



Technical Data Sheet

ETHYL SILICATE 40

Description

Chemical Name	Ethyl Silicate 40
Molecular Formula	$C_{24}H_{60}Si_5O_{16}$
CAS No.	11099-06-2
Molecular Weight	740 average

Properties

Physical Form	Colorless Transparent liquid
Color, APHA	15 MAX
Specific Gravity at 20°C, g/cm ³	1.05-1.07
Boiling Point, °C	N/A
Refractive Index, ND ²⁰	1.392-1.402
Flash Point, Pensky-Martens Closed Cup(1), °C	78
SiO ₂ Content, %	38.0-42.0
Chloride, ppm	20 MAX

Applications

This product is mainly used in the manufacture of chemical-resist and heat-resist coatings, organosilicon solvents and adhesives of precision casting.

When be completely hydrolyzed, it will generate tiny silicon oxide powder which can be used in making fluorescent powder.

Applied to natural stones or other construction materials, it forms a silica-gel like binder (SiO₂) that increases the substrate strength.

Polymerization of silicone resins for use in paints and other surface modification applications. And it is the intermediate for sol-gel process.

Further more, it can improve the performance of other resins and also it is the material for making silicon macromolecular compounds.

Packaging and Storage

Be packed in 200KG drum, or 1000KG IBC.

Be sealed and stored in cool and well ventilated place. Away from fire and water.

Shelf Life

12 months