

LAUR SILICONE

LAUR Q-1441 SILICONE RUBBER

DESCRIPTION

Laur Q-1441 Silicone Rubber is a three-component system intended for making solvent dispersions. When properly mixed and cured, Laur Q-1441 yields a translucent, 64-durometer rubber with good physical properties and a brittle point of -73 °C (-100 °F).

PIGMENTING

Laur Q-1441 dispersion may be colored to most desired shades by using inorganic heat stable pigments. Pigment pastes masterbatched with a silicone fluid are recommended. Pigments containing cadmium, tin, mercury, selenium or tellurium may not be compatible with the cure system and are not recommended. As a general rule, pigments should be tested to insure compatibility before use.

USES

Laur Q-1441 Silicone Rubber is designed to be dispersed in solvent for coating electrical sleeving and cloth. It is designed for use in applications that require MIL-I-3190-6D (SHIPS) Class 200, Type D, Category C specification.

TYPICAL PROPERTIES *

Test Designation	Properties Measured	LAUR Q-1441
ASTM D 792	Specific Gravity	1.16
ASTM D 2240	Durometer, Shore A-2	64
ASTM D 412	Tensile Strength, psi	1,400
ASTM D 412	Elongation, %	400
ASTM D 624	Tear Die B, ppi	95
	180 Degree Bend	Pass

* Values obtained from 0.085-in-thick slabs, molded 10 minutes at 340 °F and post cured 1 Hr./302 F.

The properties listed here are typical values and are not intended to be used for writing specifications. For assistance in selecting a compound for a specific application, please contact our technical department.

HOW TO USE

Laur Q-1441 Bases should be used only with Laur Q-1441 Additives. The ratio requires 1 - 3 % of each additive, based on 100 parts of base. For proper level consult the product label. Conventional peroxides should NOT be used, as inconsistent properties will result.

MAKING DISPERSIONS

Choose a suitable mixing vessel; i.e. 5-gallon pail or 55-gallon drum, dependent on volume required. Either a Cowles-type or propeller-type mixer may be used.

The base should first be freshened on a two-roll mill. As soon as possible after freshening, the base should be cut into small pieces and added to the mixing vessel containing the pre-measured amount of solvent.

After the Q-1441 Base has been uniformly dissolved, the additives should be added. Allow to mix until uniform. Heating of the material should be limited.

Although Laur Q-1441 base is strained, it is recommended that the dispersion be filtered. This will remove contamination introduced during the dispersing process.

Solvent choice rests with the processor, but xylene or toluene are best. Naphtha may be used, but may require longer mixing times.

CAUTION: When using flammable solvents, keep away from heat, sparks, and open flame. Air operated mixing motors are preferable to electric. Consult and follow solvent handling instructions.

EXPECTED VISCOSITIES

When Laur Q-1441 base is properly dispersed, the following viscosities are typical at 31 percent solids in Xylene:

Brookfield Model LVT Viscometer, Spindle #3 at 6 RPM - 29,400 cps
12 RPM - 23,250 cps
30 RPM - 17,680 cps

Viscosities will rise on extended shelf aging. These values represent freshly made dispersions. Thickened dispersion may be restored to its original viscosity by vigorous stirring.

STORAGE AND SHELF LIFE

Laur Q-1441 Base and Additives should be stored away from materials containing sulfur, phosphorous, and amines, as these materials may inhibit vulcanization. Shelf life is three months from date of shipment.

USERS PLEASE READ

The information and data contained herein we believe reliable; however it is the responsibility of the user to test any application to determine suitability of the goods with respect to proposed usage. Laur Silicone, Inc. warrants that the product shall meet the seller's specifications, and no other expressed or implied warranties are intended. Laur's sole liability is limited to refund or replacement of goods shown to be otherwise as warranted. Suggestions of uses shall not be interpreted as inducement to infringe any particular patent.