SAFETY DATA SHEET
Regulation (EC) No 1907/2006 and 2020/878 (REACH) *Date Revised: 6/10/2021; Supersedes Date: 1/15/2019*

Section 1 Identification of the Substance/Preparation and of the Company/Undertaking.

1.1 Product Identifier

- Product Type: Gypsum Casting Investment
- Trade Names:

Beauty-Cast
Cristobalite Inlay
Prestobalite
Hi-Heat Soldering
Novocast
Omni-Cast
Jewelry Investment
Soldering Investment
Speed-E Soldering
Cristobalite Model Investment Powder

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Investments for casting dental appliances
Uses Advised Against: For professional use only.

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer
Whip Mix Corporation
361 Farmington Avenue
Louisville, Kentucky, USA 40209
Emergency Telephone Number: (502) 634-1451
Fax Number: (502) 634-4512

EU Importer
Whip Mix Europe GmbH
Wißstrasse 26 – 28
D – 44137 Dortmund
Germany
+49 (0) 231 / 567 70 8-0

1.4 Emergency Telephone Number:

Transportation Emergencies: ***CHEMTREC 1(800) 424-9300 (U.S. and Canada)***
International Calls: 1- 703-741-5970 (Collect calls accepted)

Medical Emergencies: +49 (0) 30 30 686 790 – Giftnotrufzentrale der Charité Berlin (24 Std.)

Other Product Information: ***Infor@whipmix.com***

Section 2 Hazard Identification.

2.1 Classification of the Substance or Mixture:

CLP/GHS Classification (1272/2008):

Health Hazards	Physical Hazards	Environmental Hazards
Specific Target Organ Toxicity – Repeat Exposure Category 1 (H372)	Not Hazardous	Not Hazardous

2.2 Label Elements

Danger!

Contains crystalline silica, quartz and crystalline silica, cristobalite

H372 Causes damage to lung through prolonged or repeated exposure by inhalation.

P260 Do not breathe dust.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P314 Get medical attention if you feel unwell.
P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None

Section 3 Composition/Information on Ingredients.

3.2 Mixtures

Substance	***CAS No. / EC Number***	***%***	**CLP/GHS Classification (1272/2008)**
Silica, Crystalline, Quartz	14808-60-7 / 238-878-4	0-80	STOT RE 1 H372
Silica, Crystalline, Cristobalite	14464-46-1 / 238-455-4	0-80	STOT RE 1 H372
Plaster of Paris (substance with member state workplace exposure limit)	26499-65-0 / 231-900-3	0-50	Not hazardous
Calcium Sulfate Hemihydrate (substance with member state workplace exposure limit)	10034-76-1 / 231-900-3	0-25	Not hazardous
Graphite (substance with member state workplace exposure limit)	7782-42-5 / 231-955-3	0-5	Not hazardous

See Section 16 for full text of GHS Classifications.

Section 4 First-Aid Measures.

4.1 Description of First Aid Measures
Inhalation: Remove exposed person to fresh air. If irritation or other symptoms persist, get medical attention.
Eyes: Flush with large quantities of water, holding the eyelids apart. If irritation persists, consult a physician.
Skin: No first aid is generally required. Wash skin with soap and water.
Ingestion: May cause gastrointestinal discomfort and intestinal blockage. If swallowed, drink 1 or 2 glasses of water to dilute. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

4.2 Most important symptoms/effects, acute and delayed: May cause eye irritation. Inhalation of dust may cause mucous membrane and respiratory irritation. When mixed with water, this material hardens and becomes very hot – may cause burns.
4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed: Immediate medical attention is required for ingestions.

Section 5 Fire-Fighting Measures.

5.1 Extinguishing Media: Use media appropriate for surrounding fire. Water may cause product to solidify.
5.2 Specific Hazards Arising From the Chemical: The product does not burn but may decompose producing calcium oxide and sulfur oxides.
5.3 Advice for Fire-Fighters: Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.

Section 6 Accidental Release Measures.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing as described in Section 8.

6.2 Environmental Hazards: Report releases as required by local and national authorities.
6.3 Methods and Materials for Containment and Cleaning up: Collect using dustless method (HEPA vacuum or wet method) and place in appropriate container for use. Do not use compressed air.
6.4 Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

Section 7 Handling and Storage.
7.1 Precautions for Safe Handling: Avoid contact with eyes. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.
7.2 Conditions for Safe Storage, including any Incompatibilities: Store in a cool, dry, well-ventilated area away from incompatible materials. Protect from physical damage.
7.3 Specific end use(s):
Industrial uses: None identified
Professional uses: Investments casting dental products for dental technicians.

