

**NOTE: THE FIRST 4 PAGES REFER TO DYNE LEVEL 30, THE LAST 5 REFER TO DYNE 32-44.**

## 1. Name of substance, preparation and company

<b>Commercial name of the product:</b>	CON-TROL-CURE DYNE PEN #30 mN/m
<b>Use of the substance / of the preparation</b>	Printing inks
<b>Distributor:</b>	UV PROCESS SUPPLY, INC 1229 W. CORTLAND ST. CHICAGO, IL 60614-4805 TELEPHONE: (773)248-0099 EMERGENCY: (800) 424-9300

## 2. Chemical analysis/information about the ingredients

### Chemical characterisation

#### Identification number(s):

**EINECS-number:** 203-489-0

**EC-Number:** 603-053-00-3

**Description:** Preparation of solvents and one colouring agent

## 3. Possible hazards

**Hazard designation:** Xi Irritating substances

### Information pertaining to particular hazards for man and environment:

R 36/38 Irritating for eyes and skin.

## 4. First aid measures

### General information:

When any symptoms are appearing or in all cases of doubt seek medical advice.

Never give anything by mouth to an unconscious person.

**After skin contact:** Remove contaminated clothing.  
Wash skin thoroughly with soap and water or use recognized skin cleanser.  
Do not use solvents or thinners.

**After eye contact:** Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.  
Remove contact lenses.  
Seek medical advice.

**After swallowing:** If accidentally swallowed obtain immediate medical attention.  
Keep at rest.  
Do not induce vomiting.

## 5. Fire fighting measures

**Suitable extinguishing agents:** Foam (alcohol resistant), CO<sub>2</sub>, powders, water spray

**Extinguishing agents** Full water jet

### unsuitable for safety reasons:

### Special hazards caused by the substance, its products of combustion or flue gases:

Fire will produce dense black smoke.

Exposure to hazardous decomposition products may cause a health hazard.

Suitable respiratory protective equipment independent from ambient air may be required.

Cool closed containers exposed to fire with water spray.

**Additional information:** Collect run-off from fire fighting.

## 6. Accidental release measures

### Person-related safety precautions:

Ensure supply of fresh air.

Observe the safety instructions in section 7 and 8.

### Environmental-protection measures:

Do not allow to enter sewerage system. If the product contaminates rivers, lakes or the canalisation inform the respective authorities according to local regulations.

### Measures for cleaning / collecting:

Collect spillage with liquid-absorbent material (e.g. sand, diatomaceous earth, vermiculite) and place in containers for disposal according to local regulations.

Clean preferably with a detergent.

Avoid use of solvents.

## 7. Handling and storage

### Handling:

#### Information for safe handling:

Avoid skin and eye contact.

Do not eat, drink and smoke while working in application area.

For personal protective equipment see section 8.

Comply with statutory health and safety regulation.

### Storage:

#### Requirements to be met by storerooms and containers:

Keep containers tightly closed. Smoking prohibited.

Close carefully open container and store it upright in order to avoid any leakage.

#### Further information about storage conditions:

Always keep in containers of the same material as the original one.

Store at a dry, well ventilated place.

Keep away from heat and direct sunlight.

Observe label precautions.

Store in accordance with the particular national regulations concerning water pollution (WHG) and the regional regulations concerning storage of water hazardous substances (VawS).

## 8. Exposure controls and personal protection

**Additional information about the design of technical systems:** provide for a good ventilation.

### Components with critical values that require monitoring at the workplace:

(Numerical data – if specified – are taken from the valid national lists (such as TRGS 900 for Germany)).

#### 107-41-5 2-methyl-2,4-pentanediol (80 – 100 %)

MAK (max. workplace concentration): 125 mg/m<sup>3</sup> NL

### Personal protective equipment:

#### Respiratory protective equipment:

If the occupational exposure limits can't be met due to the technical measures, suitable respiratory protective equipment should be worn only for a short period of time.

#### Protection of hands:

For prolonged or repeated contact use protective gloves.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

#### Body protection:

The skin should be washed after contact.

Working clothes must not consist of textiles which show a dangerous melting behaviour in case of fire.

## 9. Physical and chemical properties

<b>Form:</b>	fluid
<b>Colour:</b>	colourless to yellowish
<b>Odour:</b>	characteristic
<b>Change in condition</b>	
<b>Melting point/melting range:</b>	-50°C
<b>Boiling point/Boiling range:</b>	198°C
<b>Flash point:</b>	65°C
<b>Ignition temperature:</b>	260°C
<b>Critical value for explosion</b>	
<b>Lower value:</b>	1 Vol.%
<b>Upper value:</b>	9,9 Vol.%
<b>Steam pressure at 20°C</b>	0,065 hPa
<b>Density: (approx. values) at 20°C</b>	0,922 g/ cm <sup>3</sup>

## 10. Stability and reactivity

### **Thermal decomposition / conditions to be avoided:**

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

### **Materials to be avoided:**

Keep away from oxidizing agents, strongly acid and strongly alkaline materials in order to avoid exothermic reactions.

## 11. Toxicological information

The preparation is classified according to the conventional method (calculation method of the regulation concerning hazardous substances resp. of the EEC-Directive 88/379/EEC). Repeated or prolonged contact with the product may cause removal of natural fat from the skin which can cause a drying-out of the skin and irritations. The liquid splashed in the eyes may cause irritation and reversible damage.

### **Acute toxicity:**

LD50 (oral rat): 4000 mg/kg

LD50 (dermal, rabbit): 13000 mg/kg

## 12. Ecological information

The product may not enter waters, sewerage systems and soil.

## 13. Disposal considerations

### **Product:**

**Recommendation:** Do not allow to enter sewerage systems

### **European waste products catalogue**

08 03 12 printing inks waste products which contain hazardous substances

### **Uncleaned packaging:**

**Recommendation:** Not emptied containers and ink residues are hazardous waste.

Emptied containers should be supplied to scrap utilisation resp. recycling.

## 14. Transport information

The product is not subject to transport regulations for dangerous goods.

### **Maritime transport IMDG/GGVSea:**

**Marine pollutant:** No

**15. Regulatory information**

**Designation according to EEC guidelines:**

**Code letter and hazard designation of the product:** Xi    Irritating substances

**R-phrases:**

36/38    Irritating for eyes and skin.

**S- phrases:**

26    After eye contact immediately irrigate thoroughly with plenty of water and seek medical advice.

29/35    Do not allow to enter sewerage system; waste products and containers have to be eliminated in a safe way.

37    Use suitable protective gloves.

**National regulations:**

**Classification according to VbF:** not applicable.

**Water pollution class:**

Water pollution class 1:    slightly polluting (according to annex 4 VwVwS)

**16. Other information**

The information of this safety data sheet is based on the present state of our knowledge and corresponds to the valid EU and national laws. It is always the responsibility of the user to take all necessary steps in order to fulfil the demands laid down in the local rules and legislation.

The information in this safety data sheet is meant as a description of safety requirements of our product; it is not to be considered as a guarantee of the product's properties.

**Warranty:**

While UV Process Supply, Inc. believes the information contained herein is factually correct, this information is not to be taken as a warranty for which UV Process Supply, Inc. assumes legal responsibility. It is provided solely for consideration, investigation and verification.

**NOTE: THE FIRST 4 PAGES REFER TO DYNE LEVEL 30, THE LAST 5 REFER TO DYNE 32-44**

## 1. Name of substance, preparation and company

<b>Commercial name of the product:</b>	CON-TROL-CURE DYNE PENS 32 - 44 mN/m
<b>Use of the substance / of the preparation</b>	Printing inks
<b>Distributor:</b>	UV PROCESS SUPPLY, INC 1229 W. CORTLAND ST. CHICAGO, IL 60614-4805 TELEPHONE: (773)248-0099 EMERGENCY: (800) 424-9300

## 2. Chemical analysis/information about the ingredients

### Chemical characterisation

**Description:** Preparation of solvents and one colouring agent

### Dangerous ingredients:

Which are injurious to health within the meaning of Commission Directive 67 / 548 / EEC on dangerous substances.

CAS: 107-41-5	2-methyl-2,4-pentenediol	2,5 – 80 %
EINECS: 203-489-0	Xi ; R 36/38	

CAS: 111-46-6	Diethylene glycol	20 – 100 %
EINECS: 203-872-2	Xn; R 22	

### Additional information:

The text of the mentioned particular hazards can be learnt from chapter 16.

## 3. Possible hazards

**Hazard designation:** Xn Injurious to health

### Information pertaining to particular hazards for man and environment:

The product is subject to the labelling obligation due to the evaluation method of the "General classification directive relating to preparations of the EC" in its valid version.

R 22 Injurious to health when swallowed.

R 36/38 Irritating for eyes and skin.

## 4. First aid measures

### General information:

When any symptoms are appearing or in all cases of doubt seek medical advice.

Never give anything by mouth to an unconscious person.

**After skin contact:** Remove contaminated clothing.  
Wash skin thoroughly with soap and water or use recognized skin cleanser.  
Do not use solvents or thinners.

**After eye contact:** Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Remove contact lenses.

Seek medical advice.

**After swallowing:** If accidentally swallowed obtain immediate medical attention.

Keep at rest.

Do not induce vomiting.

## 5. Fire fighting measures

**Suitable extinguishing agents:** Foam (alcohol resistant), CO<sub>2</sub>, powders, water spray  
**Extinguishing agents** Full water jet

**unsuitable for safety reasons:**

**Special hazards caused by the substance, its products of combustion or flue gases:**

Fire will produce dense black smoke.

Exposure to hazardous decomposition products may cause a health hazard.

Suitable respiratory protective equipment independent from ambient air may be required.

Cool closed containers exposed to fire with water spray.

**Additional information:** Collect run-off from fire fighting.

## 6. Accidental release measures

**Person-related safety precautions:**

Ensure supply of fresh air.

Observe the safety instructions in section 7 and 8.

**Environmental-protection measures:**

Do not allow to enter sewage system. If the product contaminates rivers, lakes or the canalisation

Inform the respective authorities according to local regulations.

