

Briteframe PESA

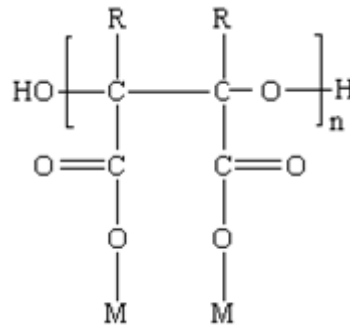
Poly Epoxy Succinic Acid, sodium salt

CAS No. : 109578-44-1 (salt) 51274-37-4 (acid)

Product information

Synonyms: Sodium salt of Polyoxirane-2,3-Dicarboxylic Acid, $\text{HO}(\text{C}_4\text{H}_2\text{O}_5\text{Na}_2)_n\text{H}$

Structural Formula:



$M = \text{Na}^+$ $R = \text{H}$ or C1-4 alkyl

Briteframe PESA is a phosphor-free, nitrogen-free, biodegradable multivariate polymer; a scale and corrosion inhibitor and dispersant comparable to conventional polyacrylates and in function comparable to phosphonates. It disperses calcium carbonate, calcium sulphate, calcium fluoride and silica scale with effects better than that of ordinary organophosphines.

PESA can be used in high alkaline, high water hardness, chlorine, chlorite and other water treatment agents, as well as high concentration index.

Earlier attempts to convert PESA-40% solutions into solids resulted in powders which were so hygroscopic, that they stuck together. Applications were practically not possible. Sirius does succeed to supply a free flowing granulate in particle sizes that fit various end products. With maximum anti scaling performance.

The applications are: detergents, cooling and boiler water systems, reverse osmosis, oilfield water, desalination plants, nutrient absorber in agriculture.

Product specifications

Test Item	40% solution commodity	90% granulate innovation
Appearance	colorless to amber transparent liquid	White granules
Solid content, %	40.0 min	90.0 min
Moisture content, %		10.0 max

Density(20°C), g/cm ³	1.28 min	
pH (1% water solution)	10.0 - <11.5	9.0 - <11.5

Commercial

Packaging 40% solution:

25liter jerrycans, 250kg (200liter) drums, 1250kg (1000liter) IBC, 24mt ISO tank container (bulk)

Packaging 90% granulate:

25kg bags, 500kg bigbags

Lead time: 6 weeks

Technical

Molecular weight: 400-1500

Briteframe PESA is readily biodegradable under OECD301b; over 60% within 28 days (ISO-9439)

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