



COMPOUND O-31/Catalyst O-51

Silanol-crosslinkable self-extinguishing composition

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Description

COMPOUND O-31 / O-51 is a silanol-crosslinkable polyolefin composition. Compound O-31 is a silanol-crosslinkable self-extinguishing polyethylene composition consisting of polyethylene chemically modified with silane and a complex of additives that provide cable insulation with the property of not spreading combustion.

COMPOUND O-51 is a crosslinking catalyst concentrate in an aqueous medium. COMPOUND O-51 is available in unpainted or black colors. The composition contains a complex of stabilizers, which provides resistance to aggressive environmental factors, oxidative degradation, and also provides high thermal stability during processing.

Application

COMPOUND O-31/O-51 is used in combination with a crosslinking catalyst of the Compound O-51 brand in a ratio of 95: 5 for applying insulation of SIW by extrusion. Cable insulation obtained from Compound O-31 and Compound O-51 materials complies with the requirements of GOST R 53769-2010 and TU 16.K71-463-2014.

Characteristics

Feature		UOM	Value
1.	Density	g/cm ³	1,135-1,15
2.	Melt flow index, at 190 ° C, load of 5 kg	g/10 min	0,5-3
3.	Spread of the melt flow index within the batch, not more	%	±10
4.	Mass fraction of volatiles at the time of packaging, not more	%	0,05
5.	Tensile strength, not less	MPa	13,5
6.	Elongation at break, not less	%	300
7.	Thermal deformation, not more	%	175
8.	Irreversible thermal deformation, not more	%	15

9.	Burning resistance category , not less		SP1
10.	Specific electrical resistance at 20°C	Om*cm	1*10 (14)
11.	Dielectric power at AC voltage of 50 Hz frequency, not less	kW/mm	20
12.	Hardness (Shore D)	NU	50
13.	Water absorption, not more	Mg/cm3	1

Recycling Recommendations

COMPOUND O-31 / O-51. Before processing, the material must be dried for 2-3 hours at 90-100 ° C. Compound O-31 is processed by extrusion together with Compound O-51 in a ratio of 95: 5, which is a crosslinking catalyst. The material is processable in the range from 150 to 220 ° C.

Temperature Profile:

Extruder zones	Zone 1	Zone 2	Zone 3	Zone 4	Die plate
Temperature, °C	140	180	190	200	200-210

Crosslinking recommendations

The crosslinking time in a water bath with a temperature of 80 ° C is calculated taking into account the fact that water penetrates the thickness of the insulation on one side. For the calculation use the table data:

Thickness of insulation, mm	Crosslinking time, min
1,0	240
0,5-1,5	180-300

Packaging

COMPOUND O-31 is delivered in soft containers (big-bag) mounted on pallets, with a foil polyethylene insert that protects the composition from moisture. Package weight is 1000 kg. By agreement with the consumer, the use of other packaging is allowed.

COMPOUND O-51 is delivered in bags of 20 (or 25) kg, laid on pallets with a total weight of 1000 kg.

Storage conditions

COMPOUND O-31 and **COMPOUND O-51** should be stored in undisturbed packaging, on pallets, in an indoor dry place at a temperature of 10 ° C to 30 ° C. Shelf life is 6 months. After opening the container, the product must be consumed within 48 hours.

Marking (Labeling)

Each bag or "big bag" shall be stuck a label indicating the following data:

- name of the material and its brand
- number of Technical Conditions
- batch number
- date of manufacture
- net weight
- name of the manufacturer's company and its contact information
- warranty period of storage

Transport containers shall be marked in accordance with the requirements of GOST 14192-96 with the following information mandatory included:

- name of the material and its brand
- number of Technical Conditions
- batch number
- date of manufacture
- net weight of the packaging unit
- name of the manufacturer's company and its contact information
- warranty period of storage

Each unit of transport packaging in the form of a soft container or pallets with bags shall be stuck the manipulation (handling) signs "Protect from sunlight" and "Protect from moisture".

The information in this specification is correct and accurate within our competence. All offers and recommendations are given without guarantees, since the manufacturer's control does not extend to the conditions of use of the product during production. We also caution you that patents may exist for some uses of the product.

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