# Product data sheet



# edilon)(sedra ESM-Epoxy 20/40C

edilon)(sedra ESM Epoxy 20/40C is a plasticizer-free 2-component reaction resin system, epoxy resin-based and formulated with special fillers. edilon)(sedra ESM Epoxy 20/40C is characterized by high-grade mechanical properties and fast hardening.

### **APPLICATION**

edilon)(sedra ESM Epoxy 20/40C is a universal epoxy grout that can be used, for example, for grouting machines, engineering structures and ribbed plates. It can also be used to bond steel plates and strips to concrete and to bond the edilon)(sedra Trackelast® RS/RPU strip as part of the edilon)(sedra Corkelast® ERS (Embedded Rail System).

### **PROPERTIES**

- + good adhesion to concrete and steel
- + high-quality mechanical properties
- electrical insulation in track systems

- + low volume shrinkage
- + resistant to vibration and dynamic load

#### **CHARACTERISTICS**

Specific weight (mixture): 1,95 g/cm3

Mixing ratio by weight: 92,5:7,5

Processing time (minutes)		walkable after (hours) at 15 mm layer thickness			hardened after (days)			
+10° C	+20° C	30° C	10° C	20° C	30° C	10° C	20° C	30° C
25	15	10	6	3	2	10	7	3

Minimum hardening or object temperature: + 10° C				
Compressive	after 24 h	75 MPa		
strength	after 7 Tagen	80 MPa		
	after 28 Tagen	85 MPa		

Adhesive strength on concrete: above 2.0 MPa (demolition in concrete)

Max. Processing or object temperature: 30° C				
Biegezugfestigkeit	after 24 h	30 MPa		
	after 7 Tagen	35 MPa		
	after 28 Tagen	40 MPa		

Adhesive strength on steel (St 37): over 6,0 MPa

## **SUBSTRATE**

Surfaces must meet the following requirements:

## concrete surfaces

- Minimum quality of concrete C20/25 acc. EN 206
- During the adhesion test, cohesive failure of the concrete must occur and the bond strength of edilon)(sedra ESM Epoxy 20/40C on concrete must be greater than 1.5 MPa.

If the surfaces do not comply with the requirements, the surfaces should be blast cleaned or sanded to obtain a clean surface with visible aggregates (stones) without cement skin.

Then remove dust and dirt from the surfaces.

If the surface meets these requirements, clean with high pressure water jets and then allow the surfaces to dry.

## steel surfaces

Remove thick layers of rust, oil, grease and dirt. Thoroughly blast surfaces until the preparation level SA 2 acc. ISO 8501-1 is reached. All surfaces must be free of oil, grease and dirt and be virtually free of mill scale, rust and other components.

The remaining residues must adhere firmly. Prevent rust formation after pre-treatment and cleaning.

The minimum required coarseness level is "medium". Use surface comparative sample (Model G) acc. ISO 8503-1/2.

Galvanized steel surfaces can be pre-treated by low-pressure sweeping with a fine abrasive. The surfaces must be free of zinc salts.



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### **MIXING**

empty edilon)(sedra ESM Epoxy 20/40C component 2 is completely into the component 1 container.

Clamp the container in the mobile mixing unit **edilon)(sedra Edimix** and start. The mixing times for the **edilon)(sedra Edimix** mobile mixing unit are preset. If an electric hand mixer is used, mix the components thoroughly for 2 minutes. While mixing, move the spiral agitator up and down and back and forth to get an even mix. We recommend the use of an electric hand mixer with not more than 1000W. The mixed material should then be processed immediately.

Product type and application	mixer	mixing tool
ESM Epoxy 20/40C as grouting	Edimix mobile mixing unit	edilon)(sedra paddle mixer 210 mm

### **PROCESSING**

edilon)(sedra ESM Epoxy 20/40C is poured onto the surface after completion of the substrate preparation.

Consumption: 1.95 kg/litre. Layer thickness with steel trough grouting: 5 - 50 mm.

The newly installed product should be protected from moisture for at least 6 hours. If the product is exposed to moisture too early it can lead to irregularities in the surface, the setting process is not affected. Only mix as much **edilon)(sedra ESM Epoxy 20/40C** as can be poured in the processing time.

### **CLEANING**

Immediately clean with EP dilution at each work stoppage. Do not allow material components or cleaning agents to enter drains, bodies of water or soil, but dispose of them properly.

## **PACKAGING, STORAGE & DURABILITY**

13 kg container: component 1, bucket; component 2, bottle

Shelf life 1 year. Keep container tightly closed, dry and if possible store at + 5° C to + 30° C. Avoid direct sunlight.

Colour: black

## **HAZARDS**

Avoid skin contact, especially with component 2. If it splashes in your eye, immediately rinse thoroughly with water, then seek medical attention immediately.

Please observe the general protection regulations of the professional association, in particular the instructions for action "Epoxy resins in the construction industry" (www.arbeitssicherheit.de), as well as the hazard warnings and safety advice in the safety data sheets and on the delivery containers.

The containers must be stored in a child-proof manner and children must be kept away during processing.

After hardening, the product is physiologically harmless.

Hardened product residues may be disposed of with household waste or under the waste code number 20 03 01 "Mixed municipal waste" in a suitable waste incineration plant.

Contaminated packaging and liquid components must be disposed of in accordance with official regulations (see notes in the safety data sheet).

Gis code: RE 1

## **ADR CLASS**

component 1: None

component 2: class 8, II, special provisions LQ 1I Release Date: 19 June 2019

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