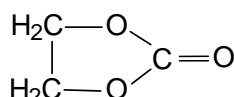


Technical Bulletin**JEFFSOL[®] ETHYLENE CARBONATE**

JEFFSOL[®] ETHYLENE CARBONATE is a low-melting point solid, practically odorless and colorless.

**APPLICATIONS**

JEFFSOL[®] Ethylene Carbonate is an excellent solvent for many organic and inorganic materials in such applications as surface coatings, dyes, fibers, plastics, and batteries. It is also an excellent reactive intermediate for selective alkoxylation, transesterification, and carbamate formation.

SALES SPECIFICATIONS

Property	Specifications	Test Method*
Appearance	Clear and substantially free of foreign matter	ST-30.1
Color, Pt-Co Supercooled liquid	40 max.	ST-30.12
Ethylene Carbonate, wt% ¹	99.5 min.	ST-35.114
Water, wt% ²	0.1 max.	ST-31.53
Water sol., 50 wt%	Clear	ST-30.15

¹GC Assay on water free basis

²Karl Fisher

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

ADDITIONAL INFORMATION**Regulatory Information**

DOT/TDG Classification	Not regulated
HMIS Code	2-1-0
WHMIS Classification	D2A, D2B
CAS Number	96-49-1, 107-21-1

Chemical Control Laws

Canada, DSL	Listed
United States, TSCA	Listed

Typical Physical Properties

Boiling point, °C (°F)	248 (478)
Flash point, PMCC, °C (°F)	152 (306)
Freezing point, °C (°F)	36 (97)
pH	7
Specific gravity	1.3
Vapor pressure, mmHg, 20°C (68°F)	<0.01
Viscosity, cSt, 40°C (104°F)	1.5
VOC Content by ASTM D2369	34%
Water solubility (%)	> 10
Weight, lb/gal, 20°C	11.0
UEL, (v/v), 200°C	26.8%
LEL, (v/v), 200°C	4.5%
Autoignition temperature	447-450°C
Dielectric constant, esu, 40°C	89.6
Specific resistance, ohm-cm, 40°C	1-10x10 ⁷

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 JEFFSOL[®] 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 or steam may be used as the heating medium. The temperature of the heating medium should not exceed 160°F (70°C). If steam is used, it should be controlled not to exceed 5 psig. The melting process may take 3-5 days to completely melt the ethylene carbonate.

AVAILABILITY

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

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The Woodlands, TX 77380
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Samples 1-800-662-0924

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