORMATION**Hazard symbols:** Irritant.

Risk phrases: R10: Flammable.
R42/43: May cause sensitisation by inhalation and skin contact.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.

Safety phrases: S23: Do not breathe vapour/spray
S24: Avoid contact with skin.
S37: Wear suitable gloves.
S42: During spraying wear suitable respiratory equipment.

Precautionary phrases: Contains isocyanates. See information supplied by the manufacturer.

VbF: AII**Water hazard class:** 1

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with EC Directive 2001/58/EC.
FOR PROFESSIONAL USE ONLY. Read full instructions before use.
IMPORTANT: This product contains hazardous materials and therefore appropriate personal protective equipment should always be used.
Please refer to the label and consult the material safety data sheet for full handling instructions and personal protection information. These are available via your local stockist or via the U-POL website at WWW.U-POL.COM.
U-POL disclaim any liability where the user does not wear the recommended personal protective equipment.

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Risk phrases used in s.2: R10: Flammable.
R20/21: Harmful by inhalation and in contact with skin.
R38: Irritating to skin.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.
R12: Extremely flammable.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
R43: May cause sensitisation by skin contact.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Addition of reducers, hardeners and other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, this company shall not be held liable for any damage resulting from handling or from contact with the above product.