



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

JUL 10 2002

Ms. Joan Van Matre  
US Liquids of Georgia Solvent Division  
1184 Logan Circle  
Atlanta, GA 30318

Ref. No.: 02-0084

Dear Ms. Van Matre:

This responds to your March 18, 2002 letter requesting clarification on shipping paper documentation and placarding under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask the correct shipping description and proper placard required for your non-bulk and bulk shipments of combustible plate wash solvent.

According to your letter, you ship a plate wash solvent that you have classed as a "Combustible liquid" in 55-gallon drums and in 275-gallon totes. The shipping papers attached with your letter are not in compliance with the HMR. The basic shipping description (the proper shipping name, hazard class number, UN identification number, and packing group number) is incorrect. Regarding the sequence of information, the type of packaging, e.g., "drums, (55 gal)" may be entered before or after the basic description. Any additional information concerning the material must be placed after the basic description required by § 172.202(a).

In addition, "plate wash solvent" is not a proper shipping name or proper technical name. Generic shipping paper entries such as "Combustible liquid, n.o.s.", requires a technical name or chemical name of the ingredient that makes the material combustible. A technical name is a recognized chemical name or microbiological name currently used in scientific and technical handbooks, journals, and texts. Generic descriptions are authorized for use as a technical names provided they readily identify the general chemical group, or microbiological group. Examples of acceptable generic chemical descriptions are organic phosphate compounds, petroleum aliphatic hydrocarbons and tertiary amines. Trade names may not be used as technical names.

The following is an example of a proper shipping description for a "Combustible liquid, n.o.s." material:

1 tote, Combustible liquid, n.o.s.(proper technical name), NA 1993, 400 lbs.

In response to your placarding question, if you meet provisions in § 173.150(f), the non-bulk (55-gallon drum) shipment of the plate wash solvent is not subject to the HMR, including shipping paper, marking, labeling, and placarding, unless it is a hazardous waste, hazardous substance, or marine pollutant.

However, the bulk (tote) shipment of the plate wash solvent is subject to the HMR as stated in § 173.150(f) and must be properly described on the shipping paper, marked, packaged, and placarded. Each bulk package must be marked with the UN identification number as specified in §§ 172.302 and 172.322. In accordance with § 172.504(a), each bulk packaging, freight container, unit load device, transport vehicle, or rail car containing any quantity of a hazardous must be placarded on each side and each end with the type of placards specified in tables 1 or 2 of this subpart. In addition, under § 172.514(c), a tote or portable tank having a capacity of less than 3,785 L (1,000 gallons) may be placarded on only two opposite sides or, alternatively, may be labeled instead of placarded. For your information, there is no combustible label authorized in the HMR. A placard on a tote may be used to meet vehicle placarding if it is visible on all four sides; however, if the bulk package is inside a freight container or transport vehicle and the placards are not visible, the motor vehicle must be placarded on all four sides and the UN identification number displayed.

I hope this answers your inquiry.

Sincerely,



Delmer F. Billings  
Chief, Standards Development  
Office of Hazardous Materials Standards

Boothe  
§ 172.101  
§ 172.544  
Proper Shipping Name  
Placarding  
02-0084

March 18, 2002

Mr. Ed Mazzullo  
The Hazardous Materials Information Center

Dear Mr. Mazzullo,

We need your help in clarifying the correct shipping papers and truck placarding for the plate wash solvent that we ship.

I am faxing you the following:

Our standard shipping Bill of Lading ( for 1 - 55 gallon drum/275 gallon tote/24 - 55 gallon drums)

The MSDS for two of the solvents that we ship

We need information in writing please for the following:

- For a 275 gallon tote shipment - correct shipping papers and correct truck placard
- For a 55 gallon drum (each drum weighs 400 lbs.) - correct shipping papers and truck placard if any required
- For 20 - 55 gallon drums or more - correct shipping papers and truck placard if any required

Also, we need to know if a common carrier is carrying 20 - 55 gallon drums and the trailer had combustible placarding, and he had the shipping papers completed as we are sending you for plate wash solvent, was he in violation for having the combustible placards on the trailer?

He had a DOT officer pull him over on Friday and he was given a ticket for having the combustible placard on his trailer. The officer said it was not supposed to be placarded at all since it was drums not bulk (tote).

We do put 2 combustible labels on the 275 gallon totes for shipment and we have been giving the freight carrier driver the combustible placards for their trailer. Also we have been giving the drivers the combustible placards for their trailers when we ship more than 2200 lbs in 55 gallon drums but we do not put the combustible labels on the 55 gallon drums.

