

Admixtures, Release Agents, Surface Treatments and Services for the Construction Industry



LUBRICANTS.
TECHNOLOGY.
PEOPLE.



LUBRICANTS. TECHNOLOGY. PEOPLE.

Fully focused on providing top-quality lubricants and related specialities.

We develop innovative and holistic solutions for a wide variety of applications.

We value the high level of commitment of our employees and the relationship of trust between them.



Key Information

Company: FUCHS LUBRICANTES S.A.U.,
a FUCHS Group company

Head Office: Castellbisbal

Product Range: Over 10,000 products for all kinds of uses in
industry and the automotive sector.

Certifications: ISO 9001, UNE-EN ISO-14001

FUCHS has been developing, producing and selling top-quality lubricants for over 85 years for virtually all industrial uses and sectors. With more than 100,000 customers and 60 companies worldwide, the FUCHS Group is the leading independent supplier of lubricants

A team of nearly 500 R&D scientists and engineers around the world work to ensure the satisfaction of our customers. The Spanish subsidiary, which has its own laboratory specialising in construction, is a leading company in the development of these products within the FUCHS group. In our technology center we link interdisciplinary expertise in a quick and efficient way – and work on innovative lubricant solutions to meet the demands of today and tomorrow every single day.

FUCHS products stand for performance and sustainability, safety and reliability, and efficiency and cost savings. They represent a promise: Technology that pays back.



CONTENTS

01	ADMIXTURES	
	Introduction	7
	Plasticisers	8
	Superplasticisers	9
	Water repellents	9
	Accelerators and retarders	10
	Other	10
	Application tips	11
02	RELEASE AGENTS	
	Introduction	13
	Mineral and vegetable oil-based release agents	14
	Emulsions.....	16
	ECOLABEL	17
	Application tips	18
	Storage	18
	CLP Regulation	18
	Defects produced in concrete by release agents and possible causes	19
03	SURFACE TREATMENTS	
	Surface treatments	21
	Application tips	21
04	OUR ADDED VALUE	
	FUCHS Construction Laboratory	23
	Reference tests for admixtures	24
	In search of the perfect release agent for every one of our customers	25
	Corrosion testing for release agents	26
	Environment, health and safety	27
	Sustainability	27

01

ADMIXTURES

Introduction

Within the framework of the European Regulation laying down harmonised conditions for the marketing of construction products, the EN-934 series of standards defines admixtures as follows:

Admixtures are those substances or products which, when incorporated into concrete, mortar or grout (before or after mixing or during additional mixing), in a proportion not exceeding 5% of the weight of the cement, produce the desired modification in that concrete, mortar or grout in its fresh or hardened state, of any of its characteristics, usual properties or behaviour.

*Admixtures for concrete, mortar and grout.
Standard: classification and definitions,
Prof. Dr. Demetrio Gaspar-Tebar, IETCC/CSIC.*

In addition, admixtures must not impair the mechanical, chemical or physical characteristics of the concrete, mortar or grout, or the characteristics of rebars, for both reinforced and prestressed concrete.

This chapter contains the following classes of FUCHS admixtures, which meet all regulatory requirements:

- Plasticisers and superplasticisers.
- Water repellents.
- Accelerators and retarders.
- Other: deaerating agents, thixotropic non-sagging agents and polymers.

FUCHS admixtures have been developed to meet the highest demands of our customers. All our admixtures are CE certified and have a declaration of performance document, if required by the standard.

Plasticisers

Plasticising admixtures are especially recommended when the sand has few fine components or the cement dosage is weak.

They improve the workability of concrete because they provide greater plasticity in a given water/cement ratio. They allow the amount of mixing water to be reduced by between 5 and 20%, depending on the type of aggregate used.

They help to control setting time in hot weather, as they reduce segregation and the tendency to shrink, resulting in high cohesion and total hydration in the cement, which makes it possible to produce larger and more durable castings.

Dry / semi-dry concrete

Products	Description
TENSIOPLAST PB	Plasticizer for semi-dry concrete recommended for the manufacture of paving stones, blocks and terrazzo.
TENSIOPLAST OP	Plasticizer for semi-dry concrete recommended for the manufacture of pipes, boxes and lattices.
BRYTEN AC 600	Rheological admixture for semi-dry concrete recommended in the manufacture of paving stones, blocks and terrazzo.

