

DICYCLOPENTADIENE (DCPD) Sales specification

Characteristics

Dicyclopentadiene, CAS 77-73-6, is a colourless to yellowish liquid hydrocarbon from the pyrolysis of hydrocarbon fractions with a characteristic odour. DCPD is a very reactive substance and contains a stabiliser/inhibitor of peroxide formation. At 160°C it reversibly decomposes into two cyclopentadiene molecules - monomerizes.

The product is classified as hazardous pursuant to Regulation (EC) No 1272/2008 (CLP).

Application

DCPD is intended for industrial applications as an intermediate for polymer production and processing. For professional users only. The substance can be used for the production of polymer materials, resins or chemical specialties, which are used for example in the production of adhesives, dyes, automotive and marine components, optical fibres, special lenses, medical components, packaging materials or sanitary products for kitchens and bathrooms, etc. The product was fully registered as a substance according to Regulation (EC) 1907/2006 (REACH).

Specification

DCPD GRADE	Unit	DCPD 82%		DCPD 92%		DCPD 94%		METHOD
		Limit	Typical value	Limit	Typical value	Limit	Typical value	
DCPD	% wt.	min. 82	83.0 - 86.0	min. 92	92.5 - 93.5	min. 94	94.5 - 95.5	LP-LAB-07
CPD (cyclopentadiene)	% wt.	max. 0.05	< 0.01	max. 0.05	< 0.01	max. 0.05	< 0.01	LP-LAB-07
Benzene	ppm wt.	max. 300	< 10	max. 100	< 10	max. 100	< 10	LP-LAB-07
Toluene	ppm wt.	max. 300	< 20	max. 100	< 20	max. 100	< 20	LP-LAB-07
Co-dimers C10 (b.p. lower than DCPD)	% wt.	max. 7	1.0 - 5.5	max. 7	3.5 - 5.5	max. 5	1.0 - 3.5	LP-LAB-07
Trimers	% wt.	max. 0.1	max. 0.1	max. 0.1	< 0.01	max. 0.1	< 0.01	LP-LAB-07
Inhibitor BHT / p-TBC (Butylhydroxytoluene / p-tert-Butylcatechol)	ppm wt.	100 - 200	150	100 - 200	150	100 - 200	150	LP-LAB-07
Peroxides	ppm wt.	max. 15	< 5	max. 15	< 5	max. 15	< 5	Polarography
Water	ppm wt.	max. 300	< 100	max. 200	< 70	max. 200	< 70	ČSN ISO 760
Sulphur	ppm wt.	max. 20	< 5	max. 20	< 5	max. 20	< 5	ČSN EN ISO 20847
Colour	APHA	max. 120	60 - 80	max. 100	60 - 70	max. 100	60 - 70	ASTM D1209

Packaging, storage and transportation

The product is filled into tank trucks or tank containers on road chassis. It is recommended to store the product in soft or stainless steel containers, in a cool, well-ventilated place with effective exhaust, away from heat sources and all sources of ignition. Rigid storage containers (vessels, containers) and related equipment should be grounded and protected against possible accumulation of static electricity. Detailed data on safety and health at work with DCPD is given in Material Safety Data Sheet of the manufacturer.