



CUDNER & O'CONNOR CO.

Safety Data Sheet ET-41477 FROST

SECTION 1: Identification

1.1 Product identifier

Product name	ET-41477 FROST
Product number	ET-41477
Brand	CANDOC

1.2 Other means of identification

Clear Printing Ink

1.3 Recommended use of the chemical and restrictions on use

Uses : Printing Ink

1.4 Supplier's details

Name	Cudner & O'Connor Co.
Address	4035 West Kinzie St Chicago, IL 60624 USA
Telephone	773-826-0200
Fax	773-826-0477
email	CANDOC1@AOL.COM

1.5 Emergency phone number(s)

800-535-5053

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Flammable liquids (chapter 2.6), Cat. 3
- Acute toxicity, dermal (chapter 3.1), Cat. 5
- Acute toxicity, inhalation (chapter 3.1), Cat. 5
- Acute toxicity, oral (chapter 3.1), Cat. 5
- Eye damage/irritation (chapter 3.3), Cat. 2A

2.2 GHS label elements, including precautionary statements

Pictogram

Safety Data Sheet
ET-41477 FROST



Signal word

Danger

Hazard statement(s)

H226	Flammable liquid and vapor
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H319	Causes serious eye irritation
H333	May be harmful if inhaled

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting and equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P312	IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use foam, alcohol foam, CO ₂ , dry chemical, water fog to extinguish.
P403+P235	Store in a well ventilated place. Keep cool.
P501	Dispose of in accordance with local, county, state, provincial and federal regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Concentration
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (CAS no.: 25036-25-3) CLASSIFICATIONS: Acute toxicity, inhalation (chapter 3.1), Cat. 5. HAZARDS: No data available.	45 - 50 %
Dipropylene glycol monomethyl ether (CAS no.: 34590-94-8) CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 4; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H227 - Combustible liquid; H335 - May cause respiratory irritation.	20 - 25 %
Silica (CAS no.: 7631-86-9) CLASSIFICATIONS: No data available. HAZARDS: No data available.	15 - 20 %
DIACETONE ALCOHOL (CAS no.: 123-42-2; EC no.: 204-626-7; Index no.: 603-016-00-1) CLASSIFICATIONS: Eye damage/irritation (chapter 3.3), Cat. 2. HAZARDS: H319 - Causes serious eye irritation.	5 - 10 %
PROPYLENE GLYCOL MONOMETHYL ETHER (CAS no.: 107-98-2; EC no.: 203-539-1; Index no.: 603-064-00-3) CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 3. HAZARDS: H226 - Flammable liquid and vapor.	< 0 - 5 %
TITANIUM DIOXIDE (CAS no.: 13463-67-7) CLASSIFICATIONS: Acute toxicity, inhalation (chapter 3.1), Cat. 5. HAZARDS: No data available.	< 0 - 5 %

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Wash off with soap and plenty of water.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first-aid responders	Wear self-contained breathing apparatus for firefighting if necessary.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in section 3.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical

Carbon oxides

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections

Safety Data Sheet

ET-41477 FROST

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)

Apart from the uses mentioned in section 1.3 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 107-98-2 (EC: 203-539-1)

PROPYLENE GLYCOL MONOMETHYL ETHER

ACGIH: 50ppm TWA inhalation

CAS: 123-42-2

Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)

Cal/OSHA: 50 ppm PEL inhalation; NIOSH: 50 ppm REL inhalation; OSHA: 50 ppm PEL inhalation; 240 mg/m³ PEL inhalation

CAS: 13463-67-7

Titanium dioxide - Total dust

Cal/OSHA: See PNOR PEL inhalation; NIOSH: Ca, (ultrafine particles), 2.4 mg/m³ (fine), 0.3 mg/m³ (ultrafine), See Appendix A, See Appendix C REL inhalation; OSHA: 15 mg/m³ PEL inhalation

CAS: 25036-25-3

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]

ACGIH: 10mg/m³ TWA inhalation; OSHA: 15mg/m³ TWA inhalation

CAS: 34590-94-8

Dipropylene glycol methyl ether

Cal/OSHA: 100 ppm, (ST) 150 ppm PEL inhalation; NIOSH: 100 ppm, (ST) 150 ppm REL inhalation; OSHA: 100 ppm PEL inhalation; 600 mg/m³ PEL inhalation

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Safety Data Sheet

ET-41477 FROST

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

Thermal breakdown during fire or very high heat conditions may release Carbon Oxides, formaldehyde, silicon dioxide and incompletely burnt hydrocarbons.

