



# Den Braven Sealants

## Technical data sheet

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## Zwaluw Hybriflex-LM

S705

## 4.4X

31.03.2009

**-D-**

**-GB-**

**-NL-**

### Produktumschreibung

Zwaluw Hybriflex-LM ist ein Einkomponenten - Dichtstoff mit niedrigen Modul auf Basis von SPUR Polymer, zum Abdichten von Bau- und Anschlussfugen.

Das Produkt ist fast geruchlos und frei von Isocyanate, Silicone und Lösemittel.

Unter Einfluss von Luftfeuchtigkeit vulkanisiert Hybriflex-LM zu einer dauerelastischen Masse aus.

### Einsatzbereiche

-Bewegungsfugen.

-Fensteranschlussfugen.

Im allgemeinen haftet Zwaluw Hybriflex-LM, auch ohne Primer ausgezeichnet auf vielen Untergründen im Bau wie Glas, glasierten Oberflächen, anodisiertem Aluminium, Emaille, lackiertem Holz, verschiedenen Kunststoffen sowie auf Beton, Naturstein und Bausteinen.

### Anwendungseinschränkungen

Unter anderem nicht für Anwendungen in Unterwasserbereich sowie für PP, PE, Teflon, Neopren und Bitumen-Untergründe geeignet. Exposition hohe Konzentrationen an Chloride vermeiden.

### Vorbehandlung und Nachglätten

Haftflächen müssen sauber, trocken und fest sein.

Gegebenfalls mit Zwaluw Cleaner entfetten.

Fall notwendig Primer anwenden.

Haftprüfungen vor Anwendung werden empfohlen.

Nachglätten mit Zwaluw Finisher.

### Verfügbare Farben

Weiß, grau, braun, beige und schwarz.

### Verpackung

Kartuschen à 290ml und Folienbeutel à 600ml.

### Sicherheit

Ein Sicherheitsdatenblatt steht zur Verfügung.

### Garantie

Den Braven Sealant garantiert, dass seine Produkte, innerhalb der Haltbarkeit, mit der Spezifikation konform sind.

Wir haften entsprechend unserer Verkaufsbedingungen.

Für Folgeschäden haftet Den Braven Sealants unter keinen Umständen.

### Haftung

Unsere Informationsblätter sind die Ergebnisse von unseren Tests und Erfahrung und sind von allgemeiner Art. Sie enthalten jedoch keine Haftung. Jeder Anwender ist verpflichtet, durch eigene Prüfungen sich zu überzeugen, ob das Material für die jeweilige Anwendung geeignet ist.

### Product description

Zwaluw Hybriflex-LM is a one component low modulus sealant based on SPUR polymer for construction joints and mixed joint.

The product is almost odourless and free of isocyanates, silicones and solvents. After application the sealant cures with atmospheric moisture to form a durable rubber seal.

### Applications

-Expansion joints.

-Parameter sealing.

In general Zwaluw Hybriflex-LM has a good adhesion, also without primer, to glass, glazed surfaces, porcelain, coated metal, anodised aluminium, finished wood and several plastics, like MDF and ABS, concrete, natural stone and brick.

### Limitations

Among others not recommended for locations subject to continuous water emersion and not for PE, PP, Teflon, Neoprene and bituminous surfaces!

Avoid exposure to high levels of chlorine.

### Surface preparation and finishing

Surfaces must be clean, dry and sound.

If necessary degrease with Zwaluw Cleaner.

If necessary use a primer.

Adhesion tests prior to the application are recommended.

Finish with Zwaluw Finisher.

### Available colours

White, grey, brown, beige and black.

### Packaging

Cartridges of 290ml and foil packs of 600ml.

### Safety

Safety data sheets are available upon request.

### Warranty

Den Braven Sealants warrants that its product complies, within its shelf life, to its specification.

The liability shall in no case exceed the amount fixed in our Conditions of Sale.

In no event Den Braven Sealants is liable for any incidental or consequential damage.

### Liability

All supplied information is the result of our tests and experience and is of general nature. However, they do not imply any liability. It is the responsibility of the user to verify by his own tests if the product is suitable for the application.

### Productbeschrijving

Zwaluw Hybriflex-LM is 1 component bouwkit met lage modulus op basis van SPUR polymereer voor het afdichten van bouwvoegen en aansluitvoegen

Het product is vrijwel reukloos, en vrij van isocyanaten, siliconen en oplosmiddelen.

Na het aanbrengen reageert de kit met het vocht uit de lucht en vormt een duurzame rubber.

### Toepassingen

-Constructie- en aansluitvoegen.

-voegen bij raam- en deuromtrekken.

