

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

MICROSTAR®

Product Name(s): HS™ Expansion Liquid

Product Use: Expansion liquid for investment

Manufacturer/Supplier: Jensen Industries Inc.
50 Stillman Road
North Haven, CT 06473
USA

Emergency Telephone: 1-800-243-2000

Revised: October 3rd, 2012

SECTION 2 – COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

COMPONENT	%RANGE	CAS#	*PEL/OSHA (mg/m ³)	**TLV/ACGIH (mg/m ³)
SiO ₂ -Silicon Dioxide, Chemically Prepared	0-100	7631-86-9	^a 20 mppcf	N/A
H ₂ O Water	balance	7732-18-5	N/A	N/A

*Taken from the Permissible Exposure Limits for Air Contaminants established by OSHA CFR 29 1910.1000 Subpart Z – Toxic and Hazardous Substances

**Taken from the ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

^aMineral Dusts: MPPCF(part for cu. ft. of air) The OSHA PELs for "mineral dusts" listed above are from Table Z-3 of 29 CFR 1910.1000.

SECTION 3 - HAZARD IDENTIFICATION

Silicon Dioxide, Chemically Prepared: Irritation eyes, skin, respiratory tract; pneumoconiosis

SECTION 4 - FIRST AID MEASURES

Inhalation: Avoid inhaling this material. If irritation develops and persists, obtain medical aid

Ingestion: Swallowing this material may be harmful, do not induce vomiting. Immediately drink plenty of water (approx. 500ml)
Obtain medical help if irritation or medical symptoms develop and/or persist.

Skin: Skin contamination with liquid can be removed by rinsing with water and soap. Obtain medical help if condition develops and persists

Eyes: Rinse open eye(s) for several minutes with running water. Obtain medical help if irritation develops and persists

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: N/A

Explosive Limits: N/A

Extinguishing Media: Use fire fighting measures that suit the environment: Foam, CO₂, extinguishing powder, or water jet.

Fire & Explosion Hazards: None

Special Fire Fighting Procedures: None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to Be Taken If Material Is Released Or Spilled: Establish a restricted entry zone based on the severity of the spill. Absorb spill contents with liquid-binding material (sand, diatomite, acid binders, universal binders, or sawdust).

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid excessive contact with skin

Storage: Store material in a sealed container, in a cool dry area.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Ventilation and Engineering Controls: None recommended for normal use; material in dust or powder form requires the use of local exhaust ventilation or other engineering controls.

Respiratory Protection: None recommended for normal use; material in dust or powder form requires NIOSH approved respirator

Housekeeping: General housekeeping practices are recommended that pertain to a laboratory environment

Maintenance: No special maintenance requirements are recommended

Other Protective Equipment: No other special protective equipment or clothing is required when handling this material

Protective Gloves: Rubber or latex gloves recommended

Eye Protection: Wear safety glasses (goggles)

Recommended Monitoring Procedures:

Environmental Surveillance: Not required for use of this product

Medical Surveillance: Not required for use of this product

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Color: Clear	Melting Range (°C): >1400	Density (g/cm³): 1.09-1.35	Boiling Point: 100°C
Evaporation Rate: N/A	Freezing Point: N/A	Odor: none	pH-value (10 g/l) at 20°: 9-10
Physical State: Liquid	Radioactivity: N/A	Solubility: Fully miscible in water	Sublimes At: N/A
Vapor Density (Air = 1): N/A	Vapor Pressure (mmHg): N/A	% Volatiles by Volume: N/A	

SECTION 10 - STABILITY AND REACTIVITY

General Reactivity: This material is stable. **Noncompatibility With Other Substances:** None known

Hazardous Combustion Products: None under normal conditions of use. **Hazardous Polymerization:** Will not occur.

SECTION 11- TOXICOLOGICAL INFORMATION

PRIMARY ROUTES OF EXPOSURE:

Inhalation: Irritation to respiratory tract from excessive inhalation. Pneumoconiosis (irritation to lung tissue) may develop from breathing in dust/fumes.

Ingestion: There are no known cases of illness resulting from ingestion of this material. This product is not intended for internal consumption.

Skin: Skin contact with this material may cause irritation.

Eyes: Material may cause eye irritation if contact is made

EFFECTS OF OVEREXPOSURE: The potential health effects listed below are confined to constituents which are in sufficient concentrations within the product to be significant.

Acute (immediate or near-term health effects): In general, this liquid may cause irritation to the skin, eyes, nose, throat, and lungs.

Oral LD50: 10,000 mg/kg (rat)

Aquatic Toxicity: Effective Concentration Method Assessment: LC50 Brachydanio rerio 5000 mg/l

Chronic (long-term health effects): Pneumoconiosis, from repeated inhalation of powder/dust form.

Carcinogenic References: NTP: No IARC: No NIOSH: No ACGIH: No

Medical Conditions Aggravated By Exposure: None known

SECTION 12- ECOLOGICAL INFORMATION

This material is soluble in water. Inorganic salts are not biodegradable.

Water Hazard Class: WGKI: Not hazardous to water

SECTION 13- DISPOSAL CONSIDERATIONS

Waste Management: Small quantities can be disposed with regular garbage. Comply with Federal, State, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

There are no U.S. Department of Transportation hazardous material regulations that apply to the packaging and labeling of this product as shipped by MICROSTAR Dental, LLC.

SECTION 15- REGULATORY INFORMATION

OSHA Hazard Communication Standard, 29 CFR 1910.1200: Components of these products are not considered hazardous ingredients.

Wastewater: Wastewater regulations can vary considerably. Contact your local and state governments to determine their requirements.

Other Regulations, Limitations and Prohibitive Regulations:

German UVV: N/A.

California Proposition 65: This product contains no constituents listed under California Proposition 65

SECTION 16 - OTHER INFORMATION

Disclaimer:

The information herein is supplied in the belief it is from accurate and reliable sources. The information is supplied to assist the dental professional and no warranty is made with respect to the accuracy of information on the suitability of recommendation. This MSDS has been revised following the guidelines outlined in CFR 1910-1200 "Material Safety Data Sheets."

IMPORTANT: If you have any questions or require additional information regarding the materials described in this Material Safety Data Sheet please contact Jensen Industries at 1-800-243-2000.