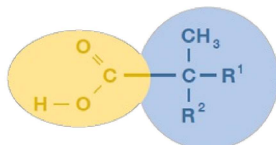


Technical Data Sheet

Versatic™ Acid 10

Description

Versatic™ Acid 10 is a synthetic, highly branched-C10 tertiary carboxylic acid. Versatic Acid 10 is also known as neodecanoic acid. Its structure may be represented as:



$R^1 + R^2 = 7$ carbon atoms

R^1 and R^2 are alkyl groups. Versatic Acid 10 contains a total of 10 Carbon atoms. Versatic Acid 10 is a water-like clear product that is liquid at ambient temperature.

Applications

Versatic Acid 10 is a key intermediate in the manufacture of a variety of products, which typically show excellent hydrolytic stability and resistance to various chemical agents. This is due to the steric hindrance created by the highly branched Versatic structure combined with the tertiary nature of its alpha-carbon atom. This is especially demonstrated in comparison with its linear and secondary-C10 equivalents.

Versatic Acid 10 can be used in its acid form, but for many applications the product is typically first converted into an acid chloride or metal salt. The acid chloride is produced by reaction with, for example, phosgene or PCl_3 and is used in the production of peroxides for polymer production. Metal salts, e.g. Cobalt, Copper or Zinc salts of Versatic Acid 10 are used in applications such as tire adhesives, paint driers, PVC heat stabilisers, chemical processing catalysts, unsaturated polyester cure catalysts, wood preservatives and fuel additives. Additionally, Versatic Acid 10 acid is a very effective metal extraction agent that is particularly suitable for Nickel. The acid can also be used as corrosion inhibitor in synthetic lubricants.

Sales Specifications

Property	Value	Unit	Test Method
Acid value	318 - 330	mg KOH/g	ASTMD1980
Appearance	Clear liquid		LPM5037
Colour Pt/Co	100 max.		ASTMD1209
Neutrals	1 max.	% m/m	LPM4301
Water	0.1 max	% m/m	ASTME203

Typical Properties

Versatic Acid 10

<https://www.hexion.com/en-US/product/versatic-acid-10>

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Property	Value	Unit	Test Method
Boiling Range at 760 mm Hg	270 - 280	°C	ASTMD1078
Density at 20°C	0.91	kg/L	ASTMD1298
Flash Point (PMC)	129	°C	ASTMD93
Miscibility With Water	Negligible		
Odour	Strong		
Pour Point	< -30	°C	ASTMD97
Purity	90 min.	% m/m	LPM5108
Vapour Pressure at 20°C	< 0.02	kPa	ASTMD5191
Viscosity at 20°C	45	mm ² /s	ASTMD445

Test Methods

ASTM Standards are published by the American Society for Testing and Materials, 100 Barr Harbor Drive, west Conshohocken, PA 19428-2959, USA or can be found under www.astm.org.

General information on LPM methods can be obtained upon request from Hexion Europe B.V.

Handling Precautions

For more detailed information on all aspects relating to Health, Safety and Handling, reference should be made to the Safety Data Sheet of Versatic Acid 10, which is available from your local Hexion representative or distributor. The precautions advised therein should be strictly observed.

Transportation and Storage

Information on transport, storage, suitable materials for tank construction, etc, is available from Hexion, via a local representative or distributor.

Versatic Acid 10 should be stored at ambient temperature (min 5 °C - max 50 °C) in conditions such that moisture is excluded, in the original containers kept tightly closed. Under these conditions the shelf life should be three years starting from the manufactured date.

Contact Information

For contact information about this product, go to www.hexion.com and visit the Versatic Derivatives product pages. Here you will have the option to choose your region to find a representative in your area.