In het algemeen hecht Zwaluw Hybriflex-LM, ook zonder primer perfect op vele bouwmaterialen zoals glas en geglazuurde oppervlakken, email, gecoat metaal, geanodiseerd aluminium, gelakt hout en diverse kunststoffen zoals MDF en ABS, beton, natuursteen, en metselsteen.

### Beperkingen

Onder meer niet geschikt voor continue onder water toepassing, en niet voor PE, PP, Teflon, Neopren en bitumineuze ondergronden.

Vermijd blootstelling aan hoge concentraties chloride.

### Voorbehandeling en afwerking

Ondergronden dienen schoon, droog en draagkrachtig te zijn.

Eventueel ontvetten met Zwaluw Cleaner.

Indien nodig een primer toepassen.

Een hecht proef voor gebruik wordt aanbevolen.

Afwerken met Zwaluw Finisher.

### Beschikbare kleuren

Wit, grijs, bruin, beige en zwart.

### Verpakking

Kokers van 290ml en worsten van 600ml.

### Veiligheid

Een product veiligheidsblad is beschikbaar.

### Garantie

Den Braven Sealants garandeert dat haar product, binnen de houdbaarheidstijd, in overeenstemming is met de specificaties.

De aansprakelijkheid zal nooit meer bedragen dan hetgeen bepaald is in onze verkoop- en leveringsvoorwaarden.

In geen geval is Den Braven Sealants aansprakelijk voor enigerlei gevolgschade.

### Aansprakelijkheid

De gegeven informatie is het resultaat van onze testen en ervaring en is van algemene aard. Zij houdt echter geen aansprakelijkheid in. Het is de verantwoordelijkheid van de gebruiker om door eigen testen vast te stellen of het product voor de toepassing geschikt is.



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### Zwaluw Hybriflex-LM

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-D- Typische Werte	-GB- Typical values	-NL- Typische waarden	Dimension	
<i>Allgemein</i>	<i>General</i>	<i>Algemeen</i>		
Basis	Basis	Basis		SPUR-Polymer
Verarbeitungstemperatur	Application temperature	Aanbreng temperatuur	°C	+5 / +35
Standvermogen	Flow	Standvermogen	mm	<2
Dichte	Density	Dichtheid	g/ml	1,35
Hautbildungszeit	Skin over time	Huidvormingstijd	min	60
Frostbeständig bis -15°C	Frost resistant till -15°C	Vorstbestendigheid tot -15°C		ja / yes / ja
während Transport	during transport	tijdens transport	Monat / Month	12
Haltbarkeit zwischen	Shelf life between	Houdbaarheid tussen	maand	
+5°C und +25°C	+5°C and +25°C	+5°C en +25°C	%	±25
Praktische Dehnfähigkeit	Joint movement capability	Toelaatbare vervorming	°C	-30 / +80
Temperaturbeständig nach	Temperature resistance	Temperatuurbestendigheid		
Aushärten	after curing	na uitharden		
<i>Mechanische Werte</i>	<i>Mechanical properties</i>	<i>Mechanische waarden</i>		
Elastisch Rückstellvermögen	Elastic recovery	Elastisch herstellvermogen	%	>80
Shore-A Härte (3 s)	Shore-A hardness (3 s)	Shore-A hardheid (3 s)		22
Modul 100%	100% Modulus	Modulus 100%	MPa (N/mm <sup>2</sup> )	0,30
Zugfestigkeit	Tensile strength	Treksterkte	MPa (N/mm <sup>2</sup> )	0,40
Bruchdehnung	Elongation at break	Rek bij breuk	%	350

Spezifikation	Specification	Specificatie	
International	International	Internationaal	ISO 11600 F-25 LM DIN 18540 SNJF Façade 25 E
Deutschland	Germany	Duitsland	
Frankreich	France	Frankrijk	

Fugen	Joints	Voegen		
<i>Netto geschätzter Verbrauch</i>	<i>Net estimated usage</i>	<i>Netto verbruiksschatting</i>		
Fugenmeter pro Kartusche	Metres of joint per cartridge	Meters voeg per koker	4 x 6 mm	12,0 m
290ml für verschiedene	290ml for various	290ml voor verschillende	6 x 6 mm	8,0 m
Fugendimensionen.	joint sizes.	voegmaten.	8 x 6 mm	6,0 m
(Breite x Tiefe)	(width x depth)	(breedte x diepte)	12 x 8 mm	3,0 m
			16 x 10 mm	1,8 m
			20 x 12 mm	1,2 m
<i>Vorfüllmaterial</i>	<i>Back up material</i>	<i>Rugvulling</i>		
Für die richtige Fugentiefe und zur Verhütung von dreiseitiger Haftung Vorlegeband benutzen.	Install back up material for the right joint depth and in order to prevent three side adhesion.	Voor de juiste voegdiepte en ter voorkoming van drie flanken hechting rugvulling gebruiken.		
<i>Fugendimensionierung</i>	<i>Joint dimensions</i>	<i>Voegafmetingen</i>	Breite / width	Tiefe / depth
Minimum Breite	Minimum width	Minimum breedte	breedte	diepte
Maximum Breite	Maximum width	Maximum breedte	4 mm	
Fugenverhältnis	Joint connection	Voegrelatie voor voegen	25 mm	
			4-8 mm	6 mm
			10-12 mm	8 mm
			14-16 mm	10 mm
			18-20 mm	12 mm
			22-24 mm	14 mm