Please fax your response to my attention at 404-605-0095 and please mail the original to:

Joan VanMatre  
US Liquids of Georgia Solvent Division  
1184 Logan Circle  
Atlanta, Georgia 30318

If you have any questions, please call me at 404-605-0085.

Thank You for your assistance.

**STRAIGHT BILL OF LADING**  
ORIGINAL-NOT NEGOTIABLE

PAGE 1 OF 1

BOL NBR. 8376  
 DATE March 18, 2002  
 TERMS Prepaid  
 CARRIER USFH - USF Holland  
 SEC 7  
 PU DATE PUTIME

PRG 000-000000-00					
ORIG. PORT	MULTI-PL. DEST.	FORW. CITY	HOOK	TRAILER NO.	DESTINATION
PCS		CKR		DOOR	
PCS		STR			

SHIPPER  
 US Liquids  
 1184 Logan Circle, N.W.  
 Atlanta GA 30318

CONSIGNEE  
 Tru-Color  
 3803 Ford Circle  
 Cincinnati OH 45227

BILL TO OR REMIT TO

ISSUING OFFICE OR AGENT

GENERAL COMMENTS

PLEASE DO NOT BREAK PALLETS!  
 HGT RUSH / NON-HAZ! PLEASE DO NOT BREAK

PIECES	IN	H	DESCRIPTION	WEIGHT LBS. (SUBJECT TO CORRECTION)	RATE	CHARGES	CLASS
1			Drums, DRUM(S) (55/GAL) Platewash Solvent IT#101720-3 Purchase Order #	400			55
1			TOTALS	400			

REMIT C.O.D.  
TO

COD AMT: \$

C.O.D. FEE

PREPAID  \$  
 COLLECT

ADDRESS

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
 The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.

\$ \_\_\_\_\_ per

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:  
 The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

TOTAL \$  
 CHARGES

FREIGHT CHARGES ARE PREPAID  
 UNLESS MARKED COLLECT  
 CHECK BOX IF COLLECT

(Signature of Consignor)

RECEIVED, subject to the classifications and terms in effect on the date of this issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above when said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of property under the contract) agrees to carry to its usual place of delivery at said destination, if on his route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in governing classification on the date of shipment.  
 Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

SHIPPER

CARRIER

US Liquids

USF Holland

PER

PER

DATE

Mark with "X" or "RC" if appropriate to designate Hazardous Materials or Hazardous Substances as defined in the department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on bills of lading per Section 172.201 (a) (1) (iii) of Title 49, Code of Federal Regulations. Also, when shipping hazardous materials, the shipper's certification statement prescribed in Section 172.204 (a) of the Federal Regulations must be indicated on the bill of lading, unless a specific exception from this requirement is provided in the Regulations for a particular material.

**STRAIGHT BILL OF LADING**  
ORIGINAL-NOT NEGOTIABLE

PAGE 1 OF 1

BOL. NBR.   
 DATE 8376   
 TERMS March 18, 2002   
 CARRIER Prepaid   
 SEC 7 AACT - AAA Cooper Transportation   
 PU DATE \_\_\_\_\_ PUTIME \_\_\_\_\_

PRO 000-000000-00			
TRAILER NO.	DESTINATION	DOOR	
FCB	STRK		

SHIPPER  
 US Liquids  
 1184 Logan Circle, N.W.  
 Atlanta GA 30318

CONSIGNEE

BILL TO OR REMIT TO

ISSUING OFFICE OR AGENT

GENERAL COMMENTS

PIECES	IN	H	DESCRIPTION	WEIGHT LBS. (SUBJECT TO CORRECTION)	RATE	CHARGES	CLASS
1		X	Tote Bins, TOTE(S) (275/gal) Platewash Solvent IT#101720-3 Combustible Liquid, n.o.s., Platewash Solvent, NA 1993, PG III Emergency#1-800-366-9880 Purchase Order # .	2000			55
1			TOTALS	2000			

REMIT C.O.D. TO	COD AMT. \$ _____ Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. _____ (Signature of Consignor)	C.O.D. FEE
ADDRESS		PREPAID <input type="checkbox"/> \$ _____ COLLECT <input type="checkbox"/> \$ _____ TOTAL CHARGES \$ _____ FREIGHT CHARGES ARE PREPAID UNLESS MARKED COLLECT CHECK BOX IF COLLECT <input type="checkbox"/>

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ \_\_\_\_\_ per \_\_\_\_\_

RECEIVED, subject to the classifications and tariffs in effect on the date of this issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assignee.

