

1,2 – DICHLOROETHANE

(ORGANIC SYNTHESIS)

Last revision 2008

Chemical Name: Molecular formula: $C_2H_4Cl_2$
 NO.CAS: 107-06-2
 Abreviation: EDC

General Description:

1,2- Dichloroethane is a colourless liquid with a similar odor with chloroform's one. It is explosive under the action of an open flame.

1,2- Dichloroethane gives explosive mixture with air, within 6.2-16% vol limits.

Technical Quality Conditions:

Characteristics	MU	Limits	Test methods
Appearance	-	clear liquid	visual
1,2 dichloroethane, min	%	99.3	ASTM D 3447
Light chlorinated compounds, max.	%	0.6	ASTM D 3447
Heavy chlorinated compounds max.	%	0.1	ASTM D 3447
Water (Karl-Fischer), max.	%	0.05	ASTM E 203
Acidity (HCl) against bromo-thymol blue, max.	ppm	30	ASTM D 2989
Free chlorine, max.	ppm	absent	ASTM D 4755
Iron, max.	ppm	5	SR ISO 6685
Distillation range (95%vol)	$^{\circ}C$	82 -84	ASTM D 1078

Specific Properties:

Density at 20 $^{\circ}C$, g/cm 3	1.253
Boiling temperature, $^{\circ}C$	83.4
Ignition temperature, $^{\circ}C$	13 (closed cup)

The values of those characteristics are approximated, and are only for general information and are not part of the technical quality conditions.

Main Applications:

- Intermediate in chlorinated organic compounds manufacturing (particularly for vinyl chloride monomer);
- As solvent for fats, oils, waxes, synthetic and natural resins, not-vulcanized rubber, polyacrylates and metacrylates, polyvinyl chloride and polyvinyl acetate;
- Anti-explosive (removes lead from internal combustion engines).



Shipping Information:

- clean, dry and hermetically closed stainless steel tanks or double pickled metal sheet drums.

Storage:

Store in a tightly closed containers in a cool, dry, well ventilated area away from sources of heat or ignition. Isolate from flammable materials. Protect from direct sunlight. Protect against physical damage. Ventilation should be provided at the floor level. Outside or detached storage is preferred. Under normal conditions, dichloroethane may stored satisfactorily in galvanized iron and stainless steel. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid). Containers should be grounded and bonded for transfers to avoid static sparks.

Safety Consideration :

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

1,2 Dichloroethane is a very flammable and toxic liquid.

Contact with strong oxidizers may cause fire. Sensitive to static discharge.

Attention:

Information contained in this document is provided to the best of our knowledge and experience.

Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.