

Technical Library

LIM® Reactive Color Masterbatches

Product Description

Our LIM color masterbatches are dispersions of inorganic pigments in reactive silicone polymers and are for use with silicone elastomers in molding, extrusion, casting and coating.

Specifications

Typical product data values should not be used as specifications. When compared to most non-reactive colors, LIM masterbatches offer the following:

Product Features	Potential Benefits
Inorganic pigments	Color stability at high-curing and service temperatures
High boiling point	Few or no surface defects at high-curing temperatures
Reactive silicone carrier fluid	Little or no affect on the physical properties of the cured elastomers
Stable dispersion	Color uniformity in automatic or continuous processes
Chemical inertness	Little or no affect on sensitive catalytic systems
Low viscosity	Ease of processing with most types of fluid handling equipment

Typical Product Data

Grade	Color	Pigment Type	Pigment Content, %	Specific Gravity	Consistency
LIM-BK1	Black	Iron Oxide (Fe ₃ O ₄)	40	1.48	Light Paste
LIM-BL1	Blue	Ultramarine Blue (Na ₆ Al ₆ Si ₆ O ₂₄ S ₄)	40	1.26	Pourable
LIM-BR1	Brown	Iron Oxide (Fe ₂ O ₃ -Fe ₃ O ₄)	40	1.35	Light Paste
LIM-RD1	Red	Iron Oxide (Fe ₂ O ₃)	40	1.41	Light Paste
LIM-WH1	White	Titanium Dioxide (TiO ₂)	40	1.37	Easily Pourable

Applications

LIM color masterbatches are recommended for pigmenting silicone elastomers including RTV's and gum.

Instructions for Use

Mixing

Addition of colors to liquid silicone products such as LIM, SLE and RTV products is generally affected through automatic mixing equipment, although hand-mixing may be adequate for products of lower viscosity.

For addition to gum stock elastomers or rubber compounds, the mixing may be performed during the milling operation or, in the case of injection molding and extrusion, the LIM color masterbatches may be metered to the injection barrel or to the extruder system.

Typical levels of color masterbatches to base materials range from 1% to 5% by weight, although higher levels may be used if required.

Equipment Shutdown

Mixing equipment clean-out is required when changing colors. Meter/mixers can be equipped with closed-loop, solvent-flush systems for use with toluene, xylene, or methyl ethyl ketone. If the silicone compound has already cured, a chemical stripper will be needed to swell and soften the rubber. Specific product information on such strippers may be obtained on request.

Handling and Safety

Material Safety Data Sheets are available upon request. Similar information for solvents and other chemicals used with our products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

Storage Warranty Period

The warranty period is 6 months from date of shipment from our facilities if stored in the original unopened container at 25°C (77°F).

Government Requirement

Prior to considering use of a GE product in fulfilling any government requirement, please contact the U.S. Government and Trade Compliance office at 413-448-4624.

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