

## Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 26.06.2007

Revision: 26.06.2007

### 1 Identification of Product:

- **Use:** Screen Printing Ink
- **Range:** CitraSOL Ink
- **Manufacturer/Supplier:**  
Uniform  
Chertsey Business Centre, Riversdell Close, Chertsey, Surrey. KT16 9as  
Tel. +44 (0) 1932 568555  
info.uniformdigital.com
- **Information department:** Product Safety Department. +44 (0) 1932 568555

### 2 Hazards identification

- **Hazard description:**



Xn Harmful  
N Dangerous for the environment

- **Information pertaining to particular dangers for man and environment**  
R 21 Harmful in contact with skin.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes.  
R 43 May cause sensitisation by skin contact.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system**  
The classification was made according to the latest editions of the EU-lists, and expanded by company and literature data.
- **Additional information:**  
Organic solvents should not be used for hand cleaning as this may lead to absorption through the skin, skin irritation or dermatitis.  
Exposure to component solvent vapours above the occupational exposure limit, stated in Section 8, may result in adverse health effects such as mucous membrane and respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

### 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 763-69-9 EINECS: 212-112-9	ethyl 3-ethoxypropionate R 52/53	50-100%
CAS: 112-15-2 EINECS: 203-940-1	2-(2-ethoxyethoxy)ethyl acetate ☒ Xn, ☒ Xi; R 21-38-41-43	25-50%
CAS: 872-50-4 EINECS: 212-828-1	N-methyl-2-pyrrolidone ☒ Xi; R 36/38	5-10%
CAS: 5989-27-5 EINECS: 227-813-5	(R)-p-mentha-1,8-diene ☒ Xi, ☒ N; R 10-38-43-50/53	1-5%

- **Additional information**  
For the wording of the listed risk phrases refer to section 16.

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**4 First aid measures**

- **General information**  
Never make an unconscious person vomit or drink fluids.  
Immediately remove any clothing soiled by the product.
- **After inhalation**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
- **After skin contact** Immediately wash with soap and water and rinse thoroughly.
- **After eye contact**  
Rinse open eye for several minutes under running water. Then consult a doctor.  
Call a doctor immediately.
- **After swallowing** Do not induce vomiting; call for medical help immediately.

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
In case of fire, the following can be released:  
Carbon monoxide (CO)
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**  
Cool endangered containers with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

**6 Accidental release measures**

- **Person-related safety precautions:**  
Ensure adequate ventilation  
Keep away from ignition sources  
Refer to the protective measures stated in Sections 7 and 8. Keep unprotected personnel away.
- **Measures for environmental protection:**  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities if seepage into water course or sewage system occurs.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to section 13.

**7 Handling and storage**

- **Handling**
- **Information for safe handling:**  
Store in cool, dry place in tightly sealed containers.  
Keep away from heat and direct sunlight.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Storage:** Store in accordance with current national regulations.
- **Requirements to be met by storerooms and containers:** Store between 5 - 30°C.
- **Information about storage in one common storage facility:**  
Do not store together with oxidizing and acidic materials.  
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:** Keep container tightly sealed.

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## 8 Exposure controls and personal protection

- Additional information about design of technical systems:**

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates or solvent vapour below the occupational exposure limit stated, then suitable respiratory protection must be worn as a temporary measure and is specified below.

- Components with limit values that require monitoring at the workplace:**

**872-50-4 N-methyl-2-pyrrolidone**

WEL (Great Britain)	Short-term value: 309 mg/m <sup>3</sup> , 75 ppm Long-term value: 103 mg/m <sup>3</sup> , 25 ppm Sk
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- Additional information:**

The instructions and information provided by the manufacturer of the personal protective equipment on use, storage, maintenance and replacement must always be followed.

- General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Avoid contact with the eyes and skin.

- Breathing equipment:**

In cases of insufficient ventilation use the following respiratory protective device:  
CEN: A1 filter.

