



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

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P0000230 "OPTISOL" IN-LINE ALCOHOL
Revised 13-SEP-1999

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Cyrel OptiSol is a registered trademark of DuPont.

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	%
C6-C8 Iso-alcohols		100

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

INHALATION: Negligible hazard at ambient temperature (-18 to 38C; 0 to 100F). High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

SKIN CONTACT: Irritating.

EYE CONTACT: Severly irritating. If not removed promptly, will injure eye tissue, which may result in permanent damage.

(HAZARDS IDENTIFICATION - Continued)

INGESTION: Minimal toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

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

Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances. Activated charcoal may be given but should be used with caution since it may induce vomiting.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : 158 F (70 C) Method: TCC
Flammable limits in Air, % by Volume
LEL : No Data Available
UEL : No Data Available
Autoignition : No Data Available

Combustible liquid.

Can form combustible mixtures at temperatures at or above the flashpoint.

If thermally decomposed, flammable/toxic gases may be released.

Material 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. Shut off source of fuel, if possible and without risk. Cool tank/container with water spray.

Avoid spraying water directly into storage containers due to danger of boilover.

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

Recover undamaged and minimally contaminated material for reuse and reclamation. 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)

Ground container when pouring. Use of non-sparking and explosion-proof equipment may be necessary depending on type of operation. Keep away from heat, sparks and flames.

Storage

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

Store at ambient temperatures.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of material.

RESPIRATORS

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING

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

Exposure Guidelines

Exposure Limits

"OPTISOL" IN-LINE ALCOHOL

PEL (OSHA) : None Established
TLV (ACGIH) : None Established-----
PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Form : Liquid
Color : Clear, almost colorless
Odor : Mild
Boiling Point : 311-365 F (155-185 C) (typical)
Vapor Pressure : 4 mm Hg @ 100 F (38 C)
 5 mm Hg @ 122 F (50 C) (maximum)
Vapor Density : 4 (Air=1.0)
Evaporation Rate : 0.2 (Butyl Acetate=1.0)
Solubility in Water : Negligible
Specific Gravity : 0.83 @ 68 F (20 C)
Volatile Organic Content: 6.9 lb/gal (estimated)
Pour Point : -65 F (-54 C)
Viscosity : 9.7 cSt @ 68 F (20 C)

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

Incompatible with strong oxidizing agents, inorganic acids, halogens, aldehydes, acid anhydrides, alkylene oxides, monomers & polymerizable esters.

Decomposition

Hazardous gases/vapors produced are flammable hydrocarbons.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

No information available.

ECOLOGICAL INFORMATION

Ecotoxicological Information

No information available.

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

DOT
Proper Shipping Name : ALCOHOLS, N.O.S.
Hazard Class : COMBUSTIBLE LIQUID
I.D. No. (UN/NA) : UN1987
Packing Group : III

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
Fire : Yes

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating
Health : 2
Flammability : 2
Reactivity : 0

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

Personal Protection rating to be supplied by user depending on use conditions.

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)

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