



PROCESS SOLUTIONS

Release Agents, Additives & Ancillaries

Composites





Release Agents, Additives and Ancillaries

BÜFA

As manifold as procedures and methods of processing are, BÜFA's portfolio of release agents, additives and auxiliary agents is just as varied. In the following pages of this brochure, we would like to present a selection of our line of products.

BY

Along with our BÜFA products, Byk additives in particular are also available to users. The use of Byk additives optimises your production sequences and improves the quality of your finished products.

Byk additives are already in many BÜFA products. The following table provides information on our most important additives for de-airing, wetting and dispersing as well as surface and rheology additives.

Chem Trend

Chem Trend is the world-wide leading manufacturer of release agents for the most different industrial applications, e.g. composite materials, plastic and rubber applications.

Would you like to optimise your production and make processes more efficient?

Then the semi-permanent release agent systems made by Chem Trend offers you the right solution.







Release Agents, Additives and Ancillaries

BÜFA®-Release Agents

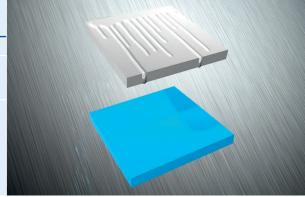
Product name	BÜFA®-Release Agent for Metalmoulds	BÜFA®-Release Laquer Nature	BÜFA®-Release Wax Paste	BÜFA®-Release Wax Liquid	BÜFA®-Mould Cleaner 3125
Art. No.	741-0070	741-0052	741-0054	741-0063	742-0596
Characteristics	Based on soybean lecithin dissolved in butyl acetate	Based on polyvinyl alcohol dissolved in ethanol/water	Based on synthetic wax and white spirit	Based on polyethylene wax dissolved in white spirit	Based on butyl acetate, toluene-free
	Mould release agent for moulds made of pore-free materials (steel, glass, etc.)	Mould release agent for use on plastic moulds, glossy after drying, tough, PVA layer	When used on moulds made of plastic, wood, gypsum, etc., mainly used with the release lacquer BÜFA®-Release Lacquer Nature	When used on complicated moulds made of plastic, wood, gypsum, etc., also often used with the release lacquer BÜFA®-Release Lacquer Nature	Highly effective cleaner for removing wax and polyester residue from mould surfaces
Product name	BÜFA®-BF 500 Liquid	BÜFA®-BF 700 Mould			
Product fiallie	mould release wax	release wax paste			
Art. No.	022-0500	022-0700			
Characteristics	Liquid release wax,	Release wax paste,			

BÜFA®-Primer

Product name	BÜFA®-Primer Metal	BÜFA®-Primer Wood	BÜFA®-Primer Polymere concrete	BÜFA®-Resin UP 0122
Art. No.	742-0079	742-0074	742-0078	700-0122
Characteristics	Based on a special silane acrylate dissolved in alcohol	Based on aromatic polyisocyanate in organic solvents	Based on a special silane acrylate dissolved in alcohol	Unsaturated polyester dissolved in styrene
	Used as a bonding layer when coating metal, glass and ceramic with GRP	Used as a bonding layer when coating wood surfaces with GRP	Improves mechanical properties in concrete applications. Improves adhesion on glass fibres	Optimises adhesion on PVC

BÜFA®-Additive Viscosity Control

Product name	BÜFA®-Additive Spray thinner	BÜFA®-UP Thixpaste	BÜFA®-Additive Viscoreducer
Art. No.	742-0013	740-0007	742-0018
Characteristics	Specially coordinated mixture of acetone and styrene	Mixture of thixotropizing agents in UP resin	Styrene-free solution of polymers in MMA
	Optimises the spraying viscosity of gelcoats	For thixotropizing UP resins, paste consistence, easy to meter (5 - 20 %) and work in	For reducing the viscosity of filled systems to improve working properties or the degree of filling

