

DIPON LuminaCast 9 Ocean Flow — two-component epoxy casting resin for thick pours

Document TDS2026-0819-02	Issued 19 August 2026	Version 1 · EN
Mixing ratio 2 : 1 by weight	Pot life approx. 240 min	Thickness per pour 30–100 mm

1. Identification

Item	Detail
Trade name	DIPON LuminaCast 9 Ocean Flow
Type	two-component epoxy casting system (part A resin + part B hardener)
Manufacturer	DIPON.DE Removable Automotive Coatings GmbH & Co. KG, Ringofenstr. 39, D-44287 Dortmund, Germany
Supplier	RESIN TABLE s.r.o., Dr. Stojana 351, 765 02 Otrokovice, Czech Republic
Pack sizes	1.5 · 3 · 7.5 · 15 · 30 kg (combined weight of A + B) — this data sheet applies to all pack sizes

2. Description and intended use

A clear epoxy resin of very low viscosity designed for **thick castings**. The long pot life and gradual exothermic reaction allow deep layers to be poured without overheating, yellowing or cracking, and the low viscosity releases entrapped air by itself.

- river tables, worktops and panels
- large-volume castings in moulds, lamps, decorative objects
- encapsulation of wood, stone and other objects

Compatible substrates: wood, concrete, glass, metal, glass and carbon fibre fabrics, natural stone, silica sand, marble and granite. It can be coloured with all DIPON alcohol inks, resin pastes and effect pigments.

Formulation: UV absorbers and n-HALS stabilisers, amines with a reduced tendency to yellow, **high resistance to carbamate formation**, a crystallisation-stable recipe and bio-based ingredients. Free of SVHC and CoRAP substances.

3. Technical data

Property	Value
Mixing ratio	2 : 1 by weight (A : B)
Pot life	approx. 240 min (23 °C, 500 g, 90 mm)
Time to peak exotherm	approx. 480 min (23 °C, 500 g, 90 mm)
Layer thickness (20 °C)	30–100 mm
Viscosity, part A (23 °C)	730 ± 50 mPa·s
Viscosity, part B (23 °C)	55 ± 50 mPa·s
Material temperature A + B	22–25 °C
Ambient temperature	12–19 °C
Minimum batch size	120 g
Recoat / next layer	approx. 28–36 h (20 °C, 50 mm)
Demoulding	approx. 72–96 h (23 °C, from 70 mm)

Property	Value
Sandable after	min. 8 days (50–70 mm, 20 °C)
Hardness after 7 days (23 °C)	Shore D 80
Heat resistance	approx. 62 °C
Shrinkage	< 0.1 %
Refractive index	> 1.59
VOC content (EU)	0 %
Density of the mix	approx. 1.08 kg/l (derived from the SDS)

Source: manufacturer's technical data sheet (DIPON). Pot life is the time in which the mixed material reaches 40 °C. The density of the mix is derived from the densities of the components in section 9 of the SDS.

! Layer thickness is not the only limit — mass and temperature matter too

The figure of 30–100 mm applies at an ambient temperature of **12–19 °C**. The exothermic reaction accelerates itself in bulk: the more reacting mass and the warmer the room, the sharper the peak. In one case we handled, a final layer of 6.5 cm meant about 25 kg of reacting mass at 25–28 °C — the casting set hard within roughly 15 hours and cracked. **Do not rely on thickness alone.** On large surfaces reduce the layer, pour in several stages and control the workshop temperature.

Keeping the exotherm under control in practice

- **Ensure air circulates around the mould.** Still air traps heat and stops heat removal. Do not leave the mould in a corner, in a closed cabinet or covered.
- **When pouring at the upper limit of thickness or mass, measure.** Check the surface with a non-contact infrared thermometer during and after the first half of the pot life — a rising temperature is the only early warning you get.
- **If the temperature climbs, cool it.** Fans remove surface heat; large moulds can be cooled from the outside. This works only while the reaction is still building.

4. Physical properties of the components

Property	Part A — resin	Part B — hardener
Physical state, colour	liquid, clear	liquid, clear
Odour	characteristic	amine-like
Density (20 °C)	1.14 g/cm ³	0.978 g/cm ³
Viscosity	730 mPa·s (20 °C)	70 s (DIN 53211/4)
pH (20 °C)	not determined	12.5
Boiling point	> 200 °C	> 200 °C
Flash point	> 100 °C	> 100 °C
Miscibility with water	limited	complete

Source: manufacturer's safety data sheets, version 1 of 14 February 2024, section 9.

5. Processing

- **Condition the material.** Resin and hardener at 22–25 °C, room at 12–19 °C. Cold resin stays thick and holds bubbles; warm resin cures fast and may yellow or crack.
- **Prepare the substrate.** Dry, clean and free of grease. Seal timber with a thin coat first so that it does not release air into the pour.
- **Weigh to the gram** at 2 : 1 by weight. Do not measure by volume — the densities of the two parts differ. An inaccurate ratio leaves a permanently undercured, tacky surface.
- **Never mix in the shipping container** — it leads to incomplete cure of the whole batch.
- **Mix slowly** for 3–5 minutes, scraping the sides and bottom of the container. Fast mixing introduces air.
- **Transfer to a clean container** and mix again — this eliminates unmixed material clinging to the walls.
- **Pour slowly** into the lowest point of the mould and let the resin flow out.

- **Release the air.** The low viscosity lifts most bubbles by itself; remove the rest with a heat gun or a torch from a safe distance, in short passes. For demanding castings a **vacuum chamber** or a **190 µm paint strainer** helps.
- **Leave undisturbed** at a stable temperature, protected from dust and draughts.

Cleaning of tools: acetone or universal thinner immediately after use. Once cured, the resin can only be removed mechanically.

6. Consumption

Length × width × height of the casting in cm ÷ 1000 × 1.08 = required mass in kg. Add **10-15 %** for material left in the container and for inaccuracies of the mould. As a guide, 3 kg of mixed resin corresponds to roughly 2.8 litres of casting.

7. Food contact

The cured material has been **assessed for contact with food**. This is confirmed by expert opinion **No. SZÚ/17382/2024** of 17 December 2024 issued by the National Institute of Public Health (Státní zdravotní ústav), Czech Republic, at the request of RESIN TABLE s.r.o.: the material composition complies with Regulations (EC) 1935/2004, (EC) 1895/2005, (EU) 10/2011 and Czech Decree No 38/2001 Coll.

- overall migration — complies
- specific migration of primary aromatic amines — complies
- specific migration of BADGE and its derivatives — complies
- specific migration of bisphenol A and bisphenol S — complies
- elements of concern — comply
- sensory evaluation — complies

i Condition: full cure

The food-contact properties apply to **fully chemically cured** material — the manufacturer states final properties after 7 days at 23 °C. Until then the reaction is still in progress. The conditions and the scope of the assessment are set out in the certificate itself, which is available for download with the product.

8. Safety

Both components are classified as hazardous. **Read the safety data sheets before use**; they are available for download with the product.

	Part A	Part B
Classification	Skin Irrit. 2 · Eye Irrit. 2 · Skin Sens. 1 · Aquatic Chronic 2	Skin Corr. 1 · Eye Dam. 1 · Acute Tox. 4 (oral and dermal) · Skin Sens. 1 · Aquatic Chronic 2
Pictograms	GHS07 · GHS09	GHS05 · GHS07 · GHS09
Signal word	Warning	Danger
Hazard statements	H315, H319, H317, H411	H302+H312, H314, H317, H411
UFI	CE20-C03K-J00M-CEAT	WA20-U0E6-8004-P2RR

Source: manufacturer's safety data sheets, sections 2.1 and 2.2.

Wear protective gloves and eye protection, work in a well-ventilated area, avoid breathing vapours and mists and keep out of reach of children. **Epoxy resins are skin sensitisers** — repeated contact may cause a lasting allergy.

9. Storage and disposal

- Keep containers tightly closed and dry, away from frost and direct sunlight; store at room temperature.
- Uncured material and contaminated packaging are hazardous waste — do not pour into drains.
- Allow residues to cure; cured resin is inert and is disposed of under local regulations.

The information reflects our present knowledge and the manufacturer's documentation. It is not a legally binding assurance of properties; processing conditions are beyond our control. Test before production use.