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

SHIPPER	CARRIER
US Liquids	AAA Cooper Transportation
PER	DATE

\* Mark with "X" or "RQ" if appropriate to designate Hazardous Materials or Hazardous Substances as defined in the department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on bills of lading per Section 172.201 (a) (1) (III) of Title 49, Code of Federal Regulations. Also, when shipping hazardous materials, the shipper's certification statement prescribed in Section 172.204 (a) of the Federal Regulations must be indicated on the bill of lading, unless a specific exception from this requirement is provided in the

**STRAIGHT BILL OF LADING**  
ORIGINAL-NOT NEGOTIABLE

PAGE 1 OF 1

BOL. NBR.  
 DATE 8376  
TERMS March 18, 2002  
CARRIER Prepaid  
SEC 7 GATF - R&L Carriers  
PU DATE PU TIME

PRD 000-000000-00					
PLATE	MATE	POSS	HOOK	TRAILER NO.	DESTINATION
PCS	CKR	DOOR			
PCR	STR				

SHIPPER  
US Liquids  
1184 Logan Circle, N.W.  
Atlanta

CONSIGNEE  
  
MA

GA 30318

BILL TO OR REMIT TO

ISSUING OFFICE OR AGENT

GENERAL COMMENTS

PLEASE DO NOT BREAK PALLETS!  
HOT RUSH / NON-HAZ! PLEASE DO NOT BREAK

PIECES	IN	H	DESCRIPTION	WEIGHT LBS. (SUBJECT TO CORRECTION)	RATE	CHARGES	CLASS
24		X	Drums, DRUM(S) (55/GAL) Platewash Solvent IT#101720-3 Purchase Order # Combustible Liquids, NOS, Platewash Solvent, NA1993, PGIII Emergency# 1-800-366-9860	9600			55
24			TOTALS	9600			

REMIT C.O.D. TO	COD AMT: \$	C.O.D. FEE
ADDRESS	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.	PREPAID <input type="checkbox"/> \$ COLLECT <input type="checkbox"/>
NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.	(Signature of Consignor)	TOTAL \$ CHARGES
\$ per		FREIGHT CHARGES ARE PREPAID UNLESS MARKED COLLECT CHECK BOX IF COLLECT <input type="checkbox"/>

RECEIVED, subject to the classifications and tariffs in effect on the date of this issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of property under the contract) agrees to carry to the usual place of delivery at said destination. If on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property, over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns. This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

SHIPPER	CARRIER	DATE
US Liquids	R&L Carriers	
PER	PER	

\* Mark with "X" or "RO" if appropriate to designate Hazardous Materials or Hazardous Substances as defined in the department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on bills of lading per Section 172.201 (a) (1) (ii) of Title 49, Code of Federal Regulations. Also, when shipping hazardous materials, the shipper's certification statement prescribed in Section 172.204 (a) of the Federal Regulations must be indicated on the bill of lading, unless a specific exception from this requirement is provided in the Regulations for a particular material.



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Information in this format is provided as a service to our customers and is intended only for their use. Others may use it at their own discretion and risk.

The MSDS format adheres to U.S. standards and regulatory requirements and may not meet regulatory requirements in other locations.

This information is based upon technical information DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. Please return to this website for the most current version.

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## "OPTISOL" IN-LINE SOLUTION CONTAINING "CYREL" FLEXOGRAPHIC PLATE MATERIAL

P0000197

Revised 15-MAR-2000

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### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

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#### Material Identification

Cyrel OptiSol, Cyrel are registered trademarks of DuPont.

#### Product Use

"Cyrel" Flexographic Printing Plates are considered articles by OSHA (CFR1910.1200). However, unexposed plates contain material that may cause skin irritation or allergic skin reactions and sensitization in susceptible persons. "Cyrel OptiSol" In-Line Solution used in the plate developing process will contain some unexposed plate material.

This MSDS is applicable only to spent solutions (before distillation) and/or stillbottom wastes (after distillation) generated during processing of "Cyrel" Flexographic Printing Plates with "Cyrel OptiSol" In-Line Solution.

#### 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	~5-70
Heptyl Alcohols	70914-20-4	~5-30
Unexposed "Cyrel" Flexographic Printing Plate material (contains synthetic rubber and acrylates)		10-95

## 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. Repeated and/or prolonged exposure may cause: Skin sensitization with allergic rashes.

