OMEGA
An OMEGA Technologies Company

MATERIAL SAFETY DATA SHEET

MSDS-0181
XMO-B, XTA-B
REV. DATE: 6/9/93

SECTION 1 - IDENTIFICATION

PRODUCT (TRADE) NAME: Insulation Material for Probes

CHEMICAL FAMILY: Beryllium Oxide

SUPPLIER: OMEGA ENGINEERING INC.
PO BOX 4047
STAMFORD, CT 06907

DATE PREPARED: 6/23/86
SUPERSEDES:

TELEPHONE: (203) 359-1660

SECTION 2 - HAZARDOUS INGREDIENTS

Ingredient	TLV	PEL
BeO	.002m/M3	.002m/M3

SECTION 3 - PHYSICAL DATA

Appearance: White

Specific Gravity: 3.01

Melting Point: 2547 °C

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

N/A

SECTION 5 - HAZARDOUS REACTIVITY DATA

Volatile Beryllium Hydroxide can be formed when firing solid BeO parts at high temperatures (over 1200 °C) and in moist conditions.

SECTION 6 - HEALTH HAZARD DATA

Effects of Over Exposure: Inhalation may cause berylliosis, a serious chronic lung disease, with cough, chest pain, shortness of breath, weight loss, weakness, and fatigue.

SECTION 7 - EMERGENCY AND FIRST AID PROCEDURES

Remove from exposure and consult a physician. There is no acute inhalation hazard. Handling of solid shapes presents no dermatitis or skin absorption problem.

SECTION 8 - DISPOSAL PROCEDURES

When handling BeO components, guard against the possibility of grinding and crushing action. If grinding and crushing should occur, vacuum up the particles and properly dispose of them wearing respiratory and protective clothing. Vacuum equipment provided with an absolute filter (HEPA) must be used. Dry sweeping must not be permitted.

Beryllium Oxide scrap should be landfilled. Because of potential inhalation hazard of handling this material as a discarded powder, the following practices are recommended:

1. Seal in two plastic bags.
2. Place in a DOT container approved for poison B compounds.
3. Label the outer container with the appropriate DOT hazard warning labels, and ship to an approved hazardous waste disposal site.

SECTION 9 - SPECIAL PROTECTION INFORMATION

No protective equipment or clothing is required when handling solid forms. Approved high efficiency cartridge respirator or supplied air mask is required if Beryllium in air concentrations exceeds OSHA standard. Personnel performing operations where there are exposures to dust, mists, or fumes should be provided full-body protective clothing. All contaminated clothing should be placed in sealed containers and sent to special laundry facilities.

SECTION 10 -SPECIAL PRECAUTIONS

Provide adequate local exhaust ventilation when performing operations such as machining, grinding, laser trimming, sand blasting, chemical etching, etc. where respirable dusts, mists or fumes are generated.

The machining of Beryllium under a liquid lubricant/coolant can potentially generate an elevated airborne concentration. The recycling of liquid coolant containing finely divided Beryllia in suspension can result in the concentration building to a point where the particulate becomes airborne during use. A centrifuge can be installed in-line if this becomes a problem.

Care should be taken when servicing air cleaning equipment and in cleaning muffles, furnaces, etc., particularly where the equipment has been used for long periods prior to cleaning. Operations generating airborne material must be air sampled to determine employee exposure levels. Medical surveillance should be conducted for employees where warranted by exposure data.

DO NOT INHALE FUMES

Beryllium is present in this product at a concentration of 0.1% or more and is classified as a possible carcinogen by:

1. National Toxicology Program (NTP)
   National Technical Info. Service
   5285 Port Royal Road
   Springfield, VA 22161

2. International Agency for Research on Cancer (IARC)
   World Health Organization
   49 Sheridan Street
   New York, NY 12210

3. OSHA