

# **Technical Data Sheet**

# <u>Capatue<sup>™</sup> SLC-R</u>

#### Abstract

Formulated silane (also called as silane cocktail) **SLC-R** is a high speed silane formula from Capatue which is designed for use in one-step Monosil process, Spherisil Process and Soaking Compound Process silane-crosslinking of PE and ethylene copolymers for the power cable industry.

Formulated Silane SLC-R is a clear, colorless to yellow liquid (the product can darken) which contains: vinyl silane, peroxide grafting-initiator and tin catalyst (for moisture cure). Its crosslinking vinyl silane incorporates grafting and crosslinking catalysts in a ratio suitable for crosslinking polyethylene in commercially available extrusion equipment. Formulated Silane SLC-R modifies polyethylene resins chemically during melt processing (i.e., extrusion) and efforts polymer crosslinking upon exposure of the fabricate polyethylene to moisture.

# Equivalents

Silcat<sup>®</sup> R from Momentive (formerly OSi Specialties)

Typical Properties	
Index	Value
Appearance	Clear liquid.
Color CAPATUE	Light straw
Specific Gravity at 25/25℃	0.976
Viscosity at 25℃, cst	0.7

# Benefits of Silane XLPE

The heat resistance is the main reason for using silane XLPE in the cable & wire and pipe application. Furthermore crosslinking can also improve the following properties of the polymer:

Chemical resistance

Impact strength and tensile strength



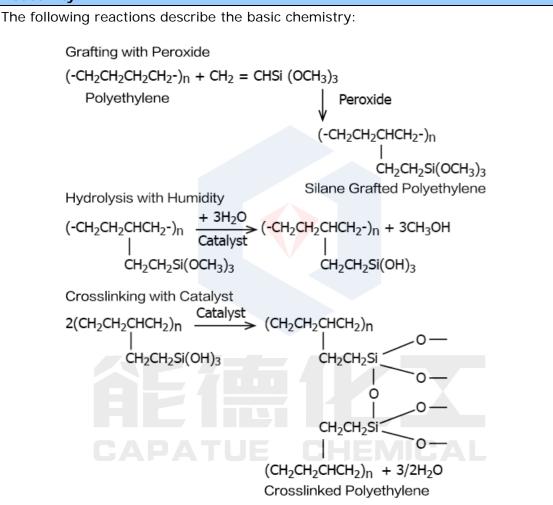
Aging resistance

Creep resistance under load

Abrasion resistance

Memory effect

#### Reactivity



Formulated silane SLC-R is suitable for the preparation of moisture-curing polymers. The characteristic feature of this process is grafting of the vinyl silane to the polymer during extrusion.

After the grafting, the polymer can still be processed as a thermoplastic. Only during treatment with moisture which is usually carried out in a water bath ( $80^{\circ}C \sim 100^{\circ}C$ ), steam bath or even at ambient conditions, the polymer chains are linked together, thereby forming a crosslinking polymer. This reaction is accelerated by using a catalyst. SLC-R contains the constituents which are necessary for both steps.



#### 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 7 months if stored in tightly closed original container at room temperature.

The containers must remain tightly sealed during storage and kept in a cool, well aired place. Protect against humidity.

# CAUTION: NEVER STORE THIS PRODUCT ABOVE 55°C (131°F)!

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 <a href="http://www.capatue.com">www.capatue.com</a> 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.

