SAFETY DATA SHEET *(Revision: 25/01/2017)*
Regulation (EC) No 1907/2006 (REACH)

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

1.1 Product Identifier

- Product Type: Phosphate Casting Investment
- Trade Names:

AccuVest	**Cera-Fina**	**Ceramigold**	**FastFire 15**
Formula 1	**Hi-Temp**	**PC 15**	**PowerCast**
Polyvest	**Ti21**	**V.H.T. Industrial**	**X-20**
Resinvest			

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.

Details of the Supplier of the Substance or Mixture

Manufacturer	**EU Importer**
Whip Mix Corporation	**Whip Mix Europe GmbH**
361 Farmington Avenue	**Wißstrasse 26 – 28**
Louisville, Kentucky, USA 40209	**D – 44137 Dortmund**
Emergency Telephone Number: (502) 634-1451	**Germany**
Fax Number: (502) 634-4512	**+49 (0) 231 / 567 70 8-0**

Emergency Telephone Number

Transportation Emergencies: ***CHEMTREC 1(800) 424-9300 (U.S. and Canada)***
International Calls: 1- 703-527-3887 (Collect calls accepted)
Medical Emergencies: +49 (0) 30 30 686 790 – Giftnotrufzentrale der Charité Berlin (24 Std.)

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

2.0 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 2 (H373)	Not Hazardous	Not Hazardous

2.2 Label Elements
Warning!

Contains crystalline silica, quartz and crystalline silica, cristobalite

H373 May cause damage to lungs by inhalation through prolonged or repeated exposure.

P260 Do not breathe dust.
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.

Substance	***CAS No. / EC Number***	***%***	**CLP/GHS Classification (1272/2008)**
Silica, Crystalline, Quartz	14808-60-7 / 238-878-4	0-75	STOT RE 1 H372
Silica, Crystalline, Cristobalite	14464-46-1 / 238-455-4	0-30	STOT RE 1 H372
Zirconium Silicate	14940-68-2 / 239-019-6	0-95	Not hazardous
Phosphates	Mixture / Not applicable	1-40	Not hazardous
Aluminum Oxide	1344-28-1 / 215-691-6	0-5	Not hazardous
Graphite	7782-42-5 / 231-955-3	0-5	Not hazardous
Glass fibers	65997-17-3 / 266-046-0	0-2	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 phosphorus 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.

8. Exposure Controls/Personal Protection.

8.1 Control Parameters:

Silica, Crystalline, Quartz	0.25 mg/m^3 TWA TLV (respirable fraction) 0.1 mg/m3 TWA France OEL(respirable aerosol) 0.075 mg/m3 TWA Netherlands OEL (respirable dust) 0.1 mg/m3 TWA Belgium OEL (respirable 0.1 mg/m3 TWA Ireland OEL (respirable fraction) 0.1 mg/m3 TWA Spain OEL (respirable fraction) 0,1 mg/m3 TWA Sweden OEL(respirable aerosol)
Silica, Crystalline, Cristobalite	0.025 mg/m^3 TWA TLV (respirable fraction) 0.05 mg/m3 TWA France OEL(respirable aerosol) 0.075 mg/m3 TWA Netherlands OEL (respirable dust) 0.05 mg/m3 TWA Belgium OEL (respirable 0.1 mg/m3 TWA Ireland OEL (respirable fraction) 0.05 mg/m3 TWA Spain OEL (respirable fraction) 0,05 mg/m3 TWA Sweden OEL(respirable aerosol)
Zirconium Silicate (as zirconium compounds)	5 mg/m^3 TWA, 10 mg/m^3 STEL ACGIH TLV 1 mg/m^3 TWA, 1 mg/m^3 STEL Germany OEL (inhalable aerosol) 5 mg/m^3 TWA, 10 mg/m^3 STEL UK OEL 5 mg/m^3 TWA, 10 mg/m^3 STEL Belgium OEL 5 mg/m^3 TWA, 10 mg/m^3 STEL Ireland OEL 5 mg/m^3 TWA, 10 mg/m^3 STEL Spain OEL
Phosphates	5 mg/m^3 TWA (respirable dust), 10 mg/m^3 TWA (total dust) Sweden OEL (inorganic dust)
Aluminum Oxide	15 mg/m^3 TWA OSHA PEL (total dust) 1.5 mg/m^3 TWA (respirable aerosol), 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 10 mg/m^3 TWA France OEL (respirable aerosol) 4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) Ireland OEL 5 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) Spain OEL 2 mg/m^3 TWA (respirable dust), 5 mg/m^3 TWA (total dust) Sweden OEL
Graphite	2 mg/m^3 TWA ACGIH TLV (respirable) 1.5 mg/m^3 TWA (respirable aerosol), 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

