

SPECIALIST IN
SILICONE TECHNOLOGY



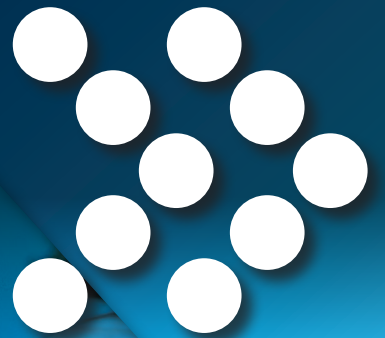
KOSDAQ
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SPECIALIST IN SILICONE TECHNOLOGY

DM
Dental Impression Materials



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SPECIALIST IN SILICONE TECHNOLOGY

We pledge to return the affection and interest that our clients have given by developing even better technologies and products through the attitude of ceaselessly pursuing researches.

HRS Co., Ltd. without being content with our current successes, has been steadfastly treading a single path with strong passion for the goal of achieving better future for everyone and played the core role in the advancement of silicone industry. We are putting in our utmost efforts to become an outstanding company that leads the materials industry through the reinforcement of the internal core capabilities, enhancement of corporate images and practicing of customer satisfaction by continuous management innovation and development of new technologies.

HRS Co., Ltd. that manufactures silicone that can be found in all aspects of our daily lives from the automobile components to advanced industrial materials as well as medical products is endeavoring to provide full satisfaction of our customers by putting in our utmost efforts.

We ask that you continue to have interest in HRS Co., Ltd. striving to make even further progresses through exchange of information and communication with our customers, stockholders and netizens in the future. Moreover, we would like to ask for your continued support and unsparing encouragement in order for HRS Co., Ltd. to create future filled with abundance and hope by fully exhibiting our capabilities.



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TAKING THE FIRST STEP WITH SILICONE WITH THE LONG-CHERISHED DESIRE FOR INDEPENDENT DOMESTIC PRODUCTION

1980's

- 1987.06 Developed the basic technology for silicone gum compounding
- 1986.08 Developed the technology for primary synthesis of silicone gum
(collaborate with KAIST for the first time in the country)
- 1985.03 Changed the name to Hae Ryong Silicone Co., Ltd.
Moved to the new Plant in Gimpo-si
- 12 Acquired U.L Standard(UL 94 V-0, Flammability Standard)
- 1983.10 Awarded for New Material development by the minister of the Ministry
of commerce and industry
- 1981.07 Incorporated Hae Ryong (started developing the manufacturing technology of
silicone rubber Compound)
- 1978.05 Established Hae Ryong Trading Company(Importing business of silicone rubber)

2000's

- 2009.07 Acquired LFGB certificate from TUV Rheinland
- 09 Developed dental impression materials and Acquired KGMP certificate
- 09 Acquired the certification of certificate of supplier quality(SQ) from Hyundai,
Kia Motor Company
- 12 Acquired ISO 13485 certificate
- 2008.10 Construction completed for Asan Plant
- 11 Awarded "the tower of 10 million dollar export" as the prize(KITA)
- 2007.03 Changed the company name to HRS Co., Ltd.
- 07 Form strategic alliance with 'D' Corporation for Silicone rubber
- 11 Acquired ISO 14001 certificate
- 2006. 08 Appointed new CEO(co CEO: Ms. Sung Ja, Kang & Mr. Won Yeong, Ji)
- 2004. 08 Construction completed for Pyeong-teak Plant(HCR, LSR, RTV, POLYMER line)
- 2003. 09 Acquired ISO 9001 certificate
- 2000. 05 Listed on KOSDAQ