Section 8. Exposure Controls/Personal Protection.

8.1 Control Parameters:

Silica, Crystalline, Quartz	0.25 mg/m^3 TWA ACGIH TLV (respirable fraction) 0.1 mg/m^3 TWA France OEL(respirable aerosol) 0.075 mg/m^3 TWA Netherlands OEL (respirable dust) 0.1 mg/m^3 TWA Belgium OEL (respirable) 0.1 mg/m^3 TWA Ireland OEL (respirable fraction) 0.05 mg/m^3 TWA Spain OEL (respirable fraction) 0,1 mg/m^3 TWA Sweden OEL(respirable aerosol)
Silica, Crystalline, Cristobalite	0.025 mg/m^3 TWA ACGIH TLV (respirable fraction) 0.05 mg/m^3 TWA France OEL(respirable aerosol) 0.075 mg/m^3 TWA Netherlands OEL (respirable dust) 0.05 mg/m^3 TWA Belgium OEL (respirable 0.1 mg/m^3 TWA Ireland OEL (respirable fraction) 0.05 mg/m^3 TWA Spain OEL (respirable fraction) 0,05 mg/m^3 TWA Sweden OEL(respirable aerosol)
Plaster of Paris	4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) Ireland OEL 4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) UK OEL
Calcium Sulfate Hemihydrate	10 mg/m^3 TWA Belgium OEL 1,5 mg/m^3 TWA German DFG (respirable) 4 mg/m^3 TWA German DFG (inhalable) 4 mg/m^3 TWA Ireland OEL(respirable) 10 mg/m^3 TWA Spain OEL (respirable)
Calcium Sulfate Hemihydrate (as PNOC)	5 mg/m^3 TWA France OEL (respirable) 4 mg/m^3 TWA Ireland OEL(respirable) 5 mg/m3 TWA Sweden OEL (respirable) 4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) UK OEL
Graphite	2 mg/m^3 TWA ACGIH TLV (respirable) 0.3 mg/m^3 TWA (respirable aerosol), 2.4 mg/m^3 TWA (inhalable aerosol) Germany OEL 4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) UK OEL 2 mg/m^3 TWA France OEL (respirable aerosol) 2 mg/m^3 TWA Belgium OEL (respirable aerosol) 2 mg/m^3 TWA (respirable aerosol) Ireland OEL 2 mg/m^3 TWA Spain OEL (inhalable aerosol) 5 mg/m^3 TWA (inhalable aerosol) Sweden OEL

Refer to local regulations for exposure limits not listed above.

8.2 Exposure Controls
Appropriate engineering controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

Individual Protection Measures: Refer to Reg (EU) 2016/425
Respiratory protection: If the exposure levels are exceeded and irritation is experienced an approved dust/mist respirator appropriate for the form and concentration of the contaminants should be used. In the EU refer to EN Standards (EN 149 or 405). Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.
Skin protection: For prolonged use or in dusty conditions, wear impervious gloves. In the EU refer to EN 374.
Eye/Face protection: Chemical safety goggles if needed to avoid eye contact. In the EU refer to EN 166.
Environmental Exposure Control: This product is not hazardous to the environment. No specific controls are required.
Other: Impervious clothing as needed to avoid contamination of personal clothing.

Section 9. Physical and Chemical Properties.

9.1 Information on basic Physical and Chemical Properties

Physical State: Solid, Powder
Color: Various
Odor: Odorless.

Odor threshold: Not applicable
Melting point/freezing point: Not applicable
Flash point: Not applicable
Flammability (solid, liquid, gas): Not applicable
Explosive limits: LEL: Not applicable
Vapor pressure: Not applicable
Relative density: Not applicable
Partition coefficient: n-octanol/water: Not available
Decomposition temperature: 2642°F / 1450°C
Explosive Properties: Not applicable

pH: Not applicable
Boiling point: Not applicable
Evaporation rate: Not applicable
Particle Characteristics: No data available
UEL: Not applicable
Relative Vapor density (air = 1): Not applicable
Solubility In Water: Not applicable
Autoignition temperature: Not applicable
Kinematic Viscosity: Not applicable
Oxidizing Properties: Not applicable

9.2 Other Information: None available

Section 10 Stability and Reactivity.