#### 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.

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## FIRST AID MEASURES

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#### 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

In case of contact, immediately wash skin with soap and water. 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.

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## FIRE FIGHTING MEASURES

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### Flammable Properties

Flashpoint: >141 F and <200 F

Combustible. The solvent can form combustible mixtures at or above the flashpoint and 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.

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## ACCIDENTAL RELEASE MEASURES

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### 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 noncombustible absorbent materials.

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## HANDLING AND STORAGE

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### 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.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits.

### Personal Protective Equipment

#### EYE/FACE PROTECTION

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

#### RESPIRATORY PROTECTION

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 CONTAINING "CYREL" FLEXOGRAPHIC PLATE MATERIAL

PEL (OSHA) : None Established  
TLV (ACGIH) : None Established

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## PHYSICAL AND CHEMICAL PROPERTIES

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### Physical Data

Form : Varies from liquid to semi-solid  
Color : Varies

Odor : Slight odor

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## STABILITY AND REACTIVITY

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### 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.

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## TOXICOLOGICAL INFORMATION

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### Animal Data

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

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## ECOLOGICAL INFORMATION

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### Ecotoxicological Information

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

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## DISPOSAL CONSIDERATIONS

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### 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.

Spent solutions and/or stillbottom wastes containing "Cyrel" Flexographic Printing Plate material with "Cyrel OptiSol" In-Line Solution have been analyzed by the Toxicity Characteristic Leachate Procedure (TCLP) for metals and organics and are below all regulatory levels currently listed by the Environmental Protection Agency (EPA).

Spent solutions and/or stillbottom wastes containing "Cyrel" Flexographic Printing Plate material with "Cyrel OptiSol" In-Line Solution do not meet the Federal definition of a RCRA hazardous waste. Incineration in an approved facility is the recommended disposal method. DO NOT landfill. EPA has banned liquids from landfills. Spent solutions and/or stillbottom wastes containing "Cyrel" Flexographic Printing Plate material with "Cyrel OptiSol" In-Line Solution may not meet the EPA requirements.

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## REGULATORY INFORMATION

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### 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 : Yes  
Fire : Yes  
Reactivity : No  
Pressure : No

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## OTHER INFORMATION

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### Additional Information

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

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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

Telephone

Wilmington, DE 19880-0702  
: 800-345-9999 (Press 1)

End of MSDS

**MATERIAL SAFETY DATA SHEET**

I. PRODUCT IDENTIFICATION

TRADE NAME: Solvit® QD

SYNONYMS: NA

II. HAZARDOUS COMPONENTS

<u>Components</u>	<u>CAS #</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Petroleum Hydrocarbon*	*	50	NE	NE
Aliphatic Alcohol*	*	50	50 ppm (skin)	50 ppm (skin)

\* The specific chemical identity is a Trade Secret and is therefore not being disclosed in the MSDS. The MSDS includes health hazard information for these compounds. Potential hazard information is not being withheld. The specific chemical identity will be provided upon request by a physician or other health-related personnel.

NA = Not Applicable NE = Not Established

III. PHYSICAL DATA

BOILING POINT: 353-390°F at 760 mm Hg

MELTING POINT: Liquid at room temperature

SPECIFIC GRAVITY (H2O=1): 0.87 @ 60°F

VAPOR PRESSURE: 1 mm @ 100°F

VAPOR DENSITY (AIR=1): 4.0

SOLUBILITY IN H2O: Less than 0.1% @ 77F

% VOLATILES BY VOLUME: 100

EVAPORATION RATE: 0.1 (Butyl Acetate = 1)

APPEARANCE AND ODOR: Clear, colorless liquid; aromatic hydrocarbon odor.

VOC'S: 100%

WEIGHT: 7.3 Pounds per Gallon

#### IV. FIRE AND EXPLOSION DATA

FLASH POINT: 145°F minimum, Pensky-Martens Closed Cup

NFPA 704: Health 2 Flammability 2 Reactivity 0

AUTO IGNITION TEMPERATURE: ~802°F

EXPLOSIVE LIMITS IN AIR:

Lower Explosion Limit: ~1.8%

Upper Explosion Limit: ~11.7%

EXTINGUISHING MEDIA: Carbon Dioxide, foam, water spray, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: Combustible liquid. May ignite if exposed to heat, sparks or open flame. Could generate oxides of Carbon and other decomposition products of undetermined hazard.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION AS THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

#### V. REACTIVITY DATA

STABILITY: Product is stable.

