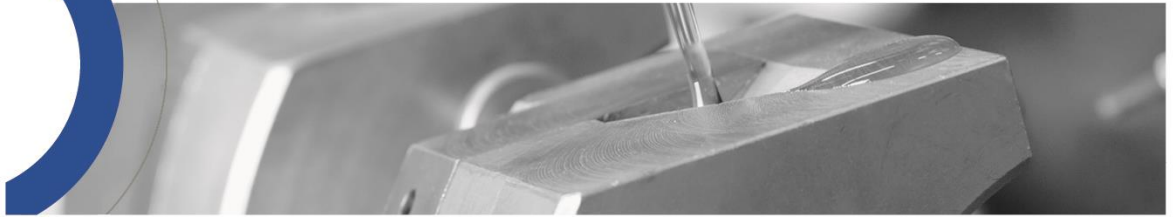


Semi-finished product range
 Cast and moulded parts
 Elastomer spring elements
 Snow plow blades
 Clutch packages
 Protective jaws
 PUR metal compounds
 Concrete-wear parts
 Wheels, rollers and mills



TECHNICAL DATA SHEET

Vulkollan® D15, 82 +-5 Shore A, natural

Properties

Hardness Shore A DIN 53505	77 - 87	SHA
Color	natural	
Density	1.25	g/cm ³
Temperature range	-15 - +80	°C
Tear resistance DIN 53504	46	MPa
Elongation at break DIN 53504	650	%
Tear propagation resistance DIN 53507	40	N/mm
Abrasion loss DIN 53516	32	mm ³
Oil resistance	very good	
Resistance to gasoline	good	
Resistance to acids	limited	
Alkali resistance	limited	
Comments	IMDS data available	
Compression set	24h, 70 °C = 20 %	

VULKOLLAN® is a registered trademark of Covestro Group

Hydrolysis resistance:

This material is manufactured with the addition of hydrolysis protection agents.

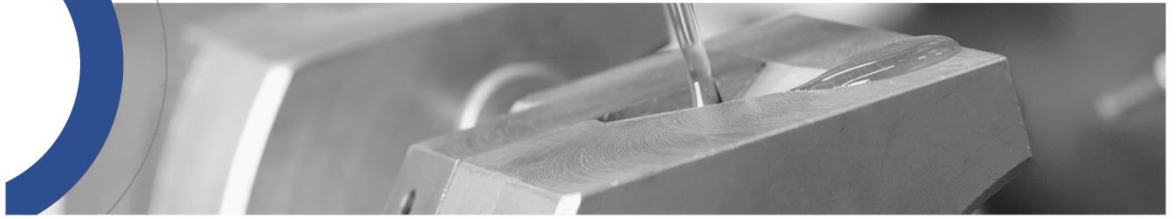
Hydrolysis is regarded as the time-related drop of typical technical parameters such as e.g. tensile strength, elongation at break and tear propagation resistance, which is initiated above all by water or moisture in combination with heat. The extent of the change is thereby dependent on the duration and intensity of the influence.

Vulkollan D15 is basically equipped so that an improved hydrolysis protection is provided in comparison to polyurethanes that are not especially protected. Nevertheless a drop in the technical characteristic values can be determined, however this change is slowed considerably. Overall however the resistance to the influences of hydrolysis is lower than for Vulkollan and standard polyurethane as produced by QUADRIGA.

An unambiguous statement about the hydrolysis resistance (as for instance with statements about the resistance to certain chemicals) is not possible, since the limit values vary greatly depending on the respective case of application.

Referenced standards correspond to the version number of the data sheet provided by our raw material supplier. All details are mean values. Our recommendations are given to the best of our knowledge. They are however without obligation, and we cannot accept any liability for damage or disadvantages of any kind, including in relation to third-party property rights.

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Resistances

	During the influence at room temperature	After short-term influence at room temperature
Acids and alkaline solutions:		
concentrated	destroyed	destroyed
diluted (< 3 %)	Volume swelling <20%, low loss in strength	original volume; original strength
Saturated hydrocarbons Crude oil, diesel fuel, gasoline	Volume swelling <20%, low loss in strength	original volume; original strength
Aromatic hydrocarbons: Super fuel, benzene, toluene, xylene	Volume swelling <20%, significant loss in strength	original volume; original strength
Lubricating oils and greases: ASTM-test oil 1, 2, 3, diesel fuel, Gasoline	Volume swelling <20%, low loss in strength	original volume; original strength
Alcohols: Methanol, ethanol	Volume swelling <20%, low loss in strength	original volume; original strength

In contrast to other plastics, Vulkollan D15 is resistant to ozone and UV-radiation. Evidence for this are the ship- and harbor bumpers. Even after many years exposed to weathering in the ocean climate, no drop in the usage properties was determined with this material.

The resistance to chemicals depends to a great extent on the duration of the contact, the predominant temperature as well as on the quantity and concentration of the respective chemical. Insofar only general information can be provided in the table.

For other chemicals not listed here or for deviating conditions of the contamination, if needed tests can be carried out. That also applies for the chemicals and fuels specified here, if these should come into contact with Vulkollan D15 not in pure form, rather mixed with additives.



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