10.1 Reactivity: None known.
10.2 Chemical stability: Stable
10.3 Possibility of hazardous reactions: None known.
10.4 Conditions to avoid: Avoid unintentional contact with water. Product will harden and produce heat.
10.5 Incompatible materials: Avoid acids and oxidizing agents.
10.6 Hazardous decomposition products: Thermal decomposition (above 2642°F/1450°C) may generate calcium oxide and sulfur dioxide. Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride.

Section 11 Toxicological Information.

11.1 Information on Toxicological Effects:

Potential Health Effects:
Eyes: Dust may cause mechanical irritation and possible injury.
Skin: Dust may cause irritation. When mixed with water, the plaster of paris hardens and becomes hot – may cause skin burns.
Ingestion: No adverse effects expected for normal, incidental ingestion. Large amounts may cause gastrointestinal blockage and discomfort.
Inhalation: Inhalation of dust may cause irritation to the nose, throat and upper respiratory tract with coughing and shortness of breath.

Acute Toxicity Data:
Silica, Crystalline, Quartz: Oral rat LD50 >22,500 mg/kg
Silica, Crystalline, Cristobalite: No toxicity data available
Plaster of Paris: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC50 > 3.26 mg/L/4 hr (structurally similar chemical)
Calcium Sulfate Hemihydrate: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC50 > 3.26 mg/L/4 hr

Graphite: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >2000 mg/m3 (no deaths occurred)

Skin Corrosion/Irritation: Based on the available data, the classification criteria are not met.
Serious Eye Damage/Irritation: Based on the available data, the classification criteria are not met.. Dust may cause mechanical irritation and possible injury.
Respiratory or Skin Sensitization: Based on the available data, the classification criteria are not met. None of the components have been shown to cause skin or respiratory sensitization in animals or humans.
Germ Cell Mutagenicity: Based on the available data, the classification criteria are not met. None of the components have been shown to cause mutagenicity**.**
Carcinogenicity: Based on the available data, the classification criteria are not met. None of the components are listed as a carcinogen by EU CLP.
Reproductive Toxicity: Based on the available data, the classification criteria are not met. None of the component cause reproductive or developmental effects.
Specific Target Organ Toxicity:
Single Exposure: Based on the available data, the classification criteria are not met.
Repeated Exposure: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.
Aspiration Hazards: Based on the available data, the classification criteria are not met.

11.2 Information on Other Hazards

11.2.1 Endocrine Disrupting Properties: None known

Section 12. Ecological Data.

12.1 Toxicity: Based on the available data, the classification criteria are not met
Silica, Crystalline, Quartz: 72 hr LC50 Carp - >10,000 mg/L
Silica, Crystalline, Cristobalite: No data available
Plaster of Paris: 96 hr LC50 >1790 Pimephales promelas mg/L, 48 hr LC50 daphnia magna >79 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >79 mg/L (structurally similar chemical)
Calcium Sulfate Hemihydrate: : 96 hr LC50 >1790 Pimephales promelas mg/L, 48 hr LC50 daphnia magna >79 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >79 mg/L (structurally similar chemical)
Graphite: 96 hr EC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >100 mg/L
12.2 Persistence and degradability: Biodegradation is not applicable to inorganic substances such plaster of paris, calcium sulfate hemihydrate, crystalline silica, quartz, crystalline silica, cristobalite and graphite.
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment: Components do not meet the criteria of PBT or vPvB.
12.6 Endocrine Disrupting Properties: None known
12.7 Other adverse effects: None known.

Section 13. Disposal Considerations.

13.1 Waste Treatment Methods: Dispose in accordance with all national and local regulations.

Section 14. Transport Information.

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated			
CANADIAN TDG		Not Regulated			
EU ADR/RID		Not Regulated			
IMDG		Not Regulated			
IATA/ICAO		Not Regulated			

14.6 Special precautions for User: Not applicable
14.7 Transport in Bulk According to IMO Instruments: Not applicable – product is transported only in packaged form

Section 15 Regulatory Information.

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory

German WGK: 1

15.2 Chemical Safety Assessment: No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16. Other Information.

Date Revised: 10 June 2021
SDS Revision History: Update to new format Reg (EU) 2020/878
Supersedes Date: 15 January 2019

CLP/GHS Classification and H Phrases for Reference (See Section 3)
STOT RE 1 Specific Target Organ Toxicity Repeat Exposure Category 1
H372 Causes damage to organs through prolonged or repeated exposure.

Key literature references and sources for data: ECHA database, GESTIS, eChemPortal, TOXNET

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP): Calculation method

Prepared By: Denise A. Deeds	Translated By:
Date: 6/10/2021	Date: