



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont  
Material Safety Data Sheet

Page 1

P0000193 "OPTISOL" IN-LINE SOLUTION  
Revised 2-SEP-2003

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Cyrel OptiSol is a registered trademark of DuPont.

Corporate MSDS Number : DU002882  
CAS Name : "OptiSol" IN-LINE SOLUTION

# Tradenames and Synonyms

"CYREL OptiSol" IN-LINE SOLUTION  
"OptiSol" 737

# Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont "Cyrel" Packaging Graphics  
Products  
Chestnut Run Plaza, Building 702  
Wilmington  
DE  
19880-0702

PHONE NUMBERS

Product Information : 800-345-9999 - press 1  
Transport Emergency : 800-424-9300 (CHEMTREC)  
Medical Emergency : 800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
HEPTYL ACETATES	90438-79-2	60-100
HEPTYL ALCOHOLS	70914-20-4	15-40

Components (Remarks)

Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

-----  
HAZARDS IDENTIFICATION  
-----

## Potential Health Effects

THIS PRODUCT CAN BE USED SAFELY WHEN USED AS DIRECTED AND WHEN APPLICABLE SAFETY PRECAUTIONS ARE FOLLOWED.

## INHALATION

Short-term overexposure may cause: Irritation of nose, throat, and lungs with cough, difficulty breathing or shortness of breath. Central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness. Non-specific effects such as headache, nausea and weakness.

The distinctive odor of "Cyrel OptiSol" In-Line Solution which is said to be noticeable at 0.1 to 2.0 ppm may be disagreeable to some individuals.

## SKIN CONTACT

Short-term overexposure may cause: Irritation with itching, burning, redness, swelling or rash.

## EYE CONTACT

Contact with liquid may cause: Severe eye irritation with tearing, pain or blurred vision. Contact with the vapor or aerosol may cause eye irritation with tearing, pain or blurred vision.

## INGESTION

The major ingestion hazard is aspiration (liquid entering the lungs during ingestion or vomiting) which may result in "chemical pneumonia". Symptoms include coughing, gasping, choking, shortness of breath, bluish discoloration of the skin, rapid breathing and heart rate, and fever. Pulmonary edema or bleeding, drowsiness, confusion, coma and seizures may occur in more serious cases. Symptoms may develop immediately or as late as 24 hours after exposure, depending on how much chemical entered the lungs.

## Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

-----  
FIRST AID MEASURES  
-----

## First Aid

## INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

## SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.

## EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

## INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## Notes to Physicians

No antidote or specific treatment regimens known. Use supportive measures as needed.

-----  
FIRE FIGHTING MEASURES  
-----

## Flammable Properties

Flash Point : 154 F (68 C) Method: PMCC  
Flammable limits in Air, % by Volume  
LEL : 0.6  
UEL : 7.0  
Autoignition : 554 F (290 C)

Combustible liquid. Can form combustible mixtures at or above the flashpoint. Can accumulate static charges which can cause an incendiary electrical discharge.

## Extinguishing Media

Water Spray, Foam, Dry Chemical.

## Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Cool tank/container with water spray.

-----  
ACCIDENTAL RELEASE MEASURES  
-----

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Initial Containment

Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Soak up with sand, oil dry, or other noncombustible absorbent materials.

-----  
HANDLING AND STORAGE  
-----

Handling (Personnel)

Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

Handling (Physical Aspects)

Keep away from heat, sparks and flames. Ground container when pouring.

Storage

Store in a well ventilated place. Store in a cool place. Keep container tightly closed.

-----  
EXPOSURE CONTROLS/PERSONAL PROTECTION  
-----

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying materials.

RESPIRATORY PROTECTION

## (EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Where airborne concentrations are expected to exceed exposure limits, a NIOSH approved respirator should be selected based on the form and concentration of the contaminant in air and in accordance with OSHA Respiratory Protection Standard CFR 1910.134.

## PROTECTIVE CLOTHING

Wear impervious clothing, such as gloves, apron, boots, or whole bodysuit as appropriate.

## Exposure Guidelines

## Exposure Limits

## "OPTISOL" IN-LINE SOLUTION

PEL (OSHA) : None Established  
 TLV (ACGIH) : None Established  
 AEL \* (DuPont) : The following limits are intended to prevent subjective complaints that might be associated with the odor of "OptiSol" In-Line Solution:

Ester Component (heptyl acetates):  
 10 ppm, 15 minute TWA  
 1 ppm, 8 hour TWA

Alcohol component (heptyl alcohols):  
 5 ppm, 15 minute TWA  
 0.5 ppm, 8 hour TWA

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

-----  
PHYSICAL AND CHEMICAL PROPERTIES  
-----

## Physical Data

Boiling Point : 302-392 F (150-200 C) @ 760 mm Hg  
 Vapor Pressure : <1 mbar  
 Vapor Density : 5.5 (Air=1.0) (heptyl acetates)  
                   4.0 (Air=1.0) (heptyl alcohols)  
 Solubility in Water : Negligible  
 pH : Not Applicable (organic liquid)  
 Specific Gravity : 0.85  
 Volatile Organic Content: 7.1 lb/gal (estimated)  
 Odor : Sweet.  
 Odor Threshold : 400 ppb (heptyl acetates)  
                   60 ppb (heptyl alcohols)  
 Form : Liquid  
 Color : Colorless.

-----  
STABILITY AND REACTIVITY  
-----

## Chemical Stability

Stable at normal temperatures and storage conditions.

## Incompatibility with Other Materials

Incompatible or can react with strong oxidizers, strong acids, bases.

## Polymerization

Polymerization will not occur.

-----  
TOXICOLOGICAL INFORMATION  
-----

## Animal Data

For toxicity information, contact "Cyrel" Packaging Graphics Products at 1-800-345-9999.

-----  
ECOLOGICAL INFORMATION  
-----

## Ecotoxicological Information

For information, contact "Cyrel" Packaging Graphics Products at 1-800-345-9999.

-----  
DISPOSAL CONSIDERATIONS  
-----

## Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

-----  
TRANSPORTATION INFORMATION  
-----

## Shipping Information

Check the current Bill of Lading for proper shipping information.

Limited quantities of combustible liquids are excepted from DOT labeling requirements, unless offered for transportation or transported by aircraft.

-----  
REGULATORY INFORMATION  
-----

## U.S. Federal Regulations

TSCA Inventory Status : In compliance with TSCA Inventory requirements for commercial purposes.

## TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes  
Chronic : No  
Fire : Yes  
Reactivity : No  
Pressure : No

-----  
OTHER INFORMATION  
-----

## NFPA, NPCA-HMIS

NPCA-HMIS Rating  
Health : 3  
Flammability : 2  
Reactivity : 0

## Additional Information

For additional Material Safety Data Sheets, contact your DuPont dealer or the DuPont marketing service center which serves your area.

-----  
The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont "Cyrel" Packaging Graphics Products  
Address : Chestnut Run Plaza - 702  
Wilmington, DE 19880-0702  
Telephone : 800-345-9999 (Press 1)

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS