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Technical Information
Sadechaf UVACRYL 2295
One-component, solvent free UV-curing adhesive

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Version 1

General

Description	One-component, solvent free UV-curing adhesive.
Application	Bonding, sealing and potting. Glass, metals, ceramics and plastics
Properties	Medium viscosity, very flexible, durable in humid climates and good outdoor weathering resistance, non-yellowing. Good impact strength, low shrinkage. Ideal to bond substrates with different CTE

Properties of Uncured Product

Properties	**Method**	**Result**
Chemical type		Acrylic
Appearance	Visual	Transparent
Density	DIN 53217	1,05 g/cm³
Viscosity @ 23°C	Haake RT20, C35/2°, Shear Rate 60/s	640 mPas

Storage Temperature and Shelf-life

Storage	**Temperature**	**Comment**
Min storage temperature	-20°C	
Max Storage temperature	25°C	
Recommended temperature	5°C to 25°C	At room temperature or in fridge
Max temperature in production	30°C	Decrease in viscosity
Shelf-life	12 months	In original unopened packaging

Curing of the Product

Spectrum	320 – 500 nm	UV and visible light
Intensity	50 – 5000 mW/cm²	
Time	1 – 60s	Depending on the transmission of substrate, adhesive layer thickness and intensity of UV-lamp.
Dose = Time x Intensity	1000 – 3000 mJ/cm²	Depending on the transmission of substrate, adhesive layer thickness and intensity of UV-lamp.
Iron or gallium doped mercury lamp	60s x 50 mW/cm²	
UV-LED: 365 to 400nm	30s x 100 mW/cm²	

The cure time does not include the heating up of the substrate until the required cure temperature.
The cure time can change when using other substrates or gap size.

Properties of Cured Product

Property	Method	Result
Temperature range of use		-40°C to +125°C
Tensile strength		10 N/mm²
Elongation at break		217 %
Hardness		Shore D: 41
Water absorption	24h at 23°C	1 %
Out gassing Total Mass loss (TML)	24h at 85°C	1.2 %
Compression shear strength Glass on glass	Compression	11.6 N/mm² or MPa
Tensile lap shear strength, PC on PC	Tensile	2.7 N/mm² or MPa

Additional Instructions:

- Make sure the substrates are clean and free from dust, water, grease, fingerprints, oil, release agents, silicones, plasticizers or other chemicals.
- Substrates can be cleaned with Acetone or Isopropanol (> 99.8% pure). Low grade alcohols, gasoline (Petrol) or paint thinners should never be used.
- To improve adhesion, durability or bonding difficult substrates (PP, PE, silicone, POM, LCP and Teflon) a pretreatment can be done with plasma, corona, flame or Pyrosil.
- Dispense the adhesive with a proper hand dispenser, time/pressure dispenser or automatic dispenser and adapted dispensing needle. When dispensing from pressure vessel, use the correct dispensing valves, black tubes and connectors to protect the UV-adhesive from artificial light or daylight.
- Do not leave the packaging open under artificial light or daylight, this can cure the product.
- Avoid direct contact with the skin, wear protective clothing (gloves). See material safety data sheet (MSDS) for safety instruction.
- Read also brochure “How to use UV-Adhesives”.
- Read also brochure “Safety instructions for UV-lamps”.
- Do not store the product together with other adhesives (1 and 2-part epoxies, 2-part acrylics, silicones, 2-part polyurethanes, cyanoacrylates, isocyanates, anaerobics, activators (CA and anaerobics) and avoid contact with amines, amides and reducing agents.
- When products are stored in the fridge or freezer, put then first at room temperature for a few hours (2-3 hours at 20-25°C) before using. Otherwise water drops can be formed on the adhesive.
- When heat sensitive products (dual cure products or filled products) are not used in production, it is recommended to store them in the fridge or freezer.
- A save temperature range to work with adhesives is between 15 – 25°C. Keep in mind a temperature increase or decrease of 10°C can reduce or increase the viscosity by a factor of 2. Heat sensitive products like dual cure products (UVAPLUS range) can cure in the packaging or with filled products the resin can separate from filler at temperatures of 30°C and higher. So avoid temperature of 30°C and higher for a longer time.