LIQUITOL®-VT

Product Information

Special Advantages:

- Approval for LAU (storage, filling and transfer) and HBV (manufacture, treatment and usage of water-polluting substances) plants (contact surfaces: concrete, asphalt, semi-rigid surface courses and stainless steel).
- One coat of primer for all contact surfaces.
- Usability officially proven regarding asphalt surfaces for vehicle use.
- Exceptional chemical resistance.

Two-component, fuel-resistant pouring compound for joints in asphalt and concrete surfaces in storage plants.

DEKOTEC GmbH stands for experience, quality and reliability in the field of corrosion prevention and sealing technology. The success is based on the development of the Petrolatum-Tape which was already developed in 1927 as the first product worldwide for passive corrosion prevention of pipelines. We establish and guarantee the highest quality standards with technically trend-setting products. Research, development and production take place exclusively in Germany. Our employees are continuously implementing safe and individual solutions in a personal cooperation with the customer.

Product Description

The LIQUITOL®-VT joint sealing system consists of a two-component, polyurethane-based material. The two components (A + B) are mixed at the construction site according to the defined mixing ratio and then poured into the joint either directly from the bucket or by using a special dispenser gun.

The primer system **LIQUITOL®-VT Primer** must also be used for such applications. The sealing compound hardens elastically and is self-levelling.

In accordance with DIBt approval guidelines, the joint sealing system is resistant to petrol fuel, aircraft fuel, heating oil, diesel, unused motor and gear oils, mineral acids up to 20%, inorganic lyes, aqueous solutions of inorganic salts, biodiesel and AdBlue (35% urea solution in catalytic converters).

Product Usage

One particular use of **LIQUITOL®-VT** is for joints in surfaces that must be sealed in a generally media-resistant way according to the Federal Water Act (WHG) or other laws and regulations.
LIQUITOL®-VT is suitable for use in asphalt surfaces, concrete surfaces and surfaces consisting of semi-rigid surface courses.

Typical Material Properties (at +23 °C/+73.4 °F)

Technical data	Unit	Value
Density (A+B, hardened)	g/cm³	1.6 (approx.)
Mixing ratio (A:B)	–	4:1 (parts by weight)
Pot life	Minutes	15 (approx., weather-dependent)
Permissible total deformation on hardening	%	25 (in relation to joint width)
Curing time	h	24–48 (weather-dependent)

Product Application

The instructions and regulations stipulated in guidelines according to the DIBt must always be observed.
Application must be carried out by a professional firm as defined by the WHG.

Joint dimensions

The dimensions and distances between the joints must be specified in accordance with the expected load and the contact surfaces.
On traffic-bearing surfaces, the joints must normally not be filled up to the upper edge, to avoid tyre contact etc. that would cause undue strain. Concrete walls must always have an edge break (chamfer) in accordance with the guidelines Annex. In these areas, the joint filling height should end approx. 3–6 mm under the joint upper edge.
The width is normally between 8 mm and 20 mm, and the height of the joint filling at the contact surfaces of concrete, steel and semi-rigid coatings is between 6 mm and 12 mm. On these contact surfaces, the height of the joint filling must always be approx. 0.8-1.0 times the joint width.

Important note:
The applicability of joint sealants in traffic-bearing asphalt surfaces governed by the WHG must be generally proven. The applicability of ***LIQUITOL®-VT has been proven.***
This means:
In these areas, the joint sealing system must be installed over the entire wearing course height.
Example: In a 4 cm-thick asphalt sealing layer, the joints must be cut 4 cm deep and must be poured 4 cm deep. The primer (**LIQUITOL®-VT Primer**) must generally be applied as usual, but over the entire depth of the joint walls. A separating layer (e.g. silicon paper) or lining must be laid on the joint bottom, so that the sealant adheres only to the walls and not to the joint bottom.
For joints having frequent contact with process fluids (e.g. at petrol stations), special working guidelines according to the DIBt approval regulations must be observed. In general, joints in such areas must be treated as maintenance joints according to DIN 52 460 and regularly inspected.

Preparation of the joints (joint walls)

The best contact with the joint filling and/or primer system is ensured by cut walls. The joint space must be clean and dry. A lining (e.g. polyethylene or foam, not sand or chippings) must be placed into the joint to prohibit "three-side adhesion". The lining must not be water-absorbent or outgassing (water absorption ≤ 3%).
Always ensure that the primer(s) stipulated by the manufacturer is/are applied to the walls along the entire area. For bituminous walls, semi-rigid surface courses, concrete walls and metal walls such as stainless steel, **LIQUITOL®-VT Primer grey and black** is used.
On metal walls (particularly stainless steel), special pre-treatment may be necessary. Any existing corrosion protection layer, etc. must be removed. Very smooth surfaces may have to be roughened, e.g. with sandpaper. Good results have been observed with a 36 grit paper.

Processing the sealant

Before mixing, the joint wall edges should be covered with e.g. crepe masking tape in order to avoid soiling. The masking tape should be removed again before the material starts to harden.
Components A and B are mixed together with a special tool (e.g. drill with mixing blade Collomix WK 70) for 4 minutes at a rotation speed of max. 500 rpm (in order to mix in as little air as possible).
The surface temperature of the joint must be between +5 °C (+41 °F) and +40 °C (+104 °F). The temperature must be ≥ 3 °C/+37.4 °F above the dew point.
Any rising air bubbles must be removed (e.g. by painting over with a brush) before the sealant solidifies.
The joint compound is tack-free and fully hardened after 24 hours. The pot life and the hardening time are temperature-dependent and decrease with rising temperatures. The material must be protected from moisture until it has hardened. During application, records must be kept of the working conditions, particularly in the case of environmental protection measures. Before installation, the state of the walls, etc. must be inspected.
After installation, wall adhesion in particular must be regularly inspected.

Cleaning tools

Tools and working equipment can be cleaned using acetone. After hardening, the material will only be removable mechanically.

Ordering Information and Packaging

LIQUITOL®-VT is delivered as components A and B in individual containers.
The content of the container corresponds to the mixing ratio.

The required **LIQUITOL®-VT Primer** is delivered in 1.0-litre containers.

The sealant can also be delivered in a stable version as **LIQUITOL®-VT -S** (without approval).

	Container size	Order number
LIQUITOL®-VT	1.65 l (A+B components)	on enquiry
	5.00 l (A+B components)	on enquiry
LIQUITOL®-VT -S	1.65 l (A+B components)	on enquiry
LIQUITOL®-VT Primer (grey and black)	1.00 l each (2.0 l set)	on enquiry

Storage

Tightly sealed in the original container. Avoid exposure to temperatures over +40 °C (+104 °F) and frost – in storage and on the building site.

Under these conditions, **LIQUITOL®-VT** can be stored for at least 12 months from the date of manufacture.

Under the same conditions, **LIQUITOL®-VT Primer** can be stored for at least 9 months from the date of manufacture.

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