



Head Office: 3F 308-56 ShinDang-Dong, Jung-Ku, Seoul Korea.

R&D Office: Bldg.86, Room #610, Seoul National University School of Dentistry,
1, Gwanak-ro, Gwanak-gu, Seoul, The Republic of Korea. P.O. 08826
T:82-2-885-3923 F:82-2-887-3923

Factory : 551-1,Yongsan-dong, Yuseong-gu,Daejeon,Korea
T:82-42-936-3924 F:82-42-936-3925

www.biomta.com

Safety Data Sheet (SDS)

1. Product and Company Identification	
Product Name	RetroMTA(RetroMTA-OrthoMTAll)
Product Use	1. Vital pulp treatment for deciduous and young permanent teeth 2. Repair material
Manufacturer	BioMTA
Address	(Yongsan-dong), 41 Techno8-ro Yuseong-gu, Daejeon, Korea
Emergency Telephone Number	82-42-936-3924
Fax	82-42-936-3925
Issued Date	July 9, 2012
Last Revision Date	June 14, 2017

2. Composition of Ingredients		
Ingredients	C.A.S Number	Content (%)
Calcium carbonate	471-34-1	60~80%
Silicon dioxide	7631-86-9	5~15%
Aluminium oxide	1344-28-1	5~10%
Zirconium dioxide	1314-23-4	20~30%

3. Hazard Identification	
Emergency Overview	RetroMTA(RetroMTA-OrthoMTAll) is a white powder. A single short-term exposure to the dry powder is not likely to cause serious harm.
Eye	May cause immediate or delayed irritation of inflammation.
Skin	May cause slight irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	May cause irritation of the digestive tract.
Chronic Effect and Symptoms	N/A



Head Office: 3F 308-56 ShinDang-Dong, Jung-Ku, Seoul Korea.

R&D Office: Bldg.86, Room #610, Seoul National University School of Dentistry,
1, Gwanak-ro, Gwanak-gu, Seoul, The Republic of Korea. P.O. 08826
T:82-2-885-3923 F:82-2-887-3923

Factory : 551-1, Yongsan-dong, Yuseong-gu, Daejeon, Korea
T:82-42-936-3924 F:82-42-936-3925

www.biomta.com

4. First Aid Measures

4. First Aid Measures	
Routes of Exposure	First Aid Instructions
Eye	Immediately flush eyes thoroughly with water. Continue flushing eyes for at least 15 minutes until residue is completely removed.
Skin	Immediately wash off contaminated area with pH-neutral soap and plenty of water for 15 minutes until residue is completely removed.
Inhalation	Move to fresh air immediately. If symptoms persist, call a physician.
Ingestion	Clean mouth with water. And consult a physician.
Notice for Medical Attention	N/A

5. Fire and Explosion Data

5. Fire and Explosion Data	
Flash Point	None
Auto-ignition Temperature	Not combustible
Min./Max. Flammability Limits in Air	None
Classification and Restrictions under the Fire Services Act	Not applicable
Extinguishing Media	Not applicable
Fire Fighting Procedures and Equipment	Not applicable
Hazardous Material Combustion	Not available

6. Accidental Release Measures

6. Accidental Release Measures	
Personal Precautions	Avoid contact with skin.
Environmental Precautions	Remove the pollutants immediately and prevent them from migrating into other areas, e.g. water or soil.
Spills/Leaks	Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.



Head Office: 3F 308-56 ShinDang-Dong, Jung-Ku, Seoul Korea.

R&D Office: Bldg.86, Room #610, Seoul National University School of Dentistry,
1, Gwanak-ro, Gwanak-gu, Seoul, The Republic of Korea. P.O. 08826
T:82-2-885-3923 F:82-2-887-3923

Factory : 551-1,Yongsan-dong, Yuseong-gu,Daejeon,Korea
T:82-42-936-3924 F:82-42-936-3925

www.biomta.com

7. Handling and Storage

Handling	Keep Retro MTA dry until used. Normal temperatures and pressures do not affect the material. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation
Storage	Store in a dry, well-ventilated area. Keep containers securely sealed.

8. Exposure Control/ Personal Protection

Engineering Measures	Use adequate ventilation to keep airborne concentrations low.
Respiratory Protection	Avoid actions that cause dust to become airborne. Use local or general exhaust ventilation to control exposures below applicable exposure limits.
Eye Protection	Wear safety glasses.
Hand Protection	Wear protective gloves.
Body Protection	Wear protective clothes and equipment.
Hygiene Measures	Avoid contact with skin, eyes and clothing. Remove or wash off contaminated clothing and equipment.

9. Physical and Chemical Characteristics

Appearance	Powder
Odor	Little to no odor
pH(1% solution)	12~13
Boiling point	Not applicable
Melting point	Not applicable
Evaporation Rate	Not applicable
Solubility in Water(g/L)	Reacts, hardens
Vapor Pressure	Not available
Specific Gravity	4.0~4.5
Decomposition Temperature	Not available
Vapor Density	Not available
Molecular Weight	Not applicable



Head Office: 3F 308-56 ShinDang-Dong, Jung-Ku, Seoul Korea.

R&D Office: Bldg.86, Room #610, Seoul National University School of Dentistry,
1, Gwanak-ro, Gwanak-gu, Seoul, The Republic of Korea. P.O. 08826
T:82-2-885-3923 F:82-2-887-3923

Factory : 551-1,Yongsan-dong, Yuseong-gu,Daejeon,Korea
T:82-42-936-3924 F:82-42-936-3925

www.biomta.com

10. Stability and Reactivity Data	
Chemical Stability	Stable under normal temperature and pressure
Substances to Avoid	Unintentional contact with water
Hazardous Decomposition Products	Not available
Hazardous Polymerization	No report on hazardous polymerization under normal temperature and pressure

11. Toxicological Information	
Acute Oral Toxicity	No
Acute Toxicity on Inhalation	Not available
Sub-acute Toxicity	Refer to above "3. Hazards Identification"
Chronic Toxicity	Refer to above "3. Hazards Identification"
Carcinogenicity	No

12. Ecological Information	
Ecotoxicity	Not available
Relevant Physical and Chemical Properties	Refer to above "9 and 10"

13. Disposal Considerations	
Dispose of waste material in a manner consistent with the local, state and federal government regulations.	

14. Transport Information	
Transport Hazard Class	None
Classification and restrictions according to marine transportation and storage of hazardous substances under the Ships Safety Act	Not available
Classification and restrictions according to other foreign transportation laws	Not available
This product is NOT classified as dangerous for IATA Transport	
Notice: Observe the federal and local government regulations	



Head Office: 3F 308-56 ShinDang-Dong, Jung-Ku, Seoul Korea.

R&D Office: Bldg.86, Room #610, Seoul National University School of Dentistry,
1, Gwanak-ro, Gwanak-gu, Seoul, The Republic of Korea. P.O. 08826
T:82-2-885-3923 F:82-2-887-3923

Factory : 551-1, Yongsan-dong, Yuseong-gu, Daejeon, Korea
T:82-42-936-3924 F:82-42-936-3925

www.biomta.com

15. Regulatory Information

Poisons Schedule	None
Regulations	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users make their own investigations to determine the suitability of the information for their particular purposes.