MATERIAL SAFETY DATA SHEET

SECTION I - NAME & PRODUCT

ADDRESS:	CONTACT:
TRADE NAME, COMMON NAME OR SPECIFICATION: **BK-7 OPTICAL GLASS**	EMERGENCY TELEPHONE:
CHEMICAL FAMILY OR PRODUCT TYPE: Inorganic glass	APPROVED BY: DATE:

SECTION II - COMPOSITION

CHEMICAL NAME	%	COMMON NAME	REG* Y/N	CAS #	OSHA PERMISSIBLE EXPOSURE LIMIT	ACGIH TLV	CARCINOGEN* Y/N
Silica	60-70		Y	014808607	0.2 mg/m^3	0.1mg/m^3	N
Boron Oxide	10-20		Y	001303862	10mg/m^3	10mg/m^3	N
Barium Oxide	1-10		Y	001304285	.5mg/m^3	.5mg/m^3	N
Sodium Oxide	1-10		N	1313593	N/A	N/A	N
Potassium Oxide	1-10		N	12136457	N/A	N/A	N
Calcium Oxide	<1		Y	1305788	5mg/m^3	2mg/m^3	N
Titanium Oxide	<1		Y	013463677	10mg/m^3	10mg/m^3	N
Zinc Oxide	<1		Y	001314132	5mg/m^3 (fume) 10mg/m^3 (dust)	5mg/m^3(fume) 10mg/m^3(dust)	N
Arsenic Trioxide	<1		Y	1327533	10ug/m^3	200ug/m^3	Y

*REGULATED AS PER LISTS: OSHA 29 CFR 1910, SUBPART Z: ACGIH, HHS/N TP, & IAPC

SECTION III - PHYSICAL AND CHEMICAL DATA

BOILING POINT: N/A	MELTING POINT: 532° C	SPECIFIC GRAVITY (BULK): 2.39g/cm^3
VAPOR PRESSURE: N/A	PERCENT VOLATILE BY VOL.: N/A	VAPOR DENSITY: N/A
EVAPORATION RATE: N/A	SOLUBILITY IN WATER:	SOLUBILITY IN ALCHOHOL:
SOLUBILITY IN OTHER SOLVENTS:	APPEARANCE & ODOR: No odor, Various forms & shapes	

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: NA	METHOD USED:	FLAMMABLE LIMITS:

EXTINGUISHING MEDIA: This material is non-combustible

SPECIAL FIRE FIGHTING PROCEDURES: Use extinguishing media that is appropriate for the classification of the surrounding fire. Inorganic glass is non-combustible.

EXPLOSION POTENTIAL: There is a possibility of flying glass fragments if hot glass comes in contact with water or carbon dioxide extinguishing media.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTE(S) OF ENTRY:	**EFFECTS OF OVEREXPOSURE (EO) OR FIRST AID (FA):**
INHALATION: Acute: Respiratory irritation. Chronic: Possible pneumoconiosis	Remove to fresh air. Seek medical attention.
INGESTION: Ingestion may cause vomiting, diarrhea, depressed circulation and in severe cases shock, coma, paralysis, and cyanosis	Seek medical attention
SKIN: Glass dust may cause irritation. Arsenic has been known to cause itching, pigmentation and cancerous changes of the skin.	Wash with soap and water. Get medical attention if irritation persists.
EYE: Dust may cause irritation.	Flush well with running water. Get medical attention if irritation persists.

GENERAL FIRST AID:

SECTION VI - SPILL, LEAK & DISPOSAL

1. Spill, Leak Procedures: No special precautions
2. Disposal Method: Follows Federal, State and Local Regulations
3. **Parental guidance required-Wipe up with wet cloth. Use a vacuum cleaner. Avoid generating dust.**

SECTION VII - SPECIAL PROTECTION INFORMATION

1. Local exhaust: Use local exhaust ventilation, hood or equipment to avoid dispersal of fibrous or other glass into the workspace air.
2. Personal Protective Equipment: Respiratory-If dust or particulate are above the OSHA permissible exposure limits, use a NIOSH approved respirator.
3. Eye Protection - Industrial safety glasses with side shields that meet ANSI Z 81 standards.
4. Protective Gloves - Recommend gloves for protection from sharp edges.
5. **Parental guidance required in handling this material**.

SECTION VIII - SPECIAL PRECAUTIONS & COMMENTS

1. Reactivity: This is stable material. Glass is inert to many chemicals but may or may not react to strong alkaline solutions & will react with hydrofluoric and phosphoric acids possibly producing hazardous decomposition or by products. Material may emit metal oxide fumes when heated to high temperature.

2. **Parental guidance is extremely important in the handling these products**.

This Material Safety Data Sheet is offered solely for your information, consideration and investigation. It provides no warranties, either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.