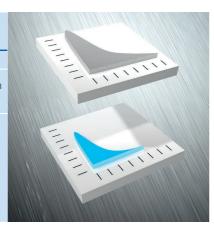


Release Agents, Additives and Ancillaries



LSE Control

Product name	BÜFA®-Additive LSE	BÜFA®-Paraffine Solution 2,5	BÜFA®-Paraffine Solution 6	BÜFA®-Paraffine Solution 10
Art. No.	742-0077	742-2025	742-2060	742-0082
Characteristics	Milieu additive dissolved in styrene	2.5 % paraffin solution in styrene and xylene	6 % paraffin solution in styrene and xylene	10 % paraffin solution in styrene and xylene
	An alternative to paraffin wax to reduce the emission of styrene, contains an adhesion promoter, can be	For tack-free curing of UP resins. Effective at temperatures between 18 - 32 °C	For tack-free curing of UP resins. Effective at temperatures between 18 - 32 °C	For tack-free curing of UP resins. Effective at temperatures between 18 - 32 °C



Further Additives

Product name	BÜFA®-Lubricant ST	BÜFA®-Accelerator Foaming Agent
Art. No.	742-0002	020-0880
Characteristics	Special lubricant based on sulphonic acid ester	Foaming Agent
	For lubricating piston and packing systems, resin conveying pumps	BÜFA®-Foaming Resins



Buffing and Polishing

Product name	BÜFA®-BF 50 Buffing Polishing Paste, extra heavy duty
Art. No.	022-0050
Characteristics	Buffing and polishing paste, extra strong, without silicone, ammonium and wax, for hand and machine application.
	BF 50 is a special combination of highly effective abrasive particles. BF 50 removes scratches and buffing marks on polyester and epoxy moulds



	BÜFA®-BF 100 Buffing Polishing Paste, heavy duty	BÜFA®-BF 150 Polishing Paste, extra fine
	022-0100	022-0150
1	Buffing and polishing paste, medium fine, without silicone, ammonium and wax, for hand and machine application	Polishing paste, extra fine, without silicone, ammonium and wax, for hand and machine application
	BF 100 was developed for a broad spectrum of universal applications. For repair, maintenance and preparation of polyester and epoxy moulds	BF 150 was developed for the 'top finish' on moulds and especially for reworking finished components and fresh PU lacquers. Sprayed mist is finely polished off and paint residue removed

Release Agents, Additives and Ancillaries



Chemlease®-Products: Release agents, Mold Cleaners and Mold Sealers

Product name	ArtNo.	Description			
Chemlease® mold cleaners promote efficiency and enhance part quality for composites molders					
Chemlease® Mold-Cleaner EZ	023-0602	Chemlease® Mold-Cleaner EZ is a special blend of HAP free solvents designed to remove wax and contaminants from composite molds. HAPs are not formula constituents of this product.			
	Chemlease® release agents for addressing a variety of composites molding situations				
Chemlease® 2185	023-2185	Chemlease® 2185 is a unique semi-permanent mold release agent that combines the multiple release capability of a typical semi-permanent product with the application ease of a liquid wax product. 2185 is well suited to the production of high gloss parts from molds that are prepared to a high gloss finish.			
Chemlease® 41 EZ	023-0651	Chemlease® 41 EZ is a unique semi-permanent mold release system developed specifically for use where a non-cosmetic finish is required. It is very easy to apply and has both the high heat tolerance and high durability exhibited by typical Chemlease® semi-permanent products.			
Chemlease® 41-90 EZ	023-0652	Chemlease® 41-90 EZ is formulated to provide easy release on parts with low draft angles. Chemlease® 41-90 EZ is the high slip version of Chemlease® 41 EZ and is used for the molding of abrasive or low draft parts, often on "B" sides in closed molds.			
Chemlease® 75 EZ	023-0653	Chemlease® 75 EZ is a unique semi-permanent mold release designed for use in circumstances where pre-release may be a concern. 75 EZ exhibits all the qualities and characteristics of Chemlease® PMR EZ but is formulated to offer less release ease, should this be needed. It performs well in releasing all commonly-known molding resins, including, but not limited to; polyester, vinyl ester, DCPD, phenolic, epoxy and BMI.			
Chemlease® IM02	023-6002	Chemlease® IM02 is an internal release system and lubricant primarily used for non-gel-coated polyester and epoxy resins. When added to polyester resin it reduces the dependency on the external release agent by imparting better flow properties to the polyester resin. Chemlease® IM02 was specifically developed for non-gelcoated parts and the production of UP resins by hot and cold processing, vacuum injection and injection molding. In pultrusion applications, Chemlease® IM02 performs very well as an internal lubricant, offering faster throughput of pultrudate and reduced die wear. Molded parts can generally be painted and bonded without the post cleaning operations usually required when using conventional external release agents.			
Chemlease® PMR EZ	023-0655	Chemlease® PMR EZ is a unique semi-permanent mold release agent developed specifically for use on high quality gloss finish molds. It performs well in releasing all commonly-known molding resins, including, but not limited to; polyester, vinyl ester, DCPD, phenolic, epoxy and BMI. PMR EZ is easy to apply and forms an invisible, inert release film on the mold surface that retains or may even slightly enhance the basic high gloss finish of the mold. Chemlease® PMR EZ forms a micro-thin film on the mold surface such that, even with multiple touch-up cycles, the product will not produce any appreciable build-up. The release film is extremely durable and will generate multiple releases, even when molding with the most chemically aggressive resin systems. The release film has very high heat tolerance, known to withstand temperatures in excess of 400 °C (750 °F).			
Chemlease® PMR 90 EZ	023-0605	Chemlease® PMR 90 EZ is formulated to provide easy release on parts designed with low draft angles. Chemlease® PMR 90 EZ is the high slip version of the Chemlease® PMR EZ and is used for the molding of abrasive or low draft parts, often on "A" sides in closed mold situations. It performs well in releasing all commonly-known molding resins, including, but not limited to; polyester, vinyl ester, DCPD, phenolic, epoxy and BMI.			
Chemlease® MPP 2180	023-0712	Chemlease® MPP 2180 is a solvent-based adhesion promotor and mould sealant that was especially developed to meet requirements for producing wind turbine blades. It is used on plastic moulds. Polyester (gelcoat and non-gelcoat processes), epoxy or phenol resin are also suitable substrates. Chemlease® MPP 2180 is not suitable for sealing moulds with finetextured surfaces or ceramic tools.			
Chemlease® 2196 W	023-2196	Chemlease® 2196 W is a semi-permanent, water based release agent for demoulding components made of composite materials. Chemlease® 2196 W is applied to the mould at room temperature. When demoulding, the surface texture of the mould is transferred to the demoulded component. Chemlease® 2196 W improves demouldability, especially for thermoformed parts.			
Chemlease® 2203 W	023-0620	Chemlease® 2203 W is a water based, semi-permanent relaease agent for demoulding parts made of composite materials, including polyurethane, gelcoat and epoxy resin systems. Chemlease® 2203 W can be applied at room temperature or on hot moulds. It does not create high gloss surfaces on parts.			
		Chemlease® Mold Sealers			
Chemlease® 15 Sealer EZ	023-0650	Chemlease® 15 Sealer EZ is developed to condition and seal mold surfaces, reduce mold porosity and act as a base for new or reconditioned molds. It is compatible with fiberglass, aluminum, steel, and most solid or dense surfaces and is stable at high temperatures. Usage of Chemlease® Sealer 15 EZ reduces overall labor time and costs in mold maintenance and by shortening mold break-in time.			







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BYK-Products

Silicone-free de-airing agents for unsaturated polyester, epoxy and polyurethane systems					
Product name	BYK-A 500	BYK-A 501	BYK-A 515	BYK-A 555	BYK-A 560
Art. No.	053-0500	053-0501	053-0515	053-0555	053-0560
UP resins	✓	(✓)	✓	✓	✓
Fibre wetting			(✓)		✓
Gelcoats	(✓)	(✓)	(✓)	✓	✓
Casting resin	(✓)	(✓)	(✓)	✓	✓
Transparent systems	✓				
Epoxy resins	✓	✓		(✓)	(✓)
PUR systems	(✓)	(✓)	✓	(✓)	
Acrylate systems			✓		

