Unisil SR – Low-molecular 1500

Low molecular weight, heat-resistant synthetic rubber

Description

It is low molecular weight dimethylsiloxane polymer with terminal OH groups, stabilized by active silicon oxide.

Features

- Gives waterproof, thermal insulating, vibration-proof, electrical insulating properties;
- has good thermal resistance, while maintains high elasticity at operating temperatures from minus 60 °C to +250 °C;
- easy to recycle;
- has high dielectric properties;
- highly hydrophobic material, resistant to weathering, acids, fungi and microorganisms;
- products made from rubber are characterized by high strength, elasticity and vibration resistance, chemical inertness;
- resistant to ozone, UV lighting;
- physiological inertness, tissue- and hemocompatibility (compared to other bioinert implants, siloxane rubbers perfectly imitate human soft tissue);
- gas permeability (the highest permeability of all known polymers);
- selective for gas permeability;
- easily sterilized;
- rubber is economical, reliable and durable, even under extreme conditions.

Storage

Store in original containers in a dry, cool place at a temperature not higher than 30ºC away from sources of ignition and high temperatures. Protect from direct sunlight.
Store away from strong oxidizers.
The shelf life in the original container is 24 months.
Storage over the date specified on the label does not necessarily mean the product is unusable. In case if store more please check the properties of product before use.

Packing

- Polymer canisters 20 dm^3;
- polymer or steel containers up to 100 dm^3;
- polymer or steel barrels of 200 or 275 dm^3;
- polymer containers - 1 m^3.

Applications

- Production of materials for moisture insulation, thermal insulation, vibration insulation, electrical insulation;
- production of various rubber compositions;
- production of molding compositions;
- sealing devices and equipment;
- sealing of pipelines, connecting elements, equipment parts;
- sealing of joints;
- sealing of simple and multilayered elements of buildings and building structures, building facades;production of fillings and gaskets for mechanisms and devices;
- production of monolithic filling and coating compounds;
- production of sealants, foam sealants;
- production of impregnating compositions;
- production of rubber-like materials and coatings;
- production of gas-selective membranes.

How to use

Cold-curing catalysts are used for vulcanization of silicone rubber: K-1 (tin dibutyl dicaprilate solution in ethyl silicate); K-18 (tin diethyl dicaprilate solution in ethyl silicate); K 10 C - methyl triacetoxy-silane.
With the introduction of the catalyst, OH groups are crosslinked, the liquid rubber is cured (vulcanized) and turned into a rubber-like material.
Vulcanization takes place at room temperature.
The proportions of mixing rubber with a catalyst depend on the production technology of the final product, the required properties and other factors.
Due to the large variety of applications, no general information can be provided.

Safety instructions

Non-toxic, does not contain solvents.
Please see comprehensive instructions in the relevant safety data sheet for the product. It can be provided upon request by the Unisil Hungary Kft. representative office or printed from the Unisil Hungary Kft. website www.unisil.eu.

Technical specification

Appearance	Clear Liquid
Kinematic viscosity, mm^2/s	1500 - 2500
Volatiles (150℃, 3 hours), %	≤2

For more information please contact your nearest representative of Unisil Hungary Kft.

LIMITED WARRANTY
PLEASE READ CAREFULLY

The information contained herein is accurate, but it does not relieve the customer from the control of each batch of products supplied. Since the conditions and methods of use of our products are beyond our control, the recommendations contained in this document should be updated by the client providing preliminary tests. Recommendations for use should not be construed as a guarantee of product suitability for a particular purpose. Unisil Hungary Kft. warrants only that the product meets its specifications in effect at the time of delivery.