



Cyrel UniSol

Version 2.6

Revision Date 15.04.2009

Ref. 130000014240

This SDS adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

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

Product information

Product name : Cyrel UniSol

Use of the Substance/Preparation : Manufacture of printing plates

Company : Du Pont (UK) Limited
Wedgwood Way
Stevenage, Herts. SG1 4QN
United Kingdom

Telephone : +44-1438-734.000

Emergency telephone : +44-(0)8456-006.640

E-mail address : sds-support@che.dupont.com

2. HAZARDS IDENTIFICATION

Harmful by inhalation.
Limited evidence of a carcinogenic effect.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation : Solvent mixture

Hazardous components

Chemical Name	CAS-No.	EC-No.	Classification	Concentration [%]
Benzyl alcohol	100-51-6	202-859-9	Xn; R20/22	10 - 25
Heavy aromatic naphtha	64742-94-5	265-198-5	Xn; R65	> 50
1,2,4-Trimethylbenzene	95-63-6	202-436-9	R10 Xn; R20 Xi; R36/37/38 N; R51 -R53	2,5 - 10
Mesitylene	108-67-8	203-604-4	R10 Xi; R37 N; R51 -R53	< 2,5

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Naphthalene	91-20-3	202-049-5	Carc.Cat.3; R40 Xn; R22 N; R50 -R53	<= 1
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For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

- General advice : Take off all contaminated clothing immediately. If symptoms persist, call a physician.
- Inhalation : If breathed in, move person into fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.
- Skin contact : Wash off immediately with soap and plenty of water. Take off contaminated clothing and shoes immediately. If skin irritation persists, call a physician.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.
- Ingestion : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position.

Notes to physician

- Risks : Risk of product entering the lungs on vomiting after ingestion.
- Symptoms : Discomfort, Cough, Unconsciousness, Gastrointestinal discomfort, Daze, Convulsions, Headache, Shortness of breath

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO₂), Alcohol-resistant foam,
- Extinguishing media which shall not be used for safety reasons : High volume water jet,
- Specific hazards during fire fighting : In fire conditions, toxic decomposition products may be formed. Hazardous combustion products Carbon dioxide (CO₂) Carbon monoxide
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Prevent fire extinguishing water from contaminating surface water or the ground water system. Keep containers and surroundings cool with water spray.



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6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Wear respiratory protection. Wear personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Flush with plenty of water.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Handle product only in closed system or provide appropriate exhaust ventilation at machinery. As a rule, at least 10 air changes per hour are recommended at the workplace. Avoid formation of aerosol. Avoid breathing vapours or mist.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Take measures to prevent the build up of electrostatic charge. Vapours are heavier than air and may spread along floors.

Storage

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. To maintain product quality, do not store in heat or direct sunlight. Store in original container.

Advice on common storage : Keep away from: Oxidizing agents Keep away from food and drink.

Storage temperature : < 30 °C

Other data : Protect from frost, heat and sunlight. Keep at temperature not exceeding 30°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Type Form of exposure	Control parameters	Update	Basis
1,2,4-Trimethylbenzene	95-63-6	TWA	100 mg/m ³ 20 ppm	05 2001	EU ELV
				05 2001	EU ELV
		TWA	125 mg/m ³ 25 ppm	2002	EH40 (UK)
				2002	EH40 OES
				2002	EH40 OES

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Naphthalene	91-20-3	TWA	50 mg/m3 10 ppm	05 2003	EU ELV
				05 2001	EU ELV

Personal protective equipment

- Respiratory protection : Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Mask with gas filter, type A (EN 141)
- Hand protection : Material: Hydrofluoric acid-resistant and solvent-resistant gloves (gloves made of VITON[®]).
Break through time: 60 min
Permeation rate: < 240 min
Glove thickness: > 0,7 mm
Unsuitable material: Do not wear cotton or leather gloves., Latex gloves (ketone resistant), Nitrile rubber gloves., Impervious butyl rubber gloves, Natural Rubber
- Eye protection : Safety glasses Goggles
- Hygiene measures : When using do not eat, drink or smoke. Wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. Avoid contact with the skin and the eyes. Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid,
- Colour : colourless,
- Odour : aromatic,
- pH : at (20 °C) not applicable
- Flash point : 63 °C
- Ignition temperature : 435 °C
- Lower explosion limit : 1,1 vol%
- Upper explosion limit : 6,5 vol%
- Vapour pressure : at 20 °C, no data available
- Relative density : 0,91 at 20 °C
- Water solubility : , immiscible

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10. STABILITY AND REACTIVITY

- Conditions to avoid : To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Stable under normal conditions.
- Materials to avoid : Strong oxidizing agents
- Hazardous decomposition products : Benzyl alcohol is slowly oxidized to benzaldehyde in the presence of air., Carbon dioxide (CO₂), Carbon monoxide
- Hazardous reactions : Vapours may form explosive mixture with air. Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity
• Benzyl alcohol : LD50/ rat : 1 230 mg/kg
- Acute inhalation toxicity
• Benzyl alcohol : ALC/ 4 h/ rat : ca. 0,025 mg/l
- Skin irritation : Irritating to skin.
- Eye irritation : Irritating to eyes.
- Sensitisation : May cause sensitization of susceptible persons by skin contact.

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

- Biodegradability : Readily biodegradable.
- Toxicity to fish
• Benzyl alcohol : LC50 / 48 h/ Leuciscus idus (Golden orfe) : 646 mg/l
- Aquatic toxicity
• Benzyl alcohol : / EC50/ 48 h/ Daphnia: 360 mg/l

Further information on ecology

- Additional ecological information : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS



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Product : Dispose of in accordance with local regulations. After recovery of solvent dispose of residue as hazardous waste.

Contaminated packaging : Can be used after re-conditioning.

14. TRANSPORT INFORMATION

ADR

Class: 9
 Packaging group: III
 Classification Code: M6
 HI No.: 90
 UN-Number: 3082
 Labelling No.: 9
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Heavy aromatic naphtha)

Further information : Optional classification as per IATA Special Provision A97., Optional classification as per IMDG Special Provision 909.

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol(s) : Xn Harmful
 N Dangerous for the environment

Hazardous components: Heavy aromatic naphtha
 Benzyl alcohol
 1,2,4-Trimethylbenzene
 Naphthalene

R-phrase(s) : R20 Harmful by inhalation.
 R40 Limited evidence of a carcinogenic effect.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 Harmful: may cause lung damage if swallowed.
 R66 Repeated exposure may cause skin dryness or cracking.
 R67 Vapours may cause drowsiness and dizziness.

S-phrase(s) : S36/37 Wear suitable protective clothing and gloves.
 S60 This material and its container must be disposed of as hazardous waste.
 S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

Text of R-phrases mentioned in Section 3

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R10	Flammable.
R20	Harmful by inhalation.
R20/22	Harmful by inhalation and if swallowed.
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R50	Very toxic to aquatic organisms.
R51	Toxic to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.