INCOMPATIBILITY: Sulfuric acid, strong oxidizing agents, inorganic acids, halogens, aldehydes, acid anhydrides, alkylene oxides, monomers and polymerizable esters.

HAZARDOUS DECOMPOSITION PRODUCTS: In case of fire, flammable hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.



VI. HEALTH HAZARD DATA

EXPOSURE LIMITS: None established for mixture.

TOXICITY DATA: Irritating to rabbits in a primary dermal irritation study. No skin sensitization was observed in guinea pigs (Buehler).

CARCINOGENICTY: NTP? See below IARC Monographs? No OSHA Regulated? No

PRIMARY ROUTE(S) OF EXPOSURE: Eye contact, skin contact, inhalation.

EFFECTS OF OVEREXPOSURE:

ACUTE: Eye contact causes severe irritation. If not removed promptly, eye injury will occur which may result in permanent damage. Skin contact causes irritation. Although not present under normal conditions, high vapor concentrations are irritating to the eyes and the respiratory tract and may cause headaches, dizziness, unconsciousness and other central nervous system effects. These effects are temporary and reversible.

CHRONIC: This product contains 0.3% Naphthalene. An NTP draft report states that lifetime inhalation exposure to naphthalene resulted in increases in tumors of the nose in rats. In a previous study, lifetime inhalation exposure increased lung tumors in female mice. The relevance of these findings to humans is not known.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Asthma, bronchitis, emphysema and any other respiratory disorders.

VII. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Use local and mechanical exhaust to minimize exposure to vapors or mists.

RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS: 100 ppm total hydrocarbons, 50 ppm alcohol.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY: Not required under normal operating conditions. Respiratory protection may be needed under certain conditions where significant exposure to fumes or mists may occur. A NIOSH approved air purifying respirator equipped with NIOSH approved organic vapor cartridges is recommended. Use must comply with the OSHA standard for respiratory protection (29 CFR 1910.134) including appropriate fit testing and training.

EYE: Chemical splash goggles.

GLOVES: Impervious nitrile or butyl rubber.

### VIII. FIRST AID PROCEDURES

#### EYE CONTACT:

If the material gets in the eyes, immediately wash the eyes with copious amounts of water, occasionally lifting the lower and upper eyelids. Continue for 15 minutes. Get medical attention immediately.

#### SKIN CONTACT:

If the material gets on the skin, immediately wash the area with soap and water and flush with water. If the material gets on clothing, remove the clothing and wash the affected area with soap and water. If irritation develops, get medical attention. Wash contaminated clothing before reuse.

#### INGESTION:

If the material has been swallowed, do not induce vomiting. Get medical attention immediately.

#### INHALATION:

If dizziness, coughing, irritation or tightness in the chest is experienced, remove to fresh air. Administer oxygen if breathing is difficult. Get medical attention immediately.

### IX. SPILL OR LEAK PROCEDURES

#### STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED:

Evacuate area of all non-essential personnel. Remove all sources of ignition. Ventilate confined spaces. Wear gloves, goggles, apron or lab coat and respirator. Contain spill with absorbent socks to prevent sewer runoff. Absorb spill with absorbent material such as sand or earth. Do not use combustible materials such as sawdust. Using non-sparking tools, shovel into salvage container.

#### WASTE DISPOSAL METHOD:

Waste liquid can be incinerated or used for fuel blending. Waste products may be hazardous due to ignitability. Comply with federal, state and local regulations.

X. SPECIAL PRECAUTIONS

Store in a cool, well-ventilated area away from flammable materials and sources of heat, sparks or flame. Use with electrically grounded equipment.

Practice good housekeeping and vigorous personal hygiene to minimize contact with material.

This product is for industrial use only. Do not reuse container.

XI. REGULATORY COMMENTS

DOT CLASSIFICATION: Not regulated for non-bulk packaging. For bulk packaging:

Combustible liquid, n.o.s.; Combustible liquid; NA 1993; PG III

TSCA STATUS: All components are on the TSCA Chemical Substance Inventory.

SARA TITLE III: This product contains no chemicals on the EPA's list of Toxic Release Chemicals under Section 313 above regulated thresholds.

1990 CAA Amendments HAP's: This product contains 0.3% Naphthalene, CAS# 91-20-3.

XII. PREPARATION INFORMATION

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DATE: April 4, 2001

SUPERSEDES: December 20, 2000

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