Wetting and dispersing	Wetting and dispersing additives to reduce viscosity and to prevent settling of fillers in cold-curing resin systems			
Product name	BYK-W 980			
Art. No.	053-0980			
Unsaturated polyester resins	✓			
Acrylate resins	✓			
Polyurethane resin systems	✓			
Epoxy resins	✓			

Wetting and dispersing additives to reduce viscosity in cold-curing resin systems				
Product name	BYK-W 909	BYK-W 985		
Art. No.	053-0909	053-0985		
Unsaturated polyester resins	✓	✓		
Acrylate resins				
Polyurethane resin systems		✓		
Epoxy resins		✓		

Wetting and dispersing additives to prevent settling and to stabilise the shade of colour in cold-curing systems			
Product name	BYK-W 909	BYK-W 985	
Art. No.	053-0909	053-0985	
Unsaturated polyester resins	(✓)	✓	
Polyurethane resin systems			
Epoxy resins	(✔)	✓	

(✔): Please get in touch with our Technical Service Department

Release Agents, Additives and Ancillaries



BYK-Products

Styrene emission reducers for unsaturated polyester, DCPD and vinyl ester resins				
Product name	BYK-S 740	BYK-S 750		
Art. No.	053-0740	053-0750		
Orthophthalic acid resin	✓	(✓)		
DCPD based resins		✓		
Isophthalic acid resins	(✓)	✓		
Vinyl ester resins		✓		

Rheology additive for vinyl ester and epoxy resins, unsaturated polyester resins and gelcoats			
Product name	BYK-R 605		
Art. No.	053-0605		
Vinyl ester resins	✓		
Unsaturated polyester resins	✓		
Epoxy resins	✓		
Polyurethane resin systems	✓		
Gelcoats	✓		

 $({\boldsymbol{\checkmark}})\!\!:$ Please get in touch with our Technical Service Department



Release Agents, Additives and Ancillaries



BÜFA®-AE-Cleaner

A new generation of cost-efficient, safe and environment friendly solvents.

In a system with a washing station and a distillation unit is even better for your company and for our environment.

BÜFA@-AE-Cleaner (Art. No. 025-0005) is a highly effective, safe and biodegradable solvent on a dicarboxylic acid base. It is VOC-free and an excellent alternative to well-known cleaning agents for a number of applications.

BÜFA®-Wash – Washing Stations

For easy and efficient use of BÜFA@-AE-Cleaner, use a BÜFA@-Wash Washing Station. Equipped with a heating unit, BÜFA@-AE-Cleaner can be heated which allows your tools to be cleaned quickly and easily. The BÜFA@-Wash Washing Stations easily clean all conventional polyester resins without any odours or pollution of the environment and can be individually equipped with ancillaries.

Art. No.	Product name	Details	Dimension (LxWxH)	
026-1210	BÜFA®-Wash 3 Washing Station	3 heatable sinks	120 x 65 x 195 cm	
026-1213	BÜFA®-Wash 2 Washing Station	2 heatable sinks	68.5 x 59.5 x 76 cm	
				Y

ISIDEST® Vacuum-Distillation Units

This distillation unit made by ISI Umwelttechnik GmbH allows easy distillation of up to 80 % BÜFA@-AE-Cleaner.

Art. No.	Product name	Details
029-1664	LD 20 EX-EVZ, Vacuum Distillation Unit incl. 50 plastic bags	Filling quantity: 15 L Output: 1.33 KW Recovery/h: max. 5.0 L
029-1665	LD 30 EX-EVZ, Vacuum Distillation Unit incl. 50 plastic bags	Filling quantity: 25 L Output: 1.66 KW Recovery/h: max. 7.0 L
029-1662	LD 60 EX-EVZ, Vacuum Distillation Unit incl. 50 plastic bags	Filling quantity: 50 L Output: 4.00 KW Recovery/h: max. 18.0 L
029-1666	LD 120 EX-EVZ, Vacuum Distillation Unit incl. 50 plastic bags	Filling quantity: 100 L Output: 6.00 KW Recovery/h: max. 21.0 L
029-1667	LD 200 EX-EVZ, Vacuum Distillation Unit incl. 50 plastic bags	Filling quantity: 180 L Output: 15.00 KW Recovery/h: max. 60.0 L



For your notes: