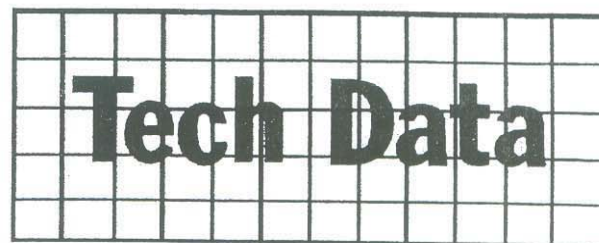


Creative Craftsmen



FILE: Fusing

DATE: January 4, 2002
SUBJECT: LUMINAR MOLD MIX 6
Cat. No. 4855 & 485501

LUMINAR MOLD MIX 6

INTRODUCTION

Luminar Mold Mix 6 is a refractory molding compound designed to allow replication of three dimensional objects in glass. It comes as a paste which is applied to a suitably prepared pattern and hardens on drying. Properly prepared molds of Mold Mix 6 will resolve the finest details and possess good strength. However, it remains sufficiently pliable to permit easy removal after annealing. Mold Mix 6 is highly resistant to reaction with hot glass and gives the fired work a high quality surface, free of hazing common to investment-type molds. Mold Mix 6 may be used for hot casting, kiln casting methods and slumping, all with excellent results. The greatest advantage of Mold Mix 6 is its ease of use and this manual will show you how to use it effectively.

PATTERN PREPARATION

Molds may be made from a wide variety of objects which are known as patterns. a pattern is the original object from which all replicas are made. Patterns may be made from plastic materials such as plasticine or clay, or they may be made of rigid materials like wood or plaster. There are many good books on pattern-making and the type you choose to use with Mold Mix 6 is a matter of personal preference. For a pattern to work well with Mold Mix 6, it must have no porosity. This means that patterns of wood or plaster must be sealed, preferably with shellac. Paints will work, but the film thickness of most paints will obscure fine surface detail. Unfired clay is the least successful of all pattern materials as it will leave a residue in the mold. Waxes are excellent for use with Mold Mix 6 as pattern materials and require no special preparation. While anything may be modeled readily in waxes, the lost wax process is their highest usefulness.

PARTING AGENTS

Mold Mix 6 will adhere quite firmly to surfaces which have not been treated with a parting agent. Several common parting agents have been shown to work well, First is PAM (vegetable oil cooking spray), a parting agent usually used in the kitchen. It must be applied sparingly as it will ruin the mold surface in heavy application. Petroleum jelly in thin application gives good results as will a light coat of dish soap.

MOLD MAKING WITH MOLD MIX 6

After the pattern has been prepared and given a coat of the parting agent, it is ready for the application of Mold Mix 6. Initially a thin coat of Mold Mix 6* (which has first been diluted 35 wt% with water) should be applied with a supple nylon brush. This first coat with dilute material will assure that all fine detail is resolved. Drying of the Mold Mix 6 should be completed between coats. Drying may be accelerated by uniform heating, 500°F (260°C) 5 minutes with 10 minute soak, or with an appropriate pattern, a microwave oven may be used. After the first coat is dry, build up the mold with undiluted Mold Mix 6 to appropriate thickness. 3/8" to 5/8" is sufficient.

*EXAMPLE: For 10 oz., by weight, use 6-1/2 oz. of Mold Mix 6 to 3-1/2 oz. of water.

Hazard Identification

TARGET ORGANS: Skin, eyes, and lungs.

Emergency Overview

CAUTION: Handling or machining of these products may produce respirable dust particles. Dust may irritate eyes, skin and respiratory tract.

Inhalation: Dust may cause irritation or soreness of throat and nose.

Eye Contact: Dust may cause temporary irritation or inflammation.

Skin Contact: May cause temporary dryness, irritation or rash.

Ingestion: Ingestion is unlikely. May cause gastrointestinal disturbances.
Never induce vomiting without the advice of a physician.

Medical Conditions Aggravated by Exposure:

Respiratory effects may be aggravated by smoking.

Preexisting respiratory problems may be aggravated by the dust.

First Aid Measures

Inhalation: Remove to fresh air. rinse mouth to clear throat and expel liquid. Blow nose to evacuate dust.
Consult a physician if irritation persists.

Eye Contact: Do not rub eyes. Keep hands or contaminated body parts away from eyes.
Remove contact lenses. Flush with water. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water. For dryness, a skin cream may be helpful.
Do not apply anything to a rash. Consult a physician if irritation persists.

Ingestion: Do not induce vomiting without advice of a physician. Seek medical attention.

Note to Physicians: Aluminum Oxide dusts have caused no systemic or pathological problems. The material is inert in the body. Some individuals may experience allergic sensitivity reactions. These are generally limited to mild occupational dermatitis. Chronic inhalation may result in pleural plaques not associated with cancers. Other effects principally derived from physical abrasion. These products contain a small percentage of amorphous silica, however, not in sufficient quantity to produce free crystalline silica upon heating. Dusts are therefore considered of the inert (nuisance) type and would not be expected to cause permanent damage to tissues on inhalation unless the exposure is severe. Chronic exposure may produce radioplaque deposits in the pulmonary system with little or no parenchymal reactions. Some individuals may exhibit allergenic reactions ranging from asthmatic symptoms to benign pneumoconiosis.