**Measures for cleaning / collecting:**

Collect spillage with liquid-absorbent material (e.g. sand, diatomaceous earth, vermiculite) and place in containers for disposal according to local regulations.

Clean preferably with a detergent.

Avoid use of solvents.

## 7. Handling and storage

**Handling:**

**Information for safe handling:**

Avoid skin and eye contact.

Do not eat, drink and smoke while working in application area.

For personal protective equipment see section 8.

Comply with statutory health and safety regulation.

**Storage:**

**Requirements to be met by storerooms and containers:**

Keep containers tightly closed. Smoking prohibited.

Close carefully open container and store it upright in order to avoid any leakage.

**Further information about storage conditions:**

Always keep in containers of the same material as the original one.

Store at a dry, well ventilated place.

Keep away from heat and direct sunlight.

Observe label precautions.

Store in accordance with the particular national regulations concerning water pollution (WHG) and the regional regulations concerning storage of water hazardous substances (VawS).

## 8. Exposure controls and personal protection

**Additional information about the design of technical systems:** provide for a good ventilation.

**Components with critical values that require monitoring at the workplace:**

(Numerical data – if specified – are taken from the valid national lists (such as TRGS 900 for Germany)).

**107-41-5 2-methyl-2,4-pentanediol (2,5 – 80 %)**

MAK (max. workplace concentration): 125 mg/m<sup>3</sup> NL

**111-46-6 Diethylene glycol (20 – 100 %)**

MAK (max. workplace concentration) 44 mg/ m<sup>3</sup>, 10 ml/ m<sup>3</sup> Y; DFG

**Personal protective equipment:**

**Respiratory protective equipment:**

If the occupational exposure limits can't be met due to the technical measures, suitable respiratory protective equipment should be worn only for a short period of time.

**Protection of hands:**

For prolonged or repeated contact use protective gloves.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

**Body protection:**

The skin should be washed after contact.

Working clothes must not consist of textiles which show a dangerous melting behaviour in case of fire.

## 9. Physical and chemical properties

<b>Form:</b>	fluid
<b>Colour:</b>	colourless to yellowish
<b>Odour:</b>	characteristic
<b>Change in condition</b>	
<b>Boiling point/Boiling range:</b>	198°C
<b>Flash point:</b>	65°C
<b>Ignition temperature:</b>	225°C
<b>Critical value for explosion</b>	
<b>Lower value:</b>	0,7 Vol.%
<b>Upper value:</b>	22,0 Vol.%
<b>Steam pressure at 20°C</b>	0,1 hPa
<b>Density: (approx. values) at 20°C</b>	0,942 g/ cm <sup>3</sup> - 1,12 g/cm <sup>3</sup>
<b>Solubility in / Miscibility with water:</b>	Solvent fully miscible

## 10. Stability and reactivity

**Thermal decomposition / conditions to be avoided:**

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

**Materials to be avoided:**

Keep away from oxidizing agents, strongly acid and strongly alkaline materials in order to avoid exothermic reactions.

## 11. Toxicological information

The preparation is classified according to the conventional method (calculation method of the regulation concerning hazardous substances resp. of the EEC-Directive 88/379/EEC).

Repeated or prolonged contact with the product may cause removal of natural fat from the skin which can cause a drying-out of the skin and irritations.

The liquid splashed in the eyes may cause irritation and reversible damage.

### Acute toxicity:

#### LD/LC50-values important for the classification:

##### 111-46-6 Diethylene glycol

Oral LD50 12565 mg/kg (rat)

Dermal LD50 11890 mg/kg (rbt)

##### 107-41-5 2-methyl-2,4-pentanediol

Oral LD50 4000 mg/kg (rat)

Dermal LD50 13000 mg/kg (rbt)

## 12. Ecological information

The product may not enter waters, sewerage systems and soil.

## 13. Disposal considerations

### Product:

**Recommendation:** Do not allow to enter sewerage systems

### European waste products catalogue

08 03 12 printing inks waste products which contain hazardous substances

### Uncleaned packaging:

**Recommendation:** Not emptied containers and ink residues are hazardous waste.

Emptied containers should be supplied to scrap utilisation resp. recycling.

## 14. Transport information

The product is not subject to transport regulations for dangerous goods.

### Maritime transport IMDG/GGVSea:

Marine pollutant: No

## 15. Regulatory information

**Designation according to EEC guidelines:**

**Code letter and hazard designation of the product:** Xn Injurious to health

**Hazard components determinant for the labelling:**

Diethylene glycol / 2-methyl-2,4-pentanediol

**R-phrases:**

22 Injurious to health when swallowed.  
36/38 Irritating for eyes and skin.

**S-phrases:**

26 After eye contact immediately irrigate thoroughly with plenty of water  
and seek medical advice.  
29/35 Do not allow to enter sewerage system; waste products and  
containers have to be eliminated in a safe way.  
36/37 Use suitable protective clothing and gloves while working in  
application area.

**National regulations:**

Classification according to VbF: not applicable.

**Water pollution class:**

Water pollution class 1: slightly polluting (according to annex 4 VwVwS)

## 16. Other information

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