ACHIEVEMENT OF STATUS AS A SPECIALIZED COMPANY IN ORDER TO OPEN THE SUSTAINABLE FUTURE OF THE SILICONE RUBBER INDUSTRY

CATAPULTING TO THE STATUS OF A EVERY LARGER CORPORATION BY UTILIZING CRISIS AS OUR OPPORTUNITIES

1990's

- 1995.11 Exported silicone rubber amounting more than \$5,000,000 for the first time
in the country(Awarded "the tower of 5 million dollar export" as the prize)
- 12 Acquired the certification of EM mark(silicone RTV foam)
- 1993.05 National Industrial Technology Center Supplied and installed Fire Stop
Seal for the 3rd and 4th Yeonggwang nuclear power plant
- 11 Developed the technology to manufacture the silicone RTV foam
(collaborate with National Industrial Technology Center)
- 1991.07 Developed the technology to manufacture the silicone rubber for
general grade silicone rubber for general grade molding
- 10 Established sales agencies in Southeast Asia
(8 Countries including Taiwan and Malaysia)
- 1990.09 Contract with Bayer AG in Germany for technological affiliation
and sales in Southeast Asia

2010's ~ Now

- 2017.03 Appointed new CEO(CEO : jin sung, Kim)
- 2016.03 Appointed new CEO(CEO : Ms. Sung Ja Kang)
- 11 Acquired CFDA(Silent-Dental impression materials)
- 2014.03 Selected as "The Proud SME Businessman of the Month")
- 06 Acquired FDA (Silent-Dental impression materials)
- 11 Acquired the patent for Liquid silicone composition for back light
unit lamp holder of Liquid crystal display
- 2013.10 Acquired the certification of Hyundai Rotem Supplier Quality(RSQ)
- 2012.03 Selected as "THE BEST TAXPAYER"(Pyeongtaek district tax office)
- 04 Selected as "global hidden champion"
(the Small and Medium Business Administration)
- 09 Selected as "KOTRA GLOBAL BRAND(BLUE)"
- 2011.05 Suzhou haeryong silicone co.,Ltd. Was established in CHINA
- 2010.07 Supply agreement between 'H' Corporation and HRS
- 09 Selected as "INNO-BIZ"

ESTABLISHING OF FIRM STATUS AS A COMPANY SPECIALIZING IN MANUFACTURING OF SILICONE RUBBER, A FUNCTIONAL MATERIAL EVERYONE DREAMS OF IN THE 21ST CENTURY



SEOUL OFFICE

- Main Businesses
- Trade Team
- Finance Team
- HR/IR Team
- Strategy & Planning Team

PYEONGTAEK PLANT

- Main Businesses
- HCR(High Consistency Silicone Rubber)
- LSR(Liquid Silicone Rubber)
- RTV(F/S) Silicone Rubber
- Silicone Gum/Polymer
- DM(Dental Impression Materials)
- EMULSION(Silicone for personal care)

ASAN PLANT

- Main Businesses
- Rubber Article
- Silicone Sheet(S/S)
- PSA(Pressure Sensitive Adhesive)

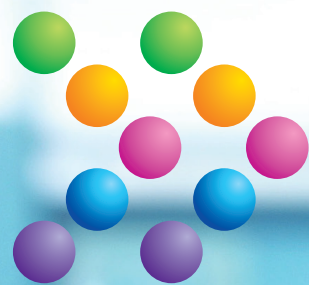
CHINA PLANT

- Main Businesses
- Rubber Article
- Silicone Sheet(S/S)

For a happy, Healthy life

Sildent

Dental Impression Materials



We pledge to return the affection and interest that our clients have given by developing even better technologies and products through the attitude of ceaselessly pursuing researches.

Sildent™ **BITE**

Sildent™ **FAST** Heavy Body

Sildent™ **FAST** Light Body

Sildent™ **Heavy Body**

Sildent™ **Regular Body**

Sildent™ **Light Body**

Sildent™ **Putty**



Sident™ Light Body



TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	Min. 36mm	
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 1min	
Color	Base : Green	Catalyst : White
Setting Time (min)	4min (in the mouth)	
Strain in Compression (%)	within 10 %	
Recovery from deformation (%)	Min. 99.5%	
Linear Dimensional change (%)	within 0.2 %	
Reproducibility (μm)	20μm reproduce	
Affinity with plaster (μm)	50μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



INDICATIONS

- Crown and bridge impressions
- Inlay and onlay impressions
- Functional impressions
- Implant impressions
- Denture and partial denture impressions



BENEFITS

- Excellent flow properties
- Hydrophilic properties for excellent flow in wet environment
- High tear strength from deformation
- Working time is secured sufficiently by Snap-set technology
- Extraordinary stability
- Excellent detail reproduction



Sident™ Regular Body

TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	31 ~ 41 mm	
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 1min	
Color	Base : Blue	Catalyst : White
Setting Time (min)	4min (in the mouth)	
Strain in Compression (%)	within 10 %	
Recovery from deformation (%)	Min. 99.5%	
Linear Dimensional change (%)	within 0.2 %	
Reproducibility (μm)	20μm reproduce	
Affinity with plaster (μm)	50μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



INDICATIONS

- Crown and bridge impressions.
- Inlay and onlay impressions.
- Functional impressions.
- Implant impressions.
- Denture and partial denture impressions



BENEFITS

- Excellent elastic recovery
- Hydrophilic properties for excellent flow in wet environment
- High tear strength from deformation
- Extraordinary stability
- Excellent detail reproduction



Sident™ Heavy Body



TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	within 35mm	
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 1min	
Color	Base : Purple	Catalyst : White
Setting Time (min)	4min (in the mouth)	
Strain in Compression (%)	within 10 %	
Recovery from deformation (%)	Min. 99.5%	
Linear Dimensional change (%)	within 0.2 %	
Reproducibility (μm)	50μm reproduce	
Affinity with plaster (μm)	50μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



INDICATIONS

- Crown and bridge impressions.
- Inlay and onlay impressions
- Functional impressions
- Implant impressions
- Denture and partial denture impressions



BENEFITS

- Excellent elastic recovery
- Hydrophilic properties for excellent flow in wet environment
- High tear strength from deformation
- Long-lasting dimensional stability
- Excellent detail reproduction
- Easy to remove from mouth



Sident™ Putty



TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	within 35mm	
Mixing Time (sec)	Jar Type	Manual-Mixing(60sec)
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 1min 40sec	
Color	Base : Violet	Catalyst : White
Setting Time (min)	5min (in the mouth)	
Strain in Compression (%)	within 2.4%	
Recovery from deformation (%)	Min. 99.5%	
Linear Dimensional change (%)	within 0.11%	
Reproducibility (μm)	75μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- Base 300ml + Catalyst 300ml 2 jars + 2 spoons



INDICATIONS

- Crown and bridge impressions
- Inlay and onlay impressions
- Functional impressions
- Implant impressions
- Denture and partial denture impressions



BENEFITS

- Short setting time in mouth
- Non-greasy, satiny smooth, extremely easy to mix
- No bubbles
- Good mechanical properties
- Excellent detail reproduction
- Hydrophilic



Sildent™ FAST Light Body



TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	Min. 36mm	
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 40sec	
Color	Base : Yellowgreen	Catalyst : White
Setting Time (min)	3min (in the mouth)	
Strain in Compression (%)	within 10 %	
Recovery from deformation (%)	Min. 99.5 %	
Linear Dimensional change (%)	Max. 0.2 %	
Reproducibility (μm)	20μm reproduce	
Affinity with plaster (μm)	50μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



INDICATIONS

- Crown and bridge impressions
- Inlay and onlay impressions
- Functional impressions
- Implant impressions
- Denture and partial denture impressions



BENEFITS

- Fast working and setting time
- Hydrophilic properties for excellent flow in wet environment
- Excellent detail reproduction
- Long-lasting dimensional stability



Sildent™ FAST Heavy Body

TECHNICAL DATA

Physical & Mechanical Property	Standard	
Viscosity (mm)	Max. 35mm	
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	More than 40sec	
Color	Base : Cordovan	Catalyst : White
Setting Time (min)	3min (in the mouth)	
Strain in Compression (%)	within 10 %	
Recovery from deformation (%)	Min. 99.5 %	
Linear Dimensional change (%)	Max. 0.2 %	
Reproducibility (μm)	50μm reproduce	
Affinity with plaster (μm)	50μm reproduce	

