## **440 NATURSTEIN**

### (Natural Stone)

#### Tested to DIN EN ISO 846; Tested for compatibility with foodstuffs

- Basis: Neutrally cross-linking oxime system
- Density: 1.03 g/cm<sup>3</sup> (ISO 1183 method B)
- Consistency: pasteous, sag-resistant
- Temperature resistance: 50°C to + 150°C
- Processing temperature: + 5°C to + 35°C
- Skin over time: approx. 5 min. (at 23°C and 50 % r elative humidity)
- Modulus 100 %: approx. 0.7 N/mm<sup>2</sup> (DIN 53504 S –1)
- Shore-A-hardness: approx. 36 (DIN 53505)
- Movement capability: ± 20 %
- Storage life: 12 months in a cool and dry place
- Colours: according to current colour chart, also available with textured surface
- Silver Ag+: Prolonged mould protection thanks to new technology
- Packaging: 310ml cartridges and 400ml-foil bags

#### Characteristics

440 NATURSTEIN cures in the presence of air humidity forming a vulcanised material with a dry surface. Thanks to neutral cross-linking no corrosion occurs in contact with metals.

Furthermore, the sealant does not contain any migrating components (plasticisers). Thus there is no danger of contamination of edges of natural stone.

440 NATURSTEIN contains fungicidal and bactericidal agents counteracting the infestation of micro-organisms (mould fungus, bacteria). In order to enhance the anti-mould characteristics it is recommended to keep the joint surfaces and adjoining surfaces clean using detergents and disinfectants. 440 NATURSTEIN is resistant to commercially available detergents and disinfectants.

Highly UV-, weather- and ageing resistant. After curing, 440 NATURSTEIN is physiologically safe and inert.

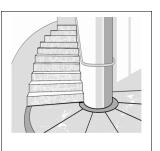
#### Application

440 NATURSTEIN is a silicone sealant which has been developed especially for sealing joints in natural stone, such as marble, gneiss, porphyry, granite, terrazzo, etc.

440 NATURSTEIN is suitable for sealing joints subjected to high strain, as well as underwater joints.

#### Processing

Cover joint edges with adhesive tape and backfill properly (e.g. with suitable backer rod) in order to avoid three-point adhesion. Preparation of adherent surfaces: The adherent surfaces must be solid, dry, and free from dust, grease, and oil. Prime joint edges with "70 PRIMER". It is imperative to take into account the open time of approx. 20 minutes! For underwater applications and on absorbent substrates use "160 PRIMER", for plastics use "100 PRIMER" and for non-absorbent substrates use "140 PRIMER". Prime with maximum care since any unintended exposure to primer may cause stains in some types of natural stone.







Joint design: In case of joints accommodating movement the joint dimensions must be chosen according to the maximum allowed distortion. A minimum joint cross section of 3x5 mm is imperative.

Introducing the sealant: 440 NATURSTEIN must be introduced into the joint evenly and without bubbles while the product is within the processing temperature range. Ensure good contact with adherent surfaces/joint edges during finishing work (smoothing with Ramsauer smoother "506 Glättmittel"). Use only fresh smoother from container. Remove any excess smoother immediately. Use only small quantities of smoother.

Joints must be sealed in accordance with the applicable standards and guidelines as amended from time to time.

#### Limitations of application

Keep natural stone surface free from primer. Primers produce stains which can only be removed mechanically (e.g. by grinding). In rooms where dispersion paints are used make sure that the paint coats are completely dry and that there is sufficient ventilation since any combination with 440 NATURSTEIN may result in discolouration of the sealant when sealing joints indoors. The product version with textured surface is not suitable for underwater applications.

The product is not suitable for tarry or bituminous substrates.

Not suitable for building aquariums and terrariums. Not authorised for gluing mirrors. Heavy exposure to environmental factors, tobacco smoke, etc. may cause discolouration of the silicone.

The Ag+ agent is not compatible with detergents or disinfectants containing hypochlorite (e.g. Ramsauer anti-mould spray "503 Schimmelspray") since this may affect the visual impression. We recommend to use neutral or alkaline detergents for cleaning.

The method of disinfection of swimming pools (e.g. chlorination, alternative procedures by means of UV irradiation) as well as water circulation must be chosen according to the size and type of pool. Take into account the applicable standards and guidelines for operating swimming pools as amended from time to time. Inadequate disinfection and/or circulation of water may result in mould formation on the joints.

#### Advice for application

Ensure sufficient ventilation during processing and curing. In view of the large number of factors which may affect processing and application the user must always try the specific application in an experiment before using the product. Take into account the expiry date of the product. 1-component silicones are not suitable for gluing full areas. The curing time increases with the thickness of the layer. Before using the 1-component silicone in layers of more than 15 mm get in touch with our application engineering department. Storage and/or transportation of products at increased temperature/air humidity for a prolonged period of time (several weeks) may result in a reduction of storage life and/or changes of characteristics of the product. In case of unpolished natural stone in particular it must be ensured that no silicone is spilled beyond the joint since the resulting stains are very hard to remove. In view of the high susceptibility to stains of many types of marble and natural stone we recommend to use exclusively our smoother "506 Glättmittel" (do not use any detergent etc). When replacing mouldy joint seals the affected sealant must be removed completely and the affected areas must be treated with mould spray "503 Schimmelspray". Otherwise, the joint may soon be affected by mould again.

# RAMSAUER® DICHTSTOFFE

#### Warning!

Product contains 2-butanone oxime. May produce an allergic reaction. Keep out of the reach of children. Use in well ventilated areas only or with an extraction system.

#### Safety advice

Refer to the current EC Safety Data Sheet. Safety data sheets are available at any time at our website <u>www.ramsauer.at</u>.

Priming table		
Glass	+	
Tiles	+	
Pinewood	+	
Concrete, wet ground	+	
Concrete, smooth according to formwork	RP 70	
Steel DC 04	+	
Hot dip galvanised steel	+	
High grade steel	+	
Zinc	+	
Aluminium	+	
Aluminium AlMg1	+	
Aluminium AlCuMg1	+	
Aluminium 6016	+	
Aluminium anodised	WP 40	
Brass MS 63 Hardness F 37	+	
Rigid PVC Kömadur ES	RP 100	
PVC plasticised	RP 100	
PC Makrolon Makroform 099	-	
Polyacryl PMMA XT 20070 Röhm	-	
Polystyrene PS Iroplast	-	
ABS Metzoplast ABS 7 H	RP 100	
PET	+	
PU cut-back quality	+	
Copper	+	
Polycarbonate	-	
PMMA Röhm sanitary quality	-	
Mirrors	-	
Natural stone	+	
Legend: + = adheres well - = not suitable	without a prin	ner
WP/RP = Ramsauer primer		

This table is based on adhesion tests with test solids of Rocholl corporation under laboratory conditions. Under field conditions the adhesion characteristics are dependent on a variety of external factors (weather, impurities, burdens, etc.). Therefore this table serves for guidance only and does not constitute any binding statement. For more information get in touch with our application engineering department.

#### Liability for defects

The information provided including but not limited to the proposals for processing and using our products are based on our knowledge and experience, usually at the time of going into print. The results of work may deviate from this information depending on the specific circumstances, in particular with respect to substrates, processing and environmental conditions. Therefore, neither this information nor any oral counselling shall constitute warranty or give rise to any liability on whatever legal ground for any specific



result of work, unless we acted intentionally or by gross negligence. Ramsauer warrants that its products will have the technical characteristics according to the Technical Data Sheets up to their expiry date. Product users must consult the latest data sheet which is available upon request. Our current General Terms and Conditions apply which are available for download on our website **www.ramsauer.at** at any time.