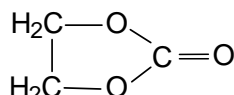


**Technical Bulletin****ULTRAPURE<sup>®</sup> ETHYLENE CARBONATE**

**ULTRAPURE<sup>®</sup> ETHYLENE CARBONATE** is a low-melting point solid, practically odorless and colorless.

**APPLICATIONS**

ULTRAPURE<sup>®</sup> Ethylene Carbonate is extremely high purity ethylene carbonate for solvent applications requiring very low levels of water, glycol, and other contaminants. Uses include such growing applications as lithium batteries, condensers, and photochromic solutions as well as polymer removal and other cleaning related applications in microelectronics fabrication.

**SALES SPECIFICATIONS**

<u>Property</u>	<u>Specifications</u>	<u>Test Method*</u>
Appearance	Melt shall be clear and substantially free of suspended matter	ST-30.1
Color, Pt-Co, Melted	20 max.	ST-30.12
Ethylene Carbonate, wt%	99.99 min.	By difference 100-EG-water
Ethylene Glycol, ppm	20 max.	ST-35.207
Water, ppm	20 max.	ST-31.53

\*Methods of Test are available from Huntsman Corporation upon request.

**ADDITIONAL INFORMATION****Regulatory Information**

See MSDS for inventory status and other regulatory information.

**Typical Properties**

Autoignition temperature, °C	447-450
Boiling point, 760 mm Hg, °C (°F)	248 (478)
Dielectric constant, esu, 40°C	89.6
Flash point, PMCC, °C (°F)	152 (305)
Freezing point, °C (°F)	36 (97)
LEL, (v/v), 200°C	4.5%
Molecular weight	88
pH	7
Specific gravity	1.3
Specific resistance, ohm-cm, 40°C	1-10x10 <sup>7</sup>
UEL, (v/v), 200°C	26.8%
Vapor pressure, mmHg, 20°C (68°F)	0.01
Viscosity, 40°C (104°F)	1.5
VOC Content by ASTM D 2369	34%
Water solubility (%)	> 10
Weight, lb/gal, 20°C	11.0

## TOXICITY AND SAFETY

For additional information on the toxicity and safe handling of this product, consult the Material Safety Data Sheet (Safety Data Sheet in Europe) prior to use of this product.

## HANDLING AND STORAGE

Recommendations for thawing containers of ULTRAPURE<sup>®</sup> Ethylene Carbonate are discussed below.

### Drums:

Drums should be thawed in a hot box maintained at 110-120°F (40-50°C). The drum bung should be loosened slightly to allow venting during the thawing process. The hot box temperature should never exceed 130°F (55°C). Once thawed and not used immediately, the head space of each drum should be purged well with nitrogen and the drum resealed.

### Other Containers (including ISO Containers):

- Record the temperature and pressure of the container upon delivery.
- Connect nitrogen to the container and maintain a 5-10 psig pad on the container during the thawing and unloading process.
- Heat the product to between 110-120°F. Do not exceed 130°F (55°C) maximum. Hot liquid must be used as the heating medium. The temperature of the heating medium should not exceed 160°F (70°C). The melting process may take 3-5 days to completely melt the ethylene carbonate.

## AVAILABILITY

ULTRAPURE Ethylene Carbonate is available in tank cars, tank wagons, drums and totes. Samples are available by contacting our sample department at 1-800-662-0924.

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