

Solvent DMC (EMAC)

Version 2026-10-22b · Revision 2026-10-22

CAS No. 616-38-6 Chemical Group Dimethyl Carbonate

Product Description

At room temperature DMC, is a colorless and transparent liquid with a pungent odor with a relative density (D204) of 1.0694, a melting point of 4 °C, boiling point of 90.3 °C, the flash point being 21.7 °C (opening) and being 16.7 °C (closed) and the refractive index (nd20) being 1.3687. It is flammable and non-toxic and is miserable with almost all organic solvents in any proportion with alcohols, ketones and esters.

Applications

EMAC can be used as traditional substitute of toxic materials phosgene, dimethyl sulfate and methyl chloride and so on. It can be used for synthesis of polycarbonate, diphenyl carbonate, isocyanate and allyl diglycol carbonate ester; it can also used for the synthesis of various kinds of carbamate pesticides such as carbaryl and so on; it can also be used as intermediate of organic synthesis such as anisole, dimethoxybenzene, alkylated aryl amines, symmetrical diamine urea, methyl carbazate and so on; in the pharmaceutical industry, it can be used for making amino oxazolidinone, ciprofloxacin, - keto acid ester class pharmaceutical intermediates. In addition, it can be used as additives of gasoline, diesel fuel, the refrigerator oil and solvent.

Storage

Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product

Physical Data

Density (g/cm ³)	1.066- 1.076
Form of supply	Colorless, transparent liquid
Moisture	0.05 max
Colour, Pt-Co scale	10 max
Content	99.5 min
Odour	Characteristic
Melting point (°C)	4
Boiling point (°C)	90.1
Flash point	16.7°C (closed cup) 21.7°C (opened cup)
Acid value	0.015 max
Methanol (Wt %)	0.05 max
Auto flammability	not pertinent
UN No.	1161
Hazard Class	3
Packing group	II

All the information above is based on data obtained at laboratory and is not to be used for certifying the suitability of the product. Users are advised to test the product in their own system before purchase.

Solvent DMC (EMAC)

Version 2026-10-22b · Revision 2026-10-22

Packaging, Shipping & Storage

Solvent DMC (EMAC) is supplied as colorless, transparent liquid. Please keep the product stored under normal temperatures, dry and protected from weather.

All the information above is based on data obtained at laboratory and is not to be used for certifying the suitability of the product. Users are advised to test the product in their own system before purchase.