

Developing together.

Recipes and ingredients for advanced building products.

Prefabricated products, such as gypsum wall-boards or cement (fiber) boards are highly developed products that require complex industrial production processes.

Chemical additives used in such systems impact both the final product as well as the production process in both positive and negative ways.

To get the highest performance from these chemical additives, a careful balance is necessary to achieve both physical performance parameters as well as economic processing conditions.

BASF recommends ingredient adjustments to maximize the finished product as well as the process in order to meet all requirements.

Testing and evaluating new products directly on the line is in most cases highly risky and expensive. BASF has developed testing methods that simulate standard production process.

This approach can help you choose the right combination of ingredients, which have the highest probability of success to meet your requirements before moving on to costly production plant trials.

BASF offers solutions, chemical raw materials and technical service for

- Gypsum Wallboards
- Gypsum and Cement (Fibre) Boards
- Joint Compounds
- Gypsum based Plasters



Application Techology and technical support

Finding the right ingredients that exactly fit local raw materials and production process while still meeting market requirements is a highly challenging game. We can support your search to identify the right BASF Additives according to your technical requirements. BASF can also provide lab support with a broad variety of recognized testing methods for reliable pretesting of additives for the most critical steps of the production process thereby reducing time spent on costly production trials.

Testing methods for:

- Setting time
- Rheology
- Mixing and Foaming Processes
- Drying
- Final Physical Properties















Analytics and Mineralogy Service

BASF provides analytical profiles of inorganic raw materials such as gypsum, stucco, cement and other minerals that characterize regional differences. Such information identifies potential incompatibilities and aids in constructing an effective additive package.

BASF offers:

- XRD and XRF measurements
- Particle Size Distribution
- Reactivity and setting
- Content and Type of Impurities/Clay Index

Raw Materials and Solutions for Prefabricated Products

Product	Chemistry	Solid Content	Availability*	Application	ons					Character
					<u>s</u>		Joint Compounds			
				Gypsum Wallboard	other Gypsum Boards	Cement Boards			Plasters	
							CaSO ₄ based powder	Disper- sion based mastic	CaSO ₄ based powder	
Foaming Agents			-							
Vinapor® GYP 3110	Anionic based surfactant mixture	Standard	North America, Europe, Asia/Pacific, South America	•						Highly unstable foam for very coarse air pore design, e.g., light-weight boards
Vinapor® GYP 3550	Anionic based surfactant mixture	Standard	North America, Europe, Asia/Pacific, South America							Unstable foam for very coarse air pore design, e.g. light-weight boards
Vinapor® GYP 3711	Anionic based surfactant mixture	Standard	North America, Europe, Asia/Pacific, South America	•						Unstable foam. High foam efficiency for coarse air pore design
Vinapor® GYP 3702	Anionic based surfactant mixture	Standard	North America, Europe, Asia/Pacific, South America	•						Medium stable foam. High foam efficiency for medium coarse pores
Vinapor® GYP 2620	Anionic based surfactant mixture	Standard	Europe, Asia/Pacific	•		•				Stable foam for small air pores and robust processing
Vinapor® GYP 2630	Anionic based surfactant mixture	Standard	Asia/Pacific	•	•	•				Stable foam for small air pores and robust processing
Vinapor® GYP 2680	Anionic based surfactant mixture	Standard	North America, Europe, Asia/Pacific, South America	•	•					Stable foam for small air pores and robust processing
Vinapor® GYP 10	Anionic based surfactant mixture	High	North America, Europe, Asia/Pacific, South America	•	•	•				Stable foam for small air pores and robust processing. Increased solid content
Vinapor® GYP 4220	Non-ionic surfactant	Standard	North America, Europe, Asia/Pacific, South America			•		•		High stability in cementitous / alkaline surrounding. Limited foaming power, workability agent
Superplasticizers										
Melcret® K 2000 L	Ketone- condensate	40%	North America, Europe, Asia/Pacific, South America		•					Highly robust water reducer for deco- rative applications and glass mat facer boards. Very high tolerance to clay impurities
Melment® L 50	Melamine- formaldehyde condensate	40%	North America, Europe, Asia/Pacific, South America	•	•					Reduced formaldehyde content, very low content of sodium sulfate
Melment® F 15 G	Melamine- formaldehyde condensate	Powder	North America, Europe, Asia/Pacific, South America						٠	Reduced formaldehyde content, extended open time
Melment® F 17 G	Melamine- formaldehyde condensate	Powder	North America, Europe, Asia/Pacific, South America						•	Reduced formaldehyde content
Melflux® PCE 239 L	Polycarboxylic ether	35%	North America, Europe, Asia/Pacific, South America	•	•	•				Slight water reduction, reduced retardation properties. Usage in combination with stable foams
Melflux® PCE 1493 L	Polycarboxylic ether	40%	North America, Europe, Asia/Pacific, South America	•	•	•		•		PCE for BNS replacement. Usage in combinations with stable foams
Melflux® PCE 26 L/ F.F.	Polycarboxylic ether, foam- friendly	40%	North America, Europe, Asia/Pacific, South America	•	٠	•				Foam structure optimized. BNS replacement with outstanding dispersing properties

Product	Chemistry	Solid Content	Availability*	Application	ons		Character			
				Gypsum Wallboard	other Gypsum Boards	Cement Boards	Joint Compounds		Plasters	
							CaSO ₄ based powder	Dispersion based mastic	CaSO ₄ based powder	
Melflux [®] PCE 541 L/ F.F.	Polycarboxylic ether, foam- friendly	44%	North America, Europe, Asia/Pacific, South America	•	•	•				Foam structure optimized. BNS replacement with high dispersing properties
Melflux® PLUS 1085 L	Phosphate based polymer	32%	Europe, Asia/Pacific,	•	•	-				Phosphate based polymer for high water reduction properties at very low retardation of gypsum set.
Melflux® PLUS 312 L	Phosphate based polymer	35%	Asia/Pacific		•					Phosphate based polymer for high water reduction properties at very low retardation of gypsum set.
Melflux® 4930 F	Polycarboxylic ether	Powder	North America, Europe, Asia/Pacific, South America					•		Fast dissolving water reducer. Dispersant for excellent workability and improved mixing. E.g., machine applied mortars
Melflux® 5581 F	Polycarboxylic ether	Powder	North America, Europe, Asia/Pacific, South America					•		Highly efficient water reducer
heology Modifiers/Thicke	ners/Stabilizers/Di	spersants								
Starvis [®] 308 F	High-molecular weight synthetic copolymer	Powder	North America, Europe, Asia/Pacific, South America					•	•	Water retaining polymer for reduced stickyness and improved workability
Starvis® T 50 F	Polyacrylamide	Powder	North America, Europe, Asia/Pacific, South America					•		Thickener for improved sag resistance
Starvis® T 51 F	Polyacrylamide	Powder	North America, Europe, Asia/Pacific, South America					•		Thickener for improved sag resistance, delayed solubility
Starvis [®] SE 25 F	Starch-ether	Powder	North America, Europe, Asia/Pacific, South America						•	Low retarding starch-ether. Low impact on yield-point. Improved workability
Starvis® SE 35 F	Starch-ether	Powder	North America, Europe, Asia/Pacific, South America						•	Starch-ether, with good impact on yield-point. Improved workability
Starvis® SE 45 F	Starch-ether	Powder	North America, Europe, Asia/Pacific, South America						•	Starch-ether with improved dosage efficiency. Very high impact on yield-point, improved workability
Starvis® S 3911 F	High-molecular weight synthetic copolymer	Powder	North America, Europe, Asia/Pacific, South America					•		Optimized water storage. Shrinkage improvement through reduction of cappilary pores
Melvis® WA GYP 1000	EO/PO blockcopolymer	Powder	North America, Europe, Asia/Pacific, South America					•	٠	Wetting agent for improved workability. Esp., machine applied mortars
lydration Control										
HyCon® S 7100 L	Aqueos suspension, based on calcium silicate hydrate	25%	North America, Europe, Asia/Pacific, South America			•				Hardening accelerator for Ordinary Portland Cement (OPC) binded systems. High early strength without negative influence on final strength
HyCon [®] S 3200 F	Calcium-silicate- hydrate	Powder	North America, Europe, Asia/Pacific, South America			•				Hardening accelerator for Ordinary Portland Cement (OPC) binded systems. High early strength without negative influence on final strength

⁼ recommended

 $^{^{\}star} \, \text{Listings in major countries available, to be checked for single countries regional production partly available}$



The information in this leaflet is based on our current knowledge and experience. It does not constitute the agreed contractual quality of the product and, in view of the many factors that may affect processing and application of our products, does not relieve processors from carrying out their own investigations and tests. The agreed contractual quality of the product at the time of transfer of risk is based solely on the data in the specification data sheet. Any descriptions, drawings, photographs, data, proportions, weights, etc. given in this publication are subject to change without prior notice. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed (02/2020).

^{® =} registered trademark of BASF