



MSO-AW

Aqueous solution of amino-functional polysiloxane

Characteristics

MSO-AW is a solution of amino-functional polysiloxane oligomer in water.

Features

- Bifunctional organic substance, functional silanol groups of which can chemically combine with an inorganic substrate;
- organophilic amino group can react with the reactive groups of the substrate;
- dissolves in water in any proportions;
- stable for a long time after dilution with water;
- not flammable;
- does not emit volatile organic substances;
- does not require special equipment and special safety measures for its use.

Properties

Acts as a promoter of adhesion between inorganic materials (e.g. glass, metals and fillers) and organic polymers (thermoactive, thermoplastic and elastomers).

The use of MSO-AW improves the following properties of the resulting materials:

- mechanical properties such as impact strength, flexural and tensile strength;
- moisture resistance;
- anti-corrosion properties;
- technological properties: adhesion, better filler dispersion.

Applications

Particular advantages are observed with water-based systems. It is an essential ingredient in products obtained in many industries:

- mineral wool - insulating material;
- fiberglass / fiberglass composites - as a component and / or decoration;
- primer for glass and metals;
- abrasives: as an additive to a phenolic binder;
- molding resins: as an additive to cold curing phenolic and furan resins;
- sealants and adhesives: as a primer or additive to improve adhesion on glass, metals and plastics;
- polymers / composites with mineral fillers: for pretreatment of fillers and pigments or as an additive;
- paints and coatings: as an additive or as a primer to improve adhesion to the substrate.

Examples of suitable inorganic substrates: glass, fiberglass, glass wool, mineral wool, quartz, sand, cristobalite, voplastonite, mica, aluminum trihydrate, magnesium dihydrate, kaolin, talc and other silicate fillers, metal oxides and metals.

Can be used with polymers such as epoxy, phenolic, furan, melamine resins, polyurethanes, polyamides, polybutylene terephthalates, polycarbonates, EVA, modified polypropylenes, PVA, acrylates and silicones.

How to use

It can be used mainly in aqueous binders and for the treatment of substrates.

It can also be used as a component of waterborne lubricants or as an additive.

When used together with binders based on silicone emulsions, EMSO-M and EMSO-DM acts as an enhancer of the water-repellent effect of these binders.

Even though silicone emulsion binders provide a very good hydrophobic effect, this effect can be significantly improved by the addition of MSO-AW.

The working solution is prepared immediately before its use. During storage, slight separation of the liquid base may occur. Stir before use.

Storage

Store in hermetically sealed original container at temperature above 0°C. Store in a dry, cool, ventilated place.

The shelf life is 12 months.

Freezing once will not affect the quality of the product. The frozen product can be reused after it is completely thawed and mixed thoroughly.

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 dm³.

Polymer drums with a capacity of 50 dm³.

Polymer barrels with a capacity of 200 dm³.

Polymer containers - 1 m³.

Safety instructions

Please see detailed instructions in the relevant product safety data sheet, which can be provided upon request.

Technical characteristics

Parameter name and measure unit	Standard
Appearance	Colorless or slightly yellowish liquid with an amine odor
Content of active substance, %, at least	50
Density at temperature (+20,0±0,5)°C, g/cm ³	1.06 – 1.20
Kinematic viscosity, at temperature (+25,0±0,5) °C, cSt	<250
pH (100 g of water + 2 g of product), at least	11.00

To obtain more information please contact your nearest representative office of Silkor Ltd.

LIMITED WARRANTY INFORMATION

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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.

Silkor Ltd only guarantees that the product meets its specifications in effect at the time of delivery.