

Technical Data Sheet

Capatue[™] SCA-S89E

Abstract

SCA-S89E is a mercapto functional silane suitable to promote the adhesion between fillers such as silica and sulfur crosslinked rubber such as NR, SBR, BR, EPDM and etc.

Chemical Name

3-Mercaptopropyltriethoxysilane

Synonyms

3-Triethoxysilyl-1-propanethiol;

gamma-Mercaptopropyl triethoxy silane

CAS Registry Number	EINECS
14814-09-6	238-883-1

Molecular Formula	Molecular Structure
C ₉ H ₂₂ O ₃ SSi	O-Si- O-Si-

Molecular Weight	
238.42	

Equivalents	
Product	Supplier
Silquest [®] A-1891	Momentive (formerly OSi Specialties)
Z-6910	Dow Corning
KBE-803	Shin-Etsu



Typical Properties

Index	Value
Appearance	Yellowy or Colorless, transparent liquid
Specific Gravity (ρ_{20}), g/cm ³	0.987
Boiling Point (760mmHg), °C	200
Flash Point, °C	88
Solubility	Soluble in water after hydrolysis, alcohol, acetone, and most aliphatic esters at normal application levels fewer than 5%. Hydrolysis releases ethanol.

Applications and Performance

Improvement in mineral-filled elastomer properties, including modulus, tensile and tear strength, heat buildup, abrasion resistance, resilience, compression set and cure time may be achieved with SCA-S89E. This silane chemically bonds reinforcing minerals such as silica, clay, mica and talc to the polymer matrix especially the sulfur-cured and metal oxide-cured rubber and elastomer. It can be used as a pretreatment on minerals or added at the time of compounding.

Mineral-reinforced rubbers such as shoe soles, rollers, wheels, white sidewalls, wire and cable insulation are the common case SCA-S89E could be used in.

Packing

The regular packing of this product is 25kg plastic pail, 200L steel drums and 1000L immediate bulk container.

Storage and Shelf Life

Should be stored in dry, cool, ventilated room; keep away from water, moisture, high temperature and fire. This product has a shelf life of at least 12 months if stored in tightly closed original container at room temperature.

If this product is kept beyond the shelf life recommend on the product label, it is not necessarily unusable, but a quality control should be performed on the properties



relevant to the application.

Product Safety and Handling

When considering the use of any Capatue products in a particular application, you should read our latest Material Safety Data Sheets (MSDS) thoroughly for handling instructions, personal protective equipment if necessary, other safety issue and toxicological data as well as for information on proper transportation, storage and use to ensure that the use you intend can be accomplished safely. Our latest Material Safety Data Sheets (MSDS) and other product safety information are available at <u>www.capatue.com</u> or upon request, from our customer service department.

Use of other material in conjunction with Capatue products may require addition precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

This product is for industry use only; it is neither tested nor represented as suitable for food, medical or pharmaceutical uses.

Limited Warranty Information

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Capatue's products are safe, effective, and fully satisfactory for the intended end use.

Suggestions of use shall not be taken as inducements to infringe any patent.

Capatue's sole warranty is that the product will meet the Capatue sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Capatue specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability.

Capatue disclaims liability for any incidental or consequential damages.

Customer must do enough tests before their regular production to ensure that our product is suitable for their specific application.