



Tosseal 83 AMB

One Part Oxime Silicone Sealant (Antimicrobial and antifungal grade)

Product Description

TOSSEAL 83 AMB is a 1-part oxime silicone sealant with fungicides. So mildew is less likely to happen. It also contains antimicrobial agents that inhibit the growth of bacteria such as Staphylococcus aureus and Escherichia coli.

This sealant adheres well to glass, tiles, plastics, and metals. It can withstand severe conditions such as ozone, ultraviolet rays, temperature changes, and various chemicals. It provides excellent waterproofing properties.

Key Features and Typical Benefits

- One-component type for easy use
- Mildew is less likely to occur
- No corrosion to most metals
- Excellent adhesion to various materials
- Superior weather resistance and durability

Applications

- **Modular bathroom:** Seal around plastic bathtubs and joints in bathrooms
- **General household use:** Prevention of water leakage around washbasins and sinks
- **Prefabricated and freezer rooms:** Joint sealing during assembly on factory lines
- **Other:** Seals in areas where mold growth is a particular problem

Characteristic Examples

Internal Test Results Based on JIS A 5758

Characteristic		Measured value
Type		F,G
Class		30SLM equivalent
Slump mm	Vertical	0
	Horizontal	0
Elastic recovery	%	91%
Modulus 60% MPa	23°C	0.3
	-20°C	0.3
Adhesion under constant elongation		No failure
Adhesion after compressed heating and extended cooling		No failure
Adhesion after exposure to Xenon light		No failure
Adhesion under constant elongation after water immersion		No failure
Volume loss	%	4
Durability class		9030G equivalent

Note: Substrate...Aluminum Primer...Tosprime D



Typical Uncured Properties

(JIS A 1439)

Characteristic	Measured value
Appearance	Paste
SG (23°C)	1.03
Skin over time (23°C)	min 10
Extrusion (5°C)	s 5
Primer use required	Yes

Typical Cured Properties

(JIS A 1439)

Characteristic	Measured value	
Substrate: Aluminum		
Modulus 50% MPa	Initial aging	0.30
	Heating (100°C, 14days)	0.30
	Water immersion (23°C, 7 days)	0.28
Tensile strength MPa	Initial aging	0.57
	Heating (100°C, 14days)	0.55
	Water immersion (23°C, 7 days)	0.52
Elongation at maximum load %	Initial aging	190
	Heating (100°C, 14days)	190
	Water immersion (23°C, 7 days)	200
Elongation at break %	Initial aging	190
	Heating (100°C, 14days)	190
	Water immersion (23°C, 7 days)	200
Cohesion failure %	Initial aging	100
	Heating (100°C, 14days)	100
	Water immersion (23°C, 7 days)	100

Note: Primer Tosprime D

Mold Resistance Test Results

Product	Aging condition	JIS indicator	Remarks
TOSSEAL 83 AMB	Initial	0	No mycelial growth is observed both initially and after hot water immersion
	Hot water immersion	0	
TOSSEAL 381	Initial	2	Mycelial development exceeds 1/3 of specimen area
	Hot water immersion	2	

Aging condition: Initial 23°C/7days Hot water immersion + 50°C/7days



Antimicrobial Properties

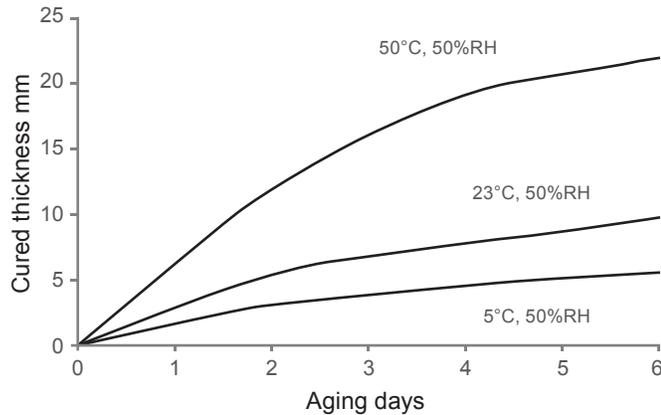
The table below shows the test result for TOSSEAL 83 AMB in accordance with JIS Z 2801 "Antimicrobial-processed products-Antimicrobial test methods and antimicrobial effect".

Antimicrobial Test Result

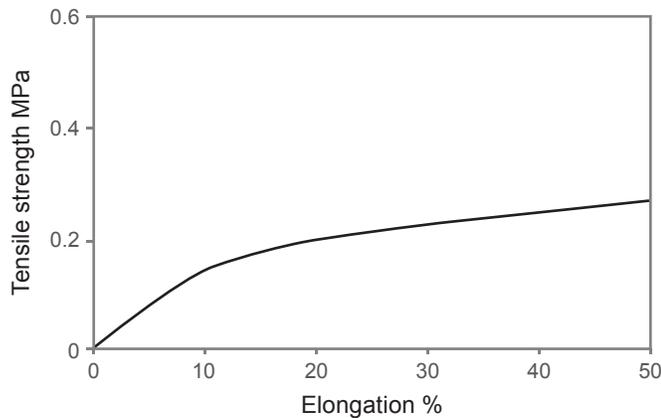
Product	Bacteria	Antibacterial activity value
TOSSEAL 83 AMB	Staphylococcus aureus	>5
	Escherichia coli	6.1

Aging condition: 35°C/24hours

Cured Property



Stress-strain Curve



Application Instructions

Surface Preparation

Substrate surface should be thoroughly cleaned with a suitable solvent such as alcohol, xylene, methyl ethyl ketone (MEK). Do not use soap, detergent, or water. Wipe the surface dry. Sealant will not properly adhere to a wet substrate.

Masking

To obtain a neat sealant line, use masking tape to cover areas adjacent to any joints before priming.

Primer

A preliminary adhesion test of sealant on the substrate is recommended to ascertain proper adhesion. For difficult-to-bond substrates, use of a primer (TOSPRIME C, D or E) is suggested. Allow primer to dry thoroughly before proceeding.

Back-up Material

Do not apply sealant in direct contact with organic rubber such as chloroprene or EPT etc. Rubber closed to back-up materials may stain the silicone sealant.

Applying and Tooling Sealant

Cut nozzle to desired bead size, break the membrane film completely and extrude sealant in the joint. Tool immediately, within 5 minutes of application, with a spatula to spread the sealant against the back-up material and joint surfaces. Remove masking tape immediately after tooling. Sealant will begin to skin on the exposed surface in about 10 minutes and cure will progress inward.

Notes

TOSSEAL 83 AMB may yellow slightly after extended exposure to sunlight or UV light. Alcohol is a suitable solvent for removing stains from sealant.



Handling and Safety

Wear eye protection when handling uncured sealant as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician. This product releases methyl ethyl ketoxime vapors as a by-product of cure. Maintain adequate ventilation in the workplace at all times. Extended contact with the skin may cause irritation and should be avoided. Not for food contact use.

Storage

- Store in a cool, dry, dark place.
- Keep out of reach of children.

Primer Selection

- TOSSEAL primers; TOSPRIME C, D and E have been specially prepared to ensure the durability and bonding strength of
- TOSSEAL 83 AMB to various substrates. The chart below shows which primer is most compatible with the substrate.

Primer	Substrate
TOSPRIME C	Mortar, Masonry
TOSPRIME D	Glass, Metal, Ceramic
TOSPRIME E	Painted metal, Painted surfaces

Caution: Primers contain solvents which are highly flammable and toxic. Observe all cautions. Storage, mixing and use must be done in a well-ventilated area away from any source of ignition such as heat, sparks, and flame.

Do not use on marble without primer because of migration. TOSPRIME C is recommended.

Post-construction Notes

TOSSEAL 83 AMB has fungicides added to prevent the formation of mildew but should be cleaned once or twice a month with a towel moistened with water, especially in bathrooms and other areas prone to buildup of mildew. If water does not remove the mildew, clean with alcohol (isopropyl alcohol is best). If left unattended, the stains may become moldy and cannot be removed by wiping afterwards.

Packaging and Color

Package	Volume (Package unit)	Color
Cartridge	333ml (10pics x 5box/1case)	Clear
		White
		Pink
		Light grey
		Grey
		Black
		Offwhite

Issued: March 2022



Customer Service Centers

For additional information, please contact our Customer Service Team

AMERICAS	+1 800 295 2392 Toll Free* +1 704 805 6946 Direct Number Email: commercial.services@momentive.com
LATIN AMERICA	BRAZIL +55 11 4534 9650 Direct Number MEXICO +52 55 2169 7670 Direct Number *All American countries
EMEA – EUROPE, MIDDLE EAST, AFRICA & INDIA	EUROPE +390510924300 Direct Number INDIA, MIDDLE EAST & AFRICA +91 44 71212207 Direct Number* *All Middle Eastern countries, Africa, India, Pakistan, Bangladesh, Sri Lanka Email: 4information.eu@momentive.com
ASIA PACIFIC	CHINA 800 820 0202 Toll Free +86 21 3860 4892 Direct Number JAPAN +81 3 5544 3111 Direct Number KOREA +82 2 6201 4600 Direct Number SOUTH EAST ASIA, AUSTRALIA & NEW ZEALAND +60 3 9206 1543 Direct Number* *All East Asia countries (Malaysia, Singapore, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar / other countries located in Pacific region) Email: 4information.ap@momentive.com
Visit us at www.siliconeforbuilding.com	

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBE HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

Before purchasing or using any Momentive products, please visit www.siliconeforbuilding.com/legaldisclaimer to view our full product and sales disclaimer. GE is a registered trademark of General Electric Company and is used under license by Momentive Performance Materials Inc. Copyright 2012-2023 Momentive Performance Materials Inc. All rights reserved.

www.siliconeforbuilding.com

CDS: Data Tosseal 83 AMB (04/23)