- Protection of hands:**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The selection of single or multi-use gloves is dependent upon the level of exposure (nitrile/neoprene gloves will last longer than latex/rubber). The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Always ensure that gloves are free from defects and that they are stored and used correctly.

Type	Latex/Rubber			Nitrile		Neoprene
	Single	Multi	Heavy Duty	Single	Multi	Heavy Duty
	Use	Use	(Gauntlets)	Use	Use	(Gauntlets)
Preparation	X	Y	X	X	Y	X
Print Shop						
Solvent Inks	Y	Y	Y	Y	Y	Y
UV Inks	X	X	X	Y	Y	Y
Reclaim	X	X	Y	X	X	Y

Y = recommended      X = not recommended

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Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Hands should be inspected on a regular basis for any signs of skin damage or inflammation

- Penetration time of glove material**

The exact break through time has to be obtained from the manufacturer of the protective gloves and must be observed.

- Eye protection:** Tightly sealed goggles.

- Body protection:** Protective work clothing; disposable overalls are preferable.

- COSHH Essentials for Printers Control Guidance Sheet:**

Guidance is provided by the Health and Safety executive (HSE) concerning COSHH (Control of Substances Hazardous to Health) for printers.

See COSHH Essentials for Printers on the HSE website:

www.hse.gov.uk and enter 'COSHH Essentials for printers' in the search bar.

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## 9 Physical and chemical properties:

### • General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

### • Change in condition

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** 170°C

• **Flash point:** 61°C

• **Self igniting:** Product is not selfigniting.

• **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

• **Vapour pressure at 20°C:** 0.9 hPa

• **Density:** Not determined

• **Water:** Not miscible or difficult to mix

### • Solvent content:

**Organic solvents:** 100.0 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

## 11 Toxicological information

### • Acute toxicity:

#### • LD/LC50 values that are relevant for classification:

763-69-9 ethyl 3-ethoxypropionate

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	10 mg/kg (Rabbit)

### • Primary irritant effect:

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation** May cause sensitisation by skin contact.

## 12 Ecological information:

### • General notes:

There are no data on the preparation itself.  
 The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified as dangerous for the environment. Also refer to Sections 2 and 15.  
 Do not allow product to reach ground water, water course or sewage system.

## 13 Disposal considerations

### • Product:

#### • Recommendation

Must not be disposed together with household rubbish. Do not allow product to reach sewage system.

#### • European waste catalogue

08 03 12	waste ink containing dangerous substances
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#### • Waste Hazard Classification:

H5 - Harmful  
 H4 - Irritant  
 H14 - Eco Toxic

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- **Recommendation:**  
Dispose of product according to official regulations.  
Also see Section 16 'Other Information'

### 14 Transport information

- Land transport ADR/RID (cross-border)



- **ADR/RID class:** 9 Miscellaneous dangerous substances and articles.
- **Danger code (Kemler):** 90
- **UN-Number:** 3082
- **Packaging group:** III
- **Label** 9
- **Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

- Maritime transport IMDG:

- **IMDG Class:** -
- **Marine pollutant:** No

- Air transport ICAO-TI and IATA-DGR:

- **ICAO/IATA Class:** -

### 15 Regulations

- **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives on Hazardous Materials

- **Code letter and hazard designation of product:**

Xn Harmful  
N Dangerous for the environment

- **Hazard-determining components of labelling:**

2-(2-ethoxyethoxy)ethyl acetate  
(R)-p-mentha-1,8-diene

- **Risk phrases:**

21 Harmful in contact with skin.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.  
43 May cause sensitisation by skin contact.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

24 Avoid contact with skin.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37 Wear suitable protective clothing and gloves.  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

### 16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

An "\*" in the left hand margin indicates an amendment from the previous version.

- **Relevant R-phrases**

10 Flammable.  
21 Harmful in contact with skin.

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36/38 Irritating to eyes and skin.

38 Irritating to skin.

41 Risk of serious damage to eyes.

43 May cause sensitisation by skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

• **Recommended restriction of use**

The product should not be used for any purpose other than that specified in Section 1.

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