



Shina-10
Neodecanoic Acid

新癸酸



Hebei Shield Excellence Technology Co., Ltd.
www.tjshield.com

To Be Leading Supplier of Low VOC Solution



Tianjin Shield was set up in 1992

Making a living by selling detergents to restaurants and earning the first bucket of gold by distributing interleukin -2.

High purity solvent for HPLC

The first products developed and produced by Shield, which filled the blanks of China. (1994)

Pyridine-free Karl-Fischer reagent

Environment-friendly and high precision reagents for measuring water content, which was firstly invented in China. (1995)

Pivalic acid and pivaloyl chloride

The first products of thousand tons scale developed and produced by Shield, which filled the blanks of Asia. (1997-2001)

National Key Technologies R&D Programme

The production technology of Shina / Shivena / Shigena was invented and the products were awarded the national new products by central government of China. (1999-2001)

Hebei Shield was set up in 2005

To realize industrialization and commercializes of Shina / Shivena / Shigena.

Shina/Shivena/Shigena came out

Tertiary carboxylic acids and its derivatives' monopoly was broken. (2008)

Winning all the IP lawsuits filed by HEXION

We have spent 20 years to pursue better technology step by step, so don't be surprised at our achievements and try to stop us today! (2011-2017)

No price rising during Momentive's force majeure

We proved that the world really needs the second responsible supplier of Shina / Shivena / Shigena, just like Shield. (2014-2015)

National Science and Technology Major Project

To find new solutions to reduce VOC from coatings and adhesives by inventing resins and emulsions based on Shina / Shivena / Shigena. (2017-2021)

Supplying low VOC solutions in coatings and adhesives

It is the time that we should do our best to help our country and our

Shield's Missions:

Removing smog to regain green hills and clear waters!

Shield's Visions:

To be the leading supplier of the low VOC solutions in the field of coating, bonding and adhesion, and dedicated to reducing VOC in the products of our customers!

Shield's Values:

To be sincere, strive for excellence and infinite creation!

Shield's Products:

Shina-10

Neodecanoic Acid :
60,000 metric tons/year

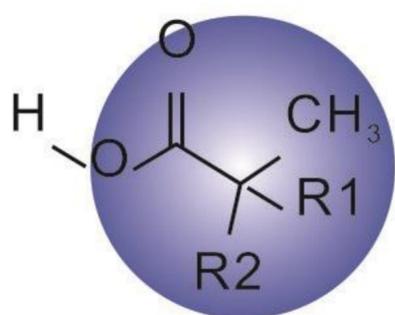
Shivena-10

Vinyl Neodecanoate:
60,000 metric tons/year

Shigena-10P

Glycidyl Neodecanoate:
10,000 metric tons/year

Neodecanoic Acid and Applications

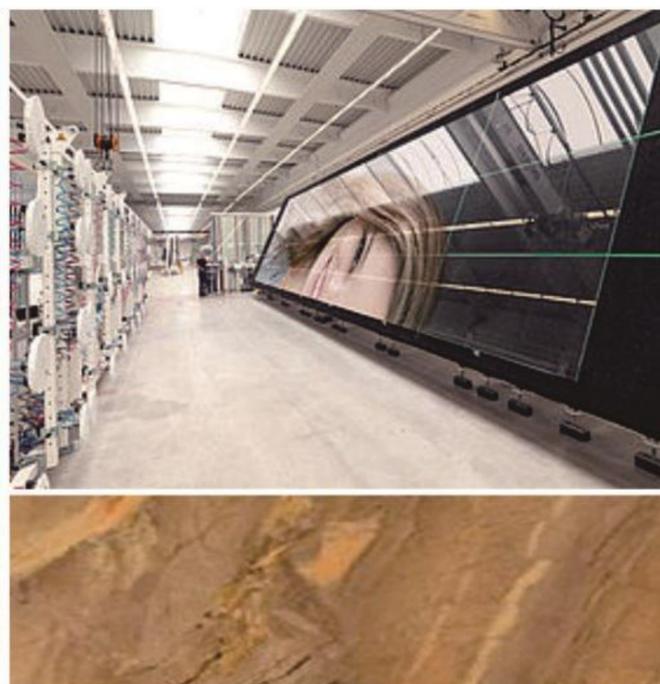


Reactive
Hydrogen

Large Steric Hindrance
Alkali and UV Resistance
Hydrophobic

Shina®

Tertiary Carboxylic Acid



Shina® - 10

Shina=**sh**ield-**neo**-carboxylic-**acid**

Chemical Name: Neodecanoic Acid

CAS No.: 26896-20-8

Shina®-10 is a synthetic highly branched tertiary carboxylic acid with ten carbon atoms. Its structural formula is as shown above, among which R1 and R2 are alkyl groups with 8 carbon atoms.

Shina®-10 shows excellent hydrolytic stability and resistance to attack from a wide variety of chemical agents. This is due to the steric hindrance created by the highly branched structure combined with the tertiary nature of its alpha-carbon atom. This is especially demonstrated in comparison with its linear and secondary C 10 equivalents.

Typical application

Neodecanoic acid metal salts:

- Ceramic inks
- Tyre adhesives
- Paint driers
- PVC stabilizers
- Chemical catalysts
- Polyester cure catalysts
- Wood preservatives
- Fuel additives

Neodecanoyl chloride:

- Peroxides for polymer production

Neodecanoic acid:

- Metal extraction agent
- Ester type synthetic lubricants

Sales Specification and Typical Properties

Sales Specification

Properties	Test method	Unit	Value
Acid value	ASTM D1980	mgKOH/g	320-330
Colour Hazen	ASTM D1209	Pt-Co	100 max.
Water	ASTM E203	%m/m	0.1 max.
Appearance	SYTM 01	--	Clear liquid

Typical Properties

Properties	Test method	Unit	Value
Density at 20 °C	ASTM D1298	kg/L	0.91
Boiling range at 760 mm Hg	ASTM D1078	°C	270-280
Melting point	ASTM D97	°C	<-30
Vapour pressure at 20°C		kPa	<0.02
Flash point (PMC)	ASTM D93	°C	129
Miscibility with water			Negligible
Viscosity at 20°C	ASTM D445	mm ² /s	45

Packaging, transport, storage and handling precautions

Shina®- 10 is packed in 200 litre drums and IBC; bulk deliveries are in road tankers.

Information on the safe handling of Shina®- 10 is given in the product Safety Data Sheet and the precautions advised therein should be strictly observed.



Shield 四友

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