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## Data sheet

## ZWALUW HYBRIFLEX-LM SSF

<b>Product</b>	One component moisture curing, low-modulus sealant
<b>Properties</b>	<input checked="" type="checkbox"/> Free from isocyanates and silicones <input checked="" type="checkbox"/> Excellent adhesion to most building substrates <input checked="" type="checkbox"/> Highly resistance to ageing and weathering <input checked="" type="checkbox"/> Permanent elasticity under all climate conditions
<b>Standard colours available</b>	White - Grey - Black – Beige - Brown
<b>Packaging</b>	290 ml cartridges / 600 ml foil bags / 200 litres drums
<b>Where to use</b>	Expansion & Sealing on interior and exterior for almost all type of building material as : wood, MDF, brick, gypsum, concrete, natural stones, tiles, ceramic, steel, aluminium, zinc, copper, brass, stainless and chrome steel, glass, plastics, ABS, roofing and isolating material.
<b>Technical data</b>	
Type	Hybrid-polyurethane based compound
Consistency	Non-Sag paste
Density	≈ 1.35 g / ml
E-modulus at 100 %	≈ 0,30 MPa
Elongation at break	> 650 %
Tensile at 100% elongation	≈ 0,50 MPa
Elastic recovery	> 80%
Shore-A hardness	≈ 22°
Temperature resistance	-30°C > +80° C. (to 120°C for short exposure)
Application temperature range	+5°C > +35° C.
Shrinkage	None
Slump	None
Skin Time	≈ 120 min. (23° C. & 50 % R.H.)
Curing speed	≈ 2 mm/day (23° C. & 50 % R.H.)
<b>How to use</b>	
Surface preparation	Joint walls must be sound, clean, dry and free from oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. Install bond breaker to prevent bond at base of joint. Priming is not usually necessary. Most substrates only require priming if testing indicates a need or where sealant will be subjected to continue water immersion after cure. Consult our technical service for additional information.
Application	Apply with hand or pneumatic guns (maximum required pressure : 3,5 kg). When applying avoid air entrapment. Smooth with joint nail or putty knife.
Cleaning	Material : immediately with white spirit. Hardened sealant can only be removed mechanically. Hands : soap and water.

**Safety** « Safety data sheet according to 91/155/CEE » on request

The information, and, in particular, the recommendations relating to the application and end-use of this product, are given in good faith based on our current knowledge and experience of the product when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, no any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. Edition : 10/02/04

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## Data sheet **ZWALUW HYBRIFLEX-LM SSF**

### Shelf life

- 9 months in original closed packing, at temperatures +5 < +25°C

### Limitations

- Avoid exposure to high levels of chlorine.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not use in joints deeper than 20 mm.

### Test standard

- Meets the ISO 11600 F-25LM standards.
- Meets the SNJF 1<sup>st</sup> category standards.
- Meets the DIN 18540 standards.

### Limited warranty

Den Braven France warrants that its products will conform to Den Braven France specifications at the time of application or use. The products must be stored in accordance with Den Braven France recommendations, and used or applied before the earliest of expiration date of such other period or recommended storage time stated in the Den Braven France products literature. If notified, in writing, of a claim within three months of the product's use or application, Den Braven France will, at its option, replace or refund the purchase price of any Den Braven France products which does not satisfy the foregoing warranty.

THE FOREGOING SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR DEFECTS OR FAILURE OF THE PRODUCTS, AND THE SOLE AND EXCLUSIVE LIABILITY OF Den Braven France, THE WARRANTIES STATED ABOVE ARE IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

### Limitation of liability

Den Braven France shall, in no event, whether the claim is based on warranty, contract, tort, strict liability, negligence or otherwise, be liable for incidental or consequential damages, or for any damages in excess of the amount of the purchase price.

### Note

On many products, Den Braven France could accept to extend its warranty for some specific application. For further information, contact us.

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