Environmental exposure controls

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Viscous Liquid
Odor	Characteristist Solvent Odor
Odor threshold	No Data
pH	No Data
Melting point/freezing point	No Data
Initial boiling point and boiling range	No Data
Flash point	138 F
Evaporation rate	Slower than Ether
Flammability (solid, gas)	
Upper/lower flammability limits	14
Upper/lower explosive limits	1.1
Vapor pressure	No Data
Vapor density	Heavier than Air
Relative density	9.57 lbs
Solubility(ies)	None Soluable
Partition coefficient: n-octanol/water	No Data
Auto-ignition temperature	No Data
Decomposition temperature	No Data
Viscosity	No Data
Explosive properties	No Data
Oxidizing properties	

Other safety information

VOC WEIGHT 35.26%
VOC VOLUME 43.30%
VOC 3.40 LBS/GAL

SECTION 10: Stability and reactivity

10.1 Reactivity

Safety Data Sheet

ET-41477 FROST

This product has not been tested as a mixture, see Section 3: Hazards Identification

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None anticipated during normal use and storage.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Bases, amines, alkali metals, metals, permanganates, e.g. potassium permanganate, fluorine, metal acetylides, hexalithium disilicide

10.6 Hazardous decomposition products

This product has not been tested as a mixture, see Section 3: Hazards Identification

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

This product has not been tested as a mixture, see Section 3: Hazards Identification

Skin corrosion/irritation

This product has not been tested as a mixture, see Section 3: Hazards Identification

Serious eye damage/irritation

This product has not been tested as a mixture, see Section 3: Hazards Identification

Respiratory or skin sensitization

This product has not been tested as a mixture, see Section 3: Hazards Identification

Germ cell mutagenicity

This product has not been tested as a mixture, see Section 3: Hazards Identification

Carcinogenicity

This product has not been tested as a mixture, see Section 3: Hazards Identification

Reproductive toxicity

This product has not been tested as a mixture, see Section 3: Hazards Identification

Summary of evaluation of the CMR properties

This product has not been tested as a mixture, see Section 3: Hazards Identification

STOT-single exposure

This product has not been tested as a mixture, see Section 3: Hazards Identification

STOT-repeated exposure

This product has not been tested as a mixture, see Section 3: Hazards Identification

Aspiration hazard

This product has not been tested as a mixture, see Section 3: Hazards Identification

Additional information

Safety Data Sheet

ET-41477 FROST

This product has not been tested as a mixture, see Section 3: Hazards Identification

SECTION 12: Ecological information

Toxicity

This product has not been tested as a mixture, see Section 3: Hazards Identification

Persistence and degradability

This product has not been tested as a mixture, see Section 3: Hazards Identification

Bioaccumulative potential

This product has not been tested as a mixture, see Section 3: Hazards Identification

Mobility in soil

This product has not been tested as a mixture, see Section 3: Hazards Identification

Results of PBT and vPvB assessment

This product has not been tested as a mixture, see Section 3: Hazards Identification

Other adverse effects

This product has not been tested as a mixture, see Section 3: Hazards Identification

SECTION 13: Disposal considerations

Disposal of the product

Dispose of in accordance with local, county, state, provincial and federal regulations. Emptied containers may retain hazardous properties. Empty containers should be disposed of in an environmentally safe manner in accordance with applicable local regulations.

Disposal of contaminated packaging

Dispose of as unused product properly.

Waste treatment

Not Applicable

Sewage disposal

Not Applicable

Other disposal recommendations

Dispose of in accordance with local, county, state, provincial and federal regulations. Emptied containers may retain hazardous properties. Empty containers should be disposed of in an environmentally safe manner in accordance with applicable local regulations.

SECTION 14: Transport information

DOT (US)

UN Number: 1210

Class: 3

Packing Group: III

Proper Shipping Name: Printing Ink

Reportable quantity (RQ):

Marine pollutant:

Poison inhalation hazard:

IMDG

Safety Data Sheet

ET-41477 FROST

UN Number: 1210
Class: 3
Packing Group: III
EMS Number:
Proper Shipping Name: Printing Ink

IATA

UN Number: 1210
Class: 3
Packing Group: III
Proper Shipping Name: Printing Ink

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Dipropylene glycol methyl ether, Diacetone alcohol, Propylene Glycol Monomethyl Ether. Propylene Glycol Monomethyl Ether

New Jersey Right To Know Components

Dipropylene glycol methyl ether, Diacetone alcohol, Propylene Glycol Monomethyl Ether. Propylene Glycol Monomethyl Ether. Titanium Dioxide

Pennsylvania Right To Know Components

Dipropylene glycol methyl ether, Diacetone alcohol, Propylene Glycol Monomethyl Ether. Propylene Glycol Monomethyl Ether. Titanium Dioxide

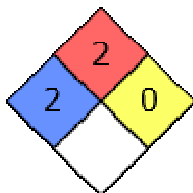
SARA 311/312 Hazards

Dipropylene glycol methyl ether, Diacetone alcohol, Propylene Glycol Monomethyl Ether. Propylene Glycol Monomethyl Ether. Titanium Dioxide

HMIS Rating

ET-41477 FROST	
HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Carcinogenicity: In February 2006 IARC concluded, "There is inadequate evidence in humans for the carcinogenicity of titanium dioxide." Based on rat inhalation studies IARC concluded that there is "sufficient

Safety Data Sheet

ET-41477 FROST

evidence in experimental animals for the carcinogenicity of titanium dioxide," IARC's overall evaluation was that "Titanium dioxide is possibly carcinogenic to humans (Group 2b)".

This conclusion was based on IARC's guidelines which require such a classification if two or more independent studies in one species carried out at different times or in different laboratories or under different protocols show evidence of tumours.

16.2 Preparation information

The information and recommendations contained in this Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. No warranty, guarantee or representation is made. The user of this product must decide what safety measures are necessary to safely use this product either alone or in combination with other products and determine its environmental regulatory compliance obligations under any federal, state or local laws.