* storage temperature 12℃ to 25℃



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



INDICATIONS

- Crown and bridge impressions
- Inlay and onlay impressions
- Functional impressions
- Implant impressions
- Denture and partial denture impressions



BENEFITS

- Fast working and setting time
- Hydrophilic properties for excellent flow in wet environment
- Excellent elastic recovery
- Excellent detail reproduction
- Long-lasting dimensional stability
- Easy to remove from mouth



Sildent™ BITE



TECHNICAL DATA

Physical & Mechanical Property		Standard
Mixing Time (sec)	Cartridge Type	Auto-Mixing
Mixing Ratio	Base : Catalyst	1 : 1
Working Time (sec)	Over 30sec	
Color	Base : Yellow	Catalyst : White
Setting Time (min)	1min (in the mouth)	
Hardness (HD)	More than 22HD (or Min. 22HD)	
Line dimensional change (%)	Max. 0.2%	

* storage temperature 12°C to 25°C



PACKAGING

- 5 cartridges(Base + Catalyst), 50ml each
- 2 cartridges(Base + Catalyst), 50ml each



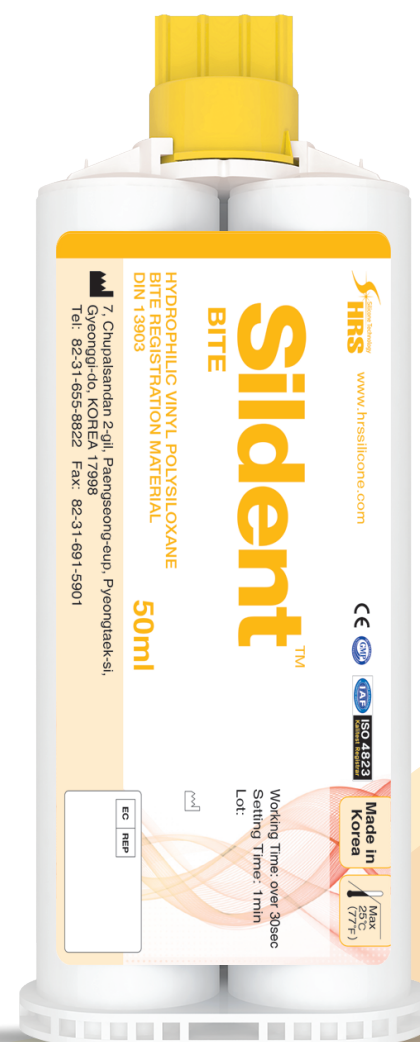
INDICATIONS

- Bite Registration



BENEFITS

- Extremely fast setting time of 1:00 min
- High Hardness
- Outstanding occlusal details and accurate bite registration
- Easy to trim and grind



CERTIFICATES

CE _ 2012



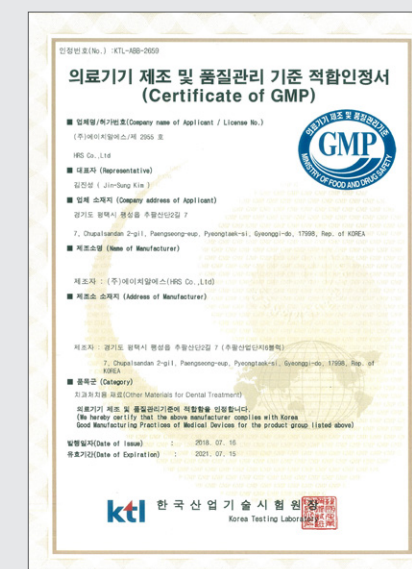
FDA _ 2014



CFDA _ 2016



KGMP



ISO 13485



ISO 9001



Silicone Technology

HRS



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