

Technical data sheet

Tri-ethyl-citrate (TEC)

Version: December 2018

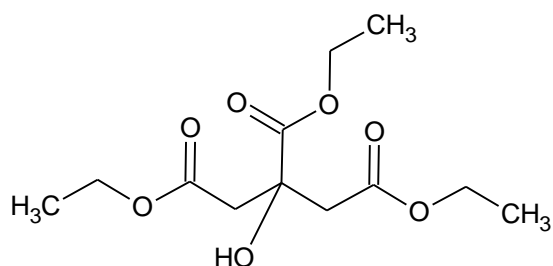
Synonyms

Tri-ethyl-citrate, triethyl Citrate

Formula

$C_{12}H_{20}O_7$

Structural formula



Molecular weight: 276.29

CAS number: 77-93-0

EINECS number: 201-070-7

Product specification

Characteristics	Unit	Value	Method*
Appearance		Clear Liquid	Visual
Colour	APHA/Hazen	<= 50	AM 018
Odour		Practically odourless	AM 074
Neutralization nr. Acid	mg KOH/g	<= 0.2	AM 006
Water content	%	<= 0.2	AM 023
Ester content	%	>= 99.0	AM 999

* Internal methods available upon request.

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Typical properties

Characteristics	Unit	Value
Density @ 25 °C	g/ml	1.14
Viscosity @ 25 °C	mPa*s	30 - 35
Refractive Index n_D^{25}		1.443

Main applications

TEC is used in dried egg whites as a whipping agent. It is an approved food additive and for food contact use as a carrier for flavours.

TEC can be used as a solvent, diluent and fixative by perfumers.

TEC finds also application as an active agent in deodorants as it inhibits the enzymatic decomposition of sweat components.

TEC is a non-toxic plasticiser and humectant for cigarettes.

Handling

Packaging: Steel drums 220 kg net.
IBC 1000 kg net
Bulk

Storage: The packaged material shall be kept into its original packaging, in cool and well-ventilated place, neither under rain nor in wet places, away from flames and heating sources. The bulk material shall be stored in stainless steel tanks, under nitrogen blanketing; for a long-lasting quality the material shall be kept at ambient temperature (ideally not above 30°C) and away from any flame or concentrated heat source

Shelf life: 2 years from production date.

Certifications: Kosher, Halal

Raw materials origin: TEC is produced from citric acid and ethanol of natural sources

The information contained in this sheet is correct and accurate and is based on our technical and scientific knowledge and on literature at the date of going to press. Such information relates only to use of the products in the pure state and for the purposes stated herein. Nothing stated here may be taken or construed as implying of any existing patents. Nor is any warranty, whether explicit or implicit, given with regard to results to be obtained through the use of the aforesaid information.

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