Prestressed concrete

Products especially suitable for concrete intended for the manufacture of prestressed beams and slabs with continuous system machines and for all types of profiles.

Products	Description
TENCEM 2	Plasticizer and air-entraining agent for prestressed concrete. Product recommended by leading manufacturers of continuous system machinery.
TENCEM 3	Plasticizer and air-entraining agent for prestressed concrete recommended for concrete with many fine aggregates due to its dispersing effect.
TENCEM SP	Plasticizer and air-entraining agent based on polycarboxylates with superplasticizing effect to achieve greater water reduction.
TENCEM HR	Plasticizer and air-entraining agent based on polycarboxylates to obtain high strength.
TENCEM NW 20	New plasticizer for prestressed concrete. Meets ASTM C 494 Type A plasticizing admixture standard. Helps to obtain high strength in a few hours of curing.

Superplasticisers

Superplasticising admixtures significantly increase the workability of concrete without the need to add more water during mixing. In mixtures whose workability is already optimal, they also make it possible to reduce the amount of water in the mix to obtain greater final strength.

Fluid concrete

Products	Description
BRYTEN NF	Universal use for all types of applications.
BRYTEN NF 16	Recommended for mortars, especially for sprayed applications such as GRC.
BRYTEN NF 20 S	Superplasticizer with retardant effect for mortars and GRC. Suitable for summer temperatures.
BRYTEN NF HAC	Developed for self-compacting concrete. Ensures a fluid concrete without segregation of aggregates or separation of water.
BRYTEN NF 25R	Superplasticizer with retardant effect for any type of concrete. Suitable for summer temperatures or if a retardant is needed.

Water repellents

Water-repellent admixtures increase the waterproof quality of hardened concrete, facilitate the evaporation of water in the curing phases and improve the workability of concrete while maintaining its mechanical strength.

Products	Description
BRYTEN L	Concentrated water repellent for concrete blocks, terrazzo and paving stones.
BRYTEN LX	For semi-dry concrete. Specially recommended for paving stones and medium precast units.
BRYTEN PREMIUM S2C	State-of-the-art water repellent for all types of concrete. Prevents the appearance of efflorescence. Highly effective and durable.
BRYTEN H	Water-repellent powder. Suitable for terrazzo.

Accelerators and retarders

Water-soluble products that act chemically with the concrete, modifying the curing speed, as well as the strength curve.

Products	Description
HORMIDUR F	Chloride-free setting accelerator with high initial strength. Provides greater advancement in the setting curve.
HORMIDUR SC	Chloride-free setting accelerator that enables production levels to be maintained at low temperatures.
BRYTEN RF	Chloride-free setting retarder, suitable for summer temperatures or in production situations requiring preservation of rheology.

Other

Products	Description
BRYTEN IT 125	Deaerating agent that reduces the air entrapped in concrete.
BRYTEN IT 250	Deaerating admixture that removes entrapped air and surface bubbles.
BRYTEN TX	Thixotropic non-sagging agent for concrete and mortar. Recommended for vertical applications.
BRYTEN GRC	Polymer admixture for concretes and mortars. Recommended for improving the strength of GRC concrete.

Application tips

Here are some application tips for optimizing the use of admixtures in your production processes:

- The dosage of an admixture is always calculated based on the weight of cement in the concrete.
- The proportion to be used must be within the ranges given in the technical data sheet for the product and adjusted according to the results obtained.
- It is always necessary to carry out preliminary tests to adjust the product dose to the concrete in question.
- Liquid admixtures should be added when the concrete already contains part of the water or after mixing, never before.
- Solid admixtures must be previously mixed dry with sand, gravel and cement before adding water.
- The mixing time must be long enough to ensure the product is evenly spread throughout the mix.
- Always keep in mind that, apart from the main purpose for which an admixture is being used, there are secondary purposes or effects that should be taken into consideration.
- If more than one admixture is used, they should not be mixed together beforehand. They should be incorporated into the mixture one after the other, ensuring that one is evenly mixed in before adding the next. The order is determined according to the type of admixture (check with the FUCHS Technical Department).



02

RELEASE AGENTS



Introduction

How does a release agent work?

Release agents achieve their purpose through physical and chemical processes.

Release agents acting through physical processes, such as pure mineral oils, reduce the bond between the concrete and the mould or forming surfaces. They form a separating film that prevents contact between the mould and the concrete. The isolating action of these release agents is limited by the low resistance of the film to the effects of temperature and abrasion.

Mineral oil-based release agents tend to leave residue on the concrete. Their separating action is mild and based mainly on physical processes. They are only suitable for simple formwork stripping tasks with low requirements on the quality of the concrete surface finish. Some mineral oil release agents contain additives to compensate for the deficiencies of pure oil, combining physical and chemical processes to achieve a good separating action.

Vegetable oil-based release agents or emulsions contain fatty acids or esters. They are used as a separating substance for formwork stripping. The fatty acids react chemically with the water cations of the concrete to create metallic soaps, which form the predetermined breaking point between the concrete and the formwork after it has hardened.

This type of release agent contains additives to minimize pores and shrinkage cavities, as well as providing corrosion protection for steel formwork.

The composition of our range of RENOCAST release agents, according to their basic raw material, is summarized in the following table:

	Mineral oil-based	Vegetable oil-based	Emulsions
Basic Composition	Mineral oils (approx. 80 to 95%) fatty acids and esters (approx. 2 to 15%)	Natural or synthetic esters (approx. 40-60%)	Fatty acids, esters and waxes (approx. 15-35%)
Thinner	Solvent	Solvent	Water
Additives to minimize pores	✓	✓	✓
Anti-corrosive additives	✓	✓	✓
Emulsifiers			✓

Mineral and vegetable oil-based release agents

Scope of application

Mineral oil-based release agents are especially recommended for precast plants and in structural and civil engineering. These products are for universal use. They are also used for immediate formwork stripping.

Vegetable oil-based release agents are often recommended for special uses or high quality finishes. They are typically used in precast plants on all common formwork: metal, plastic, chipboard and others. Some of these products can be used at formwork temperatures up to 130 °C.

Main advantages of RENOCAS mineral or vegetable oil-based release agents:

- Smooth, non-porous surfaces.
- Uniform, clean finishes.
- High protection against corrosion in steel formwork.
- Good bonding of plaster, adhesives and paints.
- Suitable for use in vertical and horizontal moulds.
- Less fog formation. Greater safety for staff and the environment.

Mineral oil-based

Release Agents

Products	Description
RENOCAST DES 6	Mineral oil-based emulsifiable product especially suitable for formwork stripping of concrete, in both precast and in public works.
RENOCAST DES 8	Mineral oil-based emulsifiable product suitable for all types of moulds (wood, silicone and smooth metals).
RENOCAST DES 20	Low-viscosity mineral oil for precast concrete with metal, resin and concrete moulds.
RENOCAST DES 20L	Low-viscosity mineral oil that protects moulds and extends their service life.
RENOCAST DES 40	Medium-viscosity mineral oil for all types of moulds, even with difficult shapes.
RENOCAST DES 40L	Mineral oil-based release agent suitable for use in medium and large precast plants.
RENOCAST DES 42	Mineral oil to dilute with solvent or diesel, containing additives to protect moulds.

Concrete mixers

Products	Description
RENOCAST DES HO	Non-stick release agent recommended for dry concrete production.
RENOCAST DES TY	Non-stick release agent recommended for fluid concrete production.
RENOCAST MIX 15	Medium-viscosity, non-stick release agent for all production types.

Special uses

Products	Description
RENOCAST DES DF	Product developed for turning machines and immediate formwork stripping.
RENOCAST DES TM	Product for the manufacture of concrete tiles.
RENOPAL 550	Synthetic release agent for immediate mould release.

Vegetable oil-based

Release Agents

Products	Description
RENOCAST DES 50 BI	Low-viscosity, odourless release agent recommended for the manufacture of panels.
RENOCAST DES 50 BS	Low-viscosity release agent that can be used in heat-insulated processes.
RENOCAST DES 55	Release agent for all types of concrete and units.
RENOCAST DES 57	Medium-viscosity release agent for very high quality finishes.
RENOCAST DES 58 AL	Vegetable oil with waxes for top quality finishes.

Concrete mixers

Products	Description
RENOCAST MIX ECO	Universal and biodegradable protector.

Emulsion release agents

These can be used in precast plants and in all standard formwork, including metal sheet and phenolic film board. Compared to solvent release agents, emulsions have added advantages, particularly in terms of environment, health and safety.

FUCHS's R&D is focussed on the development of this type of product, which uses the latest technology and ensures better performance and finish.

It is recommended to apply this type of product by means of a spray system in order to ensure that the oil, containing its active ingredients, forms a uniform film over the formwork. When the release agent turns from white to colourless, it means that the water has evaporated, and the concrete can then be poured into the mould. The evaporation time depends largely on the ambient temperature, the lower the temperature, the longer the process will take.

All FUCHS emulsion release agents are supplied ready for direct use, without requiring dilution or any other previous preparation.

Main advantages:

- Biodegradable.
- No hazard labelling.
- Application temperature up to 70 °C (formwork temperature).
- Ready for direct use.
- Uniform, clean finishes.
- High protection against corrosion in steel formwork.
- Good bonding of plaster, adhesives and paints.
- Suitable for use in vertical and horizontal areas.
- Non-flammable.

Release Agents

Products	Description
RENOCAST DES EB 50	Vegetable emulsion for all types of concrete, and in processes with heat-insulated moulds or steam-cured concrete.
RENOCAST DES EB 55	Low-viscosity release agent for all types of precast concrete where a smooth and defect-free surface finish is required.
RENOCAST DES EB 60	Vegetable emulsion, recommended for the manufacture of beams and units with complex shapes.
RENOCAST DES EB 25	Wax emulsion for architectural panels with top-quality glossy finishes.
RENOCAST DES EB 30	Low-viscosity wax emulsion for all types of moulds and top-quality finishes.

Special uses

Products	Description
RENOCAST DES EB 59	Vegetable emulsion developed for the production of self-compacting concrete.
RENOCAST DES EB 53	Vegetable emulsion for the production of sleepers.
RENOCAST DES EB 75	Release agent developed for wooden trays on block and paver machines. Contains additives that protect the wood.

ECOLABEL

ECOLABEL is the official European Community eco-labelling system, whose purpose is to highlight products which, compared to conventional products, have reduced impact on the environment and therefore contribute to its protection and sustainable development. It is a simple and reliable way to help consumers identify the greenest, most environmentally friendly products and services.

The strict requirements imposed by the EU on the products to obtain this label, ensure:

- Reduction of water and soil pollution.
- Reduction of CO₂ emissions.
- Their composition contains a high percentage of renewable raw materials.
- Limited use of hazardous substances (no R-phrases).



In order to contribute to an efficient use of resources and a high level of environmental protection, we promote our ECOLABEL construction products, which are free of solvents and hydrocarbons and highly biodegradable.

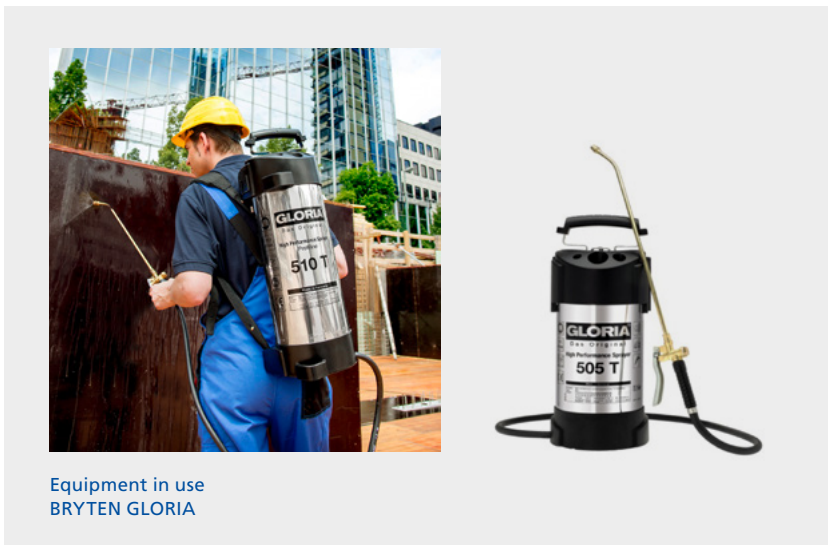
As an example of this, we present three of the release agents created by FUCHS for various uses in the construction industry: SOK ECO 107, BETONEX ECO and BITEEREX ECO.

Products	Description
SOK ECO 107	For use in civil engineering and precast concrete plants. Ensures clean, uniform and pore-free surfaces. Universal use, in any type of mould or formwork
BETONEX ECO	Universal protective release agent to prevent mortar and concrete from sticking to machinery, concrete transport trucks, concrete pumps, concrete mixers, silos, steel formwork and any type of metal part. High protection that helps reduce maintenance costs. Good resistance to water, effectiveness and durability.
BITEEREX ECO	Bitumen release agent for hot and mastic asphalt. Universal use. Developed for application on rubber-roller compactors and used in tippers and vehicle beds transporting asphalt agglomerate to prevent it sticking.

Application tips

In order to optimize the use of release agents, obtain better finishes and protect the moulds, it is advisable to follow the following recommendations:

- Before applying the product, the mould must be dry and free of concrete, dust, rust and other dirt.
- Regardless of the application system, place a thin, homogeneous layer of release agent on the moulds, avoiding excess coating and sagging on vertical parts, with special attention to corners, crevices and other nooks and crannies.
- Remove excess coating with a sponge or rag dampened with the release agent itself before pouring the concrete. In the case of emulsions, excess coating is to be removed by the same method once the water has evaporated.
- It is advisable to use manual spraying (we suggest BRYTEN GLORIA equipment) or spray gun (with or without air). The recommended nozzles are conical and with a pressure between 2 atm and 5 atm.
- Pour the concrete into the mould after a suitable time has elapsed after the release agent has been applied: immediately in the case of pure oils; after 10 to 20 min in oils diluted with solvent and after 20 to 30 min in the case of emulsions, when the water has evaporated and the applied layer is transparent.



Equipment in use
BRYTEN GLORIA

Storage

Release agents should always be stored in sealed containers, indoors and protected against freezing and direct sunlight.

CLP Regulation

From June 2015, mixtures of components must be classified according to the new hazardous substances legislation (GHS/CLP). Products based on hydrocarbons (mineral oil), if not otherwise required, are exempt from the CLP labelling regulation if they have a viscosity of more than 20.5 cSt at 40 °C.

Defects produced in concrete by release agents and possible causes

Micro-pores on the surface of the concrete

Honeycomb appearance (1-2 mm in diameter). Mainly due to inadequate or poorly applied release agent (excess coating, concrete poured before time, etc.). Larger pores are due to concrete composition (lack of fines) or vibration problems.

Stains on the surface of the concrete

The yellowish-brown stains are due to excess release agent and are darker at the bottom of vertical moulds where the product accumulates.

Rust stains

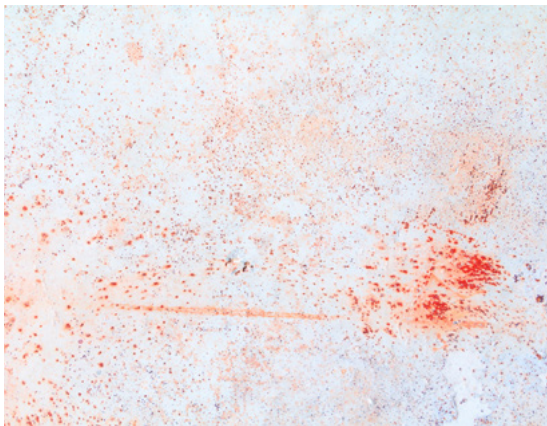
Rust stains can appear due to the lack of corrosion protection of the release agent. They can also occur when using unprotected polished moulds.

Powdery surface of the concrete or chipping

This type of surface occurs when the formwork has been stripped too quickly or excess release agent has been applied. It can also happen where the concrete has been poured too early.

Lack of bonding of subsequent treatments (paint, plasters and others)

If the resulting surface is unduly smooth, this is an unmistakable sign that too much or too little product has been used. This can happen especially with release agents containing waxes.



Concrete with rust stains



Honeycomb concrete

03

SURFACE
TREATMENTS

Surface Treatments

In an increasingly competitive market with increasingly complex designs, manufacturers of small precast units, along with street furniture manufacturers, are faced with higher demands on the quality and aesthetics of the items and flooring they manufacture and, in addition, they need to ensure easy and long-lasting maintenance.

In larger items, such as panels and walls, surface treatments are used more and more in order to ensure better aesthetics and greater durability. Their visual impact requires excellent finishes and optimum protection against harmful environmental factors (pollution, weather, graffiti, etc.).

FUCHS has developed the FILMAT range, which meets the expectations of improvement and optimisation of our customers' precast units.

Application tips

To obtain the best surface results with varnishes, protectors and cleaners, we recommend the following guidelines:

- The concrete surfaces on which these products are applied need to be free of dust and dirt.
- They must be porous enough for the product to penetrate and ensure its adhesion.
- In the case of water-based varnishes, paints and protectors, it is not advisable to apply them to polished concrete or concrete with water-repellent admixtures in their composition.
- For solvent-based products, surfaces must be dry and free of moisture. In general, varnishes, paints and protectors can be applied by brush, roller or spray.
- The performance levels shown on their datasheets are indicative and will vary according to the porosity of the concrete surface.

FILMAT Range

Products	Description
FILMAT AQ 773	Water-repellent that prevents the formation of efflorescence and humidity stains. The appearance of the item remains unchanged.
FILMAT 300	Emulsion varnish for concrete that unifies and brings out the colour with a glossy finish.
FILMAT 300F	Emulsion varnish for tiles that creates a protective and waterproof coating.
FILMAT 2330	Low-viscosity emulsion varnish for concrete that enhances the colour of treated surfaces.
FILMAT 725	Solvent-based varnish that enhances the colour with a satin finish.
FILMAT 750	Solvent-based varnish that gives the treated items a very glossy wet finish.
FILMAT PLACAS	Grey paint for the protection and decoration of concrete, available in various shades.
FILMAT R	Surface retarder for precast units.
FILMAT PROTECTOR RSD	Non-stick frame part protector for easy cleaning.
FILMAT 360 AT	Protector against stains, non-stick against chewing gum and high resistance to scratches and harmful environmental factors.
NET EMPREINTE CF AEROSOL	Graffiti remover spray.



04
OUR
ADDED VALUE

FUCHS Construction Laboratory

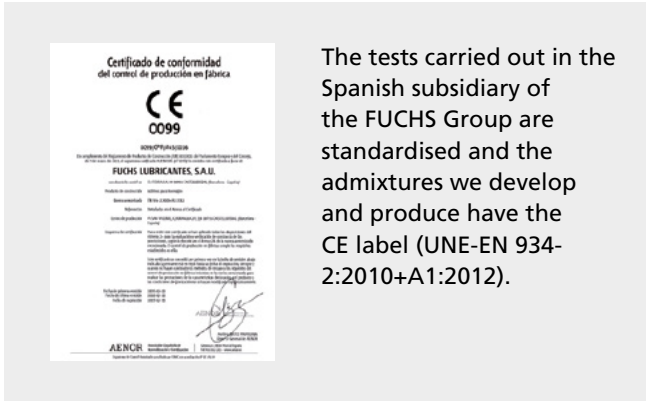
FUCHS Spain develops and manufactures a complete range of products for the construction industry for the domestic and international markets.

We have our own R&D laboratory with extensive research potential and over 40 years of experience, which works closely with other R&D teams in the FUCHS group.

Constant cooperation with our customers, technology centres and other players in the construction industry enables us to anticipate market needs by creating products and services that offer sustainable and innovative solutions.



Reference tests for admixtures



The tests carried out in the Spanish subsidiary of the FUCHS Group are standardised and the admixtures we develop and produce have the CE label (UNE-EN 934-2:2010+A1:2012).

Occluded air test: UNE-EN 12350-7

Determination of the amount of air entrapped in a fresh concrete sample expressed as a percentage using the manometer method.

This test consists of placing a concrete sample, with an unknown volume of air, into a sealed air chamber that applies a known volume of air and pressure.

The percentage of air contained in the concrete is measured with the aid of a manometer.

From the results obtained, we develop admixtures that meet the air limits established for concrete according to its use.

Strength test: UNE-EN 12390-3

Determines the compressive strength of concrete specimens using a hydraulic press. It is a destructive test (DT) that gives us a highly reliable value for the compressive strength of concrete.

Setting time test: UNE-196-3

The setting of concrete is an exothermic chemical reaction that measures the hardening time that occurs when cement and water come into contact.

During the general hardening process the mixture initially loses its plasticity and becomes difficult to handle, this state is called "initial setting". As the normal hardening of the mixture takes place, the consistency reaches a very appreciable level: the final setting.

The Vicat automatic needle system allows us to quantify the setting time. This information is required for the development of accelerators and retarders, as well as other admixtures such as superplasticizers.

Water-repellent testing UNE-EN 934-2

Following the EN 480-5 standard, a test is carried out that helps us to determine the capillary absorption of concrete.

Concrete with low capillary action ensures greater resistance against efflorescence and stains caused by water or humidity, as well as preventing seepage.

We carry out other complementary tests such as the water-resistance and efflorescence test DIN 5211 (UNE EN 83830).

Tests with superplasticizers

Slump-flow test (UNE-EN 12350-8:2011)

Measurement of the flow time of a self-compacting fluid concrete. This test makes it possible to measure slump flow of concrete and its consistency.

J-ring test (UNE-EN 12350-12:2011)

Determination of passing ability. This procedure shows the ability of concrete to pass through the spaces between the reinforcement.

V-funnel test (UNE-EN 12350-9:2011)

This test determines the time it takes for the concrete to flow through a V-shaped funnel. In this way, the segregation resistance of self-compacting concrete is calculated.

In search of the perfect release agent for every one of our customers

Release agents are highly complex products of crucial importance to the surface quality of concrete and the cleaning of formwork. For this reason, we dedicate all our expertise, technology and resources to finding the most suitable release agent for each client in order to:

- reduce time and operating costs;
- optimize the process;
- obtain concrete surfaces without flaws or stains;
- achieve clean, dust-free, corrosion-free and longer-lasting moulds;
- find the most sustainable solution, with the least possible environmental impact.

Our value proposition is to optimize the use of release agents for our customers, without affecting their production process and by taking care of all testing and application phases.

We work closely with our customers. The proximity of our laboratory allows us to perform various custom tests with their aggregates and cements in order to study compatibility with each type of concrete.

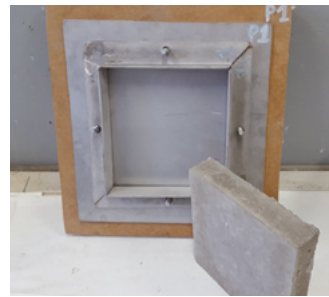


Concrete/release agent compatibility

Release agents react differently with concrete depending on their chemical nature.

At our laboratory, a test designed by our R&D team is carried out to observe the interface behaviour and reaction and compatibility of the release agent with the concrete usually used by the customer.

This test mainly prevents poor air removal and the formation of surface bubbles that cause problems with finishes as commonly found by FUCHS technicians and which they solve without difficulty.



Release test

We have numerous moulds of different materials and shapes that allow us to replicate the technical requirements of our customers.

In the case of vertical moulds we can test different types of releasing and curing by applying different percentages of humidity and temperatures.

In addition to observing the behaviour of the release agent on this type of surface, we can check the result that the unit will have in the corners and whether there could be any danger of chipping or breaking.

Corrosion testing for release agents

In order to extend the life of moulds, beds and formwork and to prevent damage to the concrete caused by corrosion, we also carry out corrosion tests on steel in our laboratory in order to analyse and determine the ability of our release agents to protect against corrosion.

Corrosion test (DIGIGALV TEST)

This test consists of immersing two electrodes in a sample of release agent and, using the Digigalv instrument, a current is created between the two that allows us to measure the difference in current intensity. This test enables us to obtain the rate of corrosion that occurs, as well as its type.

Bleed water corrosion test

Study of the protection in sheet steel against bleeding water from the water and cement mixture provided by the customer.

The results obtained are more accurate as we replicate our customers' process conditions to a greater extent.

Filter paper corrosion test (IP-287)

Determination of the rust prevention properties of release agents and rust prevention techniques when they are mixed with water.

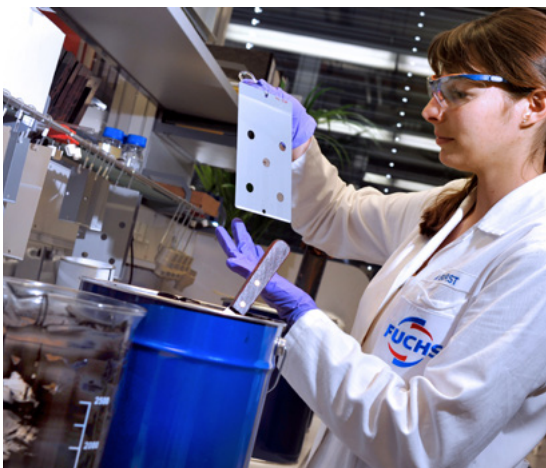
The IP-287 standard specifies the method for assessing the potential rusting of metal components during manufacturing operations where release agents are used. The test lasts for two hours, using standardized metal chips placed on filter paper, where any rust produced is visible.

Cast iron corrosion test (IP-125)

Following the IP-125 standard, the corrosion characteristics of the product on cast iron are analysed. Two metals are placed in contact for 16 hours in controlled temperature and humidity conditions. This test enables us to assess the amount and type of corrosion produced and improve the ability of a release agent to prevent corrosion.

Salt Spray Chamber ASTM B117 - 18

The salt spray test consists of recreating a controlled corrosive atmosphere, with the aim of accelerating the corrosion process in metals and being able to develop highly effective release agents that operate under harsh environmental conditions.



Environment, health and safety

At FUCHS, the environment, health and safety at work (EH&S) are priorities in our corporate strategy, and as important as the development and supply of high-quality products.

This responsible approach is not limited to simply complying with the relevant laws as we are also committed to going one step further by promoting the continuous improvement of working conditions and sustainability.



- Avoiding work-related health risks wherever possible.
- Conducting the EH&S assessment of all materials used, reducing the use of hazardous materials, especially substances of very high concern (SVHC) such as substances that are carcinogenic, mutagenic and toxic for reproduction (CMR substances).
- Ensuring regulatory compliance with respect to product classification and labelling (CLP regulation) and producing safety datasheets.
- Ensuring compliance with applicable registration (REACH) and product notification requirements.

Sustainability

Sustainability

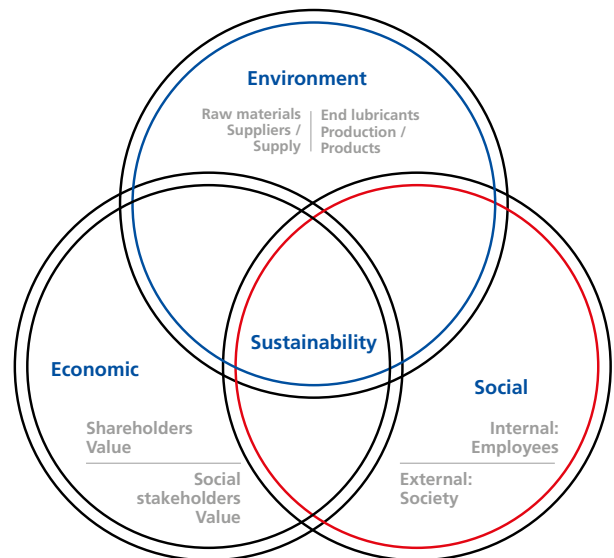
FUCHS understands sustainability as a central element of its corporate strategy, actively considering the three pillars of sustainability: economic, environmental and social.

Financial Responsibility

FUCHS recognizes sustainability in financial activities as a fundamental principle and a long-term business guarantee.

Environmental Responsibility

FUCHS is committed to environmentally friendly production methods and, for this reason, we produce lubricants that reduce emissions and implement policies aimed at conserving natural resources by reducing energy and water consumption.



Social Responsibility

In order to promote social responsibility throughout the process and its sphere of influence, FUCHS bases each of its actions on its own code of conduct and also on values such as trust, value creation, respect, reliability and integrity.

Developing comprehensive custom solutions for the most demanding challenges

Our international team of experts from all sectors and industries focuses solely on lubrication solutions so that our customers can concentrate on their business.

It is our mission to ensure that we provide technology that pays back.



Contact:



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