

SAFETY DATA SHEETS

SECTION 1– PRODUCT IDENTIFICATION

PRODUCT NAME: Glass microspheres

PRODUCT USE: Lightweight Filler

SECTION 2 – INGREDIENTS

<u>INGREDIENT:</u>	<u>C.A.S. NO:</u>	<u>PERCENT:</u>
Silica	7440-21-3	74,9
Alumina	1344-28-1	13,9
Titanium dioxide	13463-67-7	0,2
Iron Oxide (III)	1309-37-1	0,9
Iron Oxide (II)	1345-25-1	0,6
Calcium oxide	1305-78-8	1,2
Potassium oxide	12136-45-7	2,8
Sodium oxide	1313-59-3	1,9
Other	----	3,6

SECTION 3 – HAZARDS IDENTIFICATION

MERGENCY OVERVIEW

Specific Physical Form: Low density fine powder (20-400 microns)

Odor, Color, Grade: White, odorless

General Physical Form: Solid

Immediate health, physical and environmental hazards:

POTENTIAL HEALTH EFFECTS

Eye Contact:

Mechanical Eye Irritation: Signs/symptoms may include pain, redness, tearing, and corneal abrasion.

Skin Contact:

Mechanical Skin Irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

No health effects are expected.

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge and headache.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

SECTION 4 – FIRST AID MEASURES

FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Autoignition temperature	Not Applicable
Flash Point	Not Applicable
Flammable Limits-LEL	Not Applicable
Flammable Limits-UEL	Not Applicable

EXTINGUISHING MEDIA

Non-combustible. Choose material suitable for surrounding fire. Material will not burn.

PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (Section 10) for hazardous combustion and thermal decomposition information.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air.

Environmental precautions: Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods: Observe precautions from the other sections. Collect as much of the spilled material as possible. Use wet sweeping compound or water to avoid dusting. Sweep up. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7 – HANDLING AND STORAGE

HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. For industrial or professional use only. Avoid breathing of airborne material. Avoid eye contact. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Solids can generate static electricity charges sufficient to be an ignition source when transferred and in mixing operations. Provide adequate precautions, such as equipment grounding and bonding, or inert atmospheres.

STORAGE

Store under normal warehouse conditions.

SECTION 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide local exhaust ventilation at transfer points. Conduct air monitoring to determine adequacy of ventilation. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Avoid eye contact

The following eye protection(s) are recommended. Safety Glasses with side shields.

Skin Protection :

As a good industrial hygiene practice: Avoid prolonged or repeated skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended:

- Neoprene
- Nitrile Rubber.

Respiratory Protection: Avoid breathing of dust.

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Prevention of Swallowing: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

SOURCE OF EXPOSURE LIMIT DATA:

OSHM: OSH management at the enterprise;

TLTBSM: Testing laboratory of testing building structures and materials;

SE "KRPCSMC": The State Enterprise "Khmelnitsky Research and Production Center of Standardization, Metrology and Certification";

SSESU: State Sanitary and Epidemiological Service of Ukraine.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Low Density Fine Powder (20-400 microns)
Odor, Color, Grade:	White, odorless
General Physical Form:	Solid
Autoignition Temperature:	Not Applicable
Flash Point:	Not Applicable
Flammable Limits (LEL):	Not Applicable
Flammable Limits (UEL):	Not Applicable
Boiling point:	Not Applicable
Density:	0.05 – 0.13 g/cm ³
Vapor Density:	Not Applicable
Vapor Pressure:	Not Applicable
Specific Gravity:	0.05 – 0.13 [Ref Std: WATER=1]
Melting Point:	1250-1300 °C
Solubility in Water:	Not Applicable
Evaporation Rate:	Not Applicable
Volatile Organic Compounds:	Not Applicable
Kow – Oct/Water partition coef:	Not Applicable
Percent volatile:	<0.5% Weight
Softening point:	1000-1040 °C
VOC Less H₂O & Exempt Solvents:	Not Applicable
Viscosity:	Not Applicable

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Materials and Conditions to Avoid:

Conditions to Avoid: None Known

Materials to Avoid: None Known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance	Condition
None Known	Not Specified

SECTION 11 – TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for toxicological information on this material and/or its components.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Reclaim if feasible. For quantities <100 lbs. (50kg): dispose of waste product in a sanitary landfill. For larger quantities:

Dispose of waste product in a facility permitted to accept chemical waste. As a disposal alternative, incinerate in an industrial or commercial facility. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not Regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14 – TRANSPORTATION

Hazard Class:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	The product is not environmentally hazardous
