Characteristics:	Two-component epoxy paint for concrete
Description:	Water-borne two-component epoxy paint intended for coating silicate substrates and concrete floors in garages requiring high mechanical and chemical resistance.
Composition (general):	The mixture based on epoxy dispersion containing extenders, pigments, additives and other ingredients enhancing the properties of the paint.
Use:	It is used for painting concrete floors, walls, sumps and other silicate substrates and constructions in heavy duty environments of foodstuff and chemical plants and wherever high mechanical and chemical resistance is required. EPOXIDEN B is not suitable as the final paint in exteriors; there can be used a combined paint system with a sealer DENAPOX E. For coating concretes and other silicate substrates, EPOXIDEN B is produced as: - EPOXIDEN PENETRACE (PENETRATING PRIMER) – transparent for substrate penetration - EPOXIDEN B – pigmented for top coats
Color shades:	It is produced in RAL colors or in the agreed color shades.

Properties:	**Paint**	**EPOXIDEN TUŽIDLO (HARDENER)**	**Hardened mixture:**
Density (g/cm3) :	1.5 – 1.7	1.14	1.4 – 1.6
Volume solids ONL (%):	45 – 55	100	55 – 65
Weight solids (%):	60 – 70	100	68 – 75
KU Viscosity:	80 - 85		60 - 80
Flow time by use of flow cups F6 (s):	50 - 100		12 - 60
pH value (at 20 °C):	8 – 10		8 – 10
VOC (volatile organic compounds) (kg/kg):	does not contain	-	does not contain
TOC (total organic carbon) (kg/kg):	does not contain	-	does not contain
Maximum permissible value of VOC content (g/L):	140		
Max. content of VOC of the product in its ready to use condition (g/L):	does not contain		
Category of water-borne coatings:	**A/j** multiple-component reactive coatings with a special function for specific purposes.		
Appearance/color:	liquid		
Gloss number (at 60 °C):	5 - 10		
Pendulum hardness (2H/80 °C):	min. 30		
Miscibility:	miscible with water		
Drying, degree 1 (dust dry)	4 hrs 50 min.		
Drying, degree 2 (touch dry)	6 hrs 15 min.		
Drying, degree 4 (dry-through)	within 24 hrs.		
Water vapour permeability - class I. (m):	Sd < 5 *)		
CO_2 permeability (m):	> 50		
Liquid water permeability ($kg/m^2 . h^{0,5}$):	w < 0.1 *)		
Impact resistance - class III. (Nm):	> 20 *)		
Resistance to abrasion - weight loss (mg):	< 3000		
Adhesion by tensile bond strength - without movement (N/mm^2):	> 0.8 *)		
Reaction to fire:	class F		
Release of dangerous substances:	see the product safety data sheet		
Chemical resistance:	resistant to: engine oil, gear oil, Savo, hydraulic oil, Diesel fuel oil, acids and bases		

*) - tested as a part of paint systems

Substrate preparation:	The concrete substrate must be absorbent and cured (at least 28 days), it must be solid, dry and free from any mechanical and greasy impurities. Incoherent surface layers of concrete must be ground or removed mechanically. The substrate shall be soaked with the primer EPOXIDEN PENETRACE (PENETRATING PRIMER).
Application conditions:	The air and substrate temperatures during the application and drying must not fall below +15 °C.
Thinning:	Water
Hardening	EPOXIDEN PENETRACE and EPOXIDEN TUŽIDLO (HARDENER) should be hardened in a ratio of 100: 60. The hardener should always be added to the penetrating primer. Mix both the components with a suitable stirrer. Having been stirred thoroughly, adjust the mixture consistency, adding 150-300 parts of water. The open time of the hardened mixture is 2 hours.
	EPOXIDEN B and EPOXIDEN TUŽIDLO (HARDENER) should be mixed in a ratio of 100 : 20. Always add the hardener into the paint, constantly stirring. To stir, use a suitable stirring device (e.g. a drill with a stirrer). Having mixed both the components thoroughly, leave the mixture for 5 min. Adjust the consistency for the application, adding 10 - 20 parts of water. The open time of the hardened mixture is at least 2 hours.
Recommended application method:	using a brush, a roller, paint spraying
Recommended paint system:	1 layer of EPOXIDEN PENETRACE, soaking of the surface with the hardened and thinned mixture. The interval for the subsequent layer is 12 - 24 hrs, depending on the drying conditions. Strongly absorbent substrates can be soaked with double coat. 1-2 layers of EPOXIDEN B, two-component epoxy paint for concrete, hardened, or even thinned mixture, optimum layer thickness 80 - 160 µm DFT (depending on the requirements for final properties of the coating), the interval between individual applications is 12-24 hrs, depending on the drying conditions. The open time of the hardened mixture is max. 2 hrs.
Application data:	The paint is to be applied to the surface, using a brush or a roller (or paint spraying) in two or more layers according to the requirements for the final properties of the paint. The floors coated with the paint EPOXIDEN B can be fully loaded (e.g. by a vehicle or furniture) after 5 days from the application at the earliest.
Spreading capacity and recommended thickness:	Theoretical consumption of EPOXIDEN B - see the table, for penetration 0.1 to 0.15 kg/m^2 of the hardened mixture, depending on the absorbency of the substrate.

Wet film thickness WFT (µm)	135	270
Dry film thickness DFT (µm)	80	160
Theoretical spreading capacity (m^2/kg)	4.95	2.50
Theoretical spreading capacity (kg/m^2)	0.20	0.40

Package:	Plastic or sheet metal containers with a volume of 0.8 to 200 kg.
Storage:	Store in the original and sealed container in a cool, dry and well-ventilated area, at a temperature between +5 and +25 °C. Do not freeze. Keep the mixture away from drinks, foodstuff, feedstuff and medicines. Store out of reach of children. Shelf life - min. 12 months from the date of manufacture. The product must not freeze.
Disposal of containers and waste:	Product residues and contaminated containers shall be disposed of as hazardous waste in accordance with applicable regulations.
Safety and hygiene:	While working with and handling the product, hardener and hardened paint, observe the instructions stipulated in the relevant safety data sheets. Observe good personal hygiene practices. If on skin, wash with soap and water. If in eyes, rinse with plenty of water, get medical attention. If swallowed, rinse mouth with water, do not induce vomiting, get medical attention.

Legislation, certificates, attestations and others tested parameters:	It conforms to the requirements stipulated in the standard ČSN EN ISO 1504-2: Product for the surface protection - coatings. Declaration of Performance no. 006 Label:

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DENAS COLOR a.s., Sokolovská 1174/17, Bílovec

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1020-CPR-010-025990

EN 1504-2:2004

Products for the surface protection - coatings

EPOXIDEN B

Resistance to abrasion - weight loss:	< 3000 mg
CO2 permeability:	> 50 m
Water vapour permeability - class I:	Sd < 5 m
Liquid water permeability:	$w < 0.1\ kg/m^2.h^{0.5}$
Adhesion by tensile bond strength - without movement:	$> 0.8\ N/mm^2$
Impact resistance - class III:	> 20 Nm
Reaction to fire:	class F
Release of dangerous substances:	see the safety data sheet
Declaration of performance no.:	**006**