	4 mg/m^3 TWA (respirable aerosol), 10 mg/m^3 TWA (inhalable aerosol) Ireland OEL 2 mg/m^3 TWA Spain OEL (inhalable aerosol) 2.5 mg/m^3 TWA (respirable aerosol), 4 mg/m^3 TWA (inhalable aerosol) Sweden OEL
Glass fibers	1 f/cc TWA ACGIH TLV (as synthetic vitreous fibers) 1 f/cm^3 TWA Belgium OEL (as man-made vitreous fibers) 1 f/cm^3 TWA Sweden OEL

8.2 Exposure Controls
Appropriate engineering controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.
Respiratory protection: If the exposure limits are exceeded an approved particulate respirator appropriate for the form and concentration of the contaminants should be used. 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 rubber gloves.
Eye protection: Chemical safety goggles if needed to avoid eye contact.
Other: Impervious clothing as needed to avoid contamination of personal clothing.

9. Physical and Chemical Properties.

9.1 Information on basic Physical and Chemical Properties

Appearance: Powder, with variety of colors
Odor: Odorless.

Odor threshold: Not applicable
pH: Not applicable
Melting point/freezing point: Not applicable
Boiling point: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability (solid, gas): Not applicable
Flammable limits: LEL: Not applicable
UEL: Not applicable
Vapor pressure: Not applicable
Vapor density (air = 1): Not applicable
Relative density: Not applicable
Solubility In Water: Not applicable
Partition coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
Viscosity: 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: None known.
10.5 Incompatible materials: Incompatible with hydrofluoric acid.
10.6 Hazardous decomposition products: 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.
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.
Chronic Health Effects: Excessive inhalation of respirable crystalline silica dust may cause 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.

Carcinogenicity: Crystalline silica quartz is listed as “Carcinogenic to Humans” (Group 1) by IARC and “Known to be a Human Carcinogen" by NTP. None of the other components of this product are listed as carcinogens by OSHA, IARC or NTP.

Acute Toxicity Data:

Silica, Crystalline, Quartz: Oral rat LD50 >22,500 mg/kg
Silica, Crystalline, Cristobalite: No toxicity data available
Zirconium Silicate: No toxicity data available
Aluminum Oxide: Oral rat LD50 15900 mg/kg, Inhalation rat LC50 7.6 mg/L/1 hr
Graphite: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >2000 mg/m3 (no deaths occurred)
Phosphates: No toxicity data available
Glass Fibers: Oral rat LD50 >2000 mg/kg

Section 12. Ecological Data.

12.1 Ecotoxicity:

Silica, Crystalline, Quartz: 72 hr LC50 Carp - >10,000 mg/L
Silica, Crystalline, Cristobalite: No data available
Zirconium Silicate: No data available
Aluminum Oxide: 96 hr LC50 Pimephales promelas 35 mg/L
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
Phosphates: No data available
Glass Fibers: No data available

12.2 12.3 Persistence and degradability: Biodegradation is not applicable to inorganic substances.
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment: Not required.
12.6 Other adverse effects: Not required.

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 Annex II of MARPOL 73/78 and the IBC Code: 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

16. Other Information.

- HMIS Rating: Health 1* Flammability 0 Reactivity 0 Other 0
  Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum

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.
H373 May cause damage to organs through prolonged or repeated exposure.

Prepared By: Denise A. Deeds	Translated By:
Date: 25/01/2017	Date: