



# INTELLIGENT FLUIDS

smart physical cleaning



maintenance

GRAFFITI REMOVAL & BUILDING PROTECTION



## Challenge

**Soilings on facades** are created mainly by air emissions such as soot or residues resulting from combustion processes, which stick or deposit to the facades, sometimes they are even submerged.

### *Severe damages of facades.*

Besides the long-term damages due to air emissions, unwanted **colour paintings** or **graffiti** impair the image and the condition of a facade or a building much faster. Large-scale and intensive graffiti form thick lacquer coatings which prevent the natural diffusion of water vapor from the inside to the outside. Freezing condensed water may spall layers and leads to long-lasting damages of the facade structure.



**Mold growth.**



**Depreciation of the value of buildings.**



**Damages on buildings.**



**Significant impairment of image and value of buildings, streets and districts.**

# Answer

Cleaning systems for facades and building structures face a multitude of different challenges today. Depending on the condition of the substrate, facades may be highly textured, the facade material often is only little mechanically resilient and very sensitive to solvents. Moreover, special facade materials such as plaster or natural stone veneer enable the colour to deeply enter the surface.

Intelligent fluids GmbH has developed an innovative and highly **effective cleaning technology**. In contrast to conventional solvent and alkaline based cleaners, the water-based intelligent fluids® act highly effectively due to physical effects. The fluids enter the pores of the surface to be cleaned, penetrate layers of color or soiling and, finally, detach them quickly and gently.

On the other hand, the **prophylaxis system** protects various surfaces from unwanted color attacks by preventing the diffusion of spray color into the surface.

Graffiti removal on plaster with competing product (1) and intelligent fluids® (2).



**Fast removal**

**Fragmented paint can be separated from washing water**

**Facade paint is kept intact**

**No smearings and shadows**

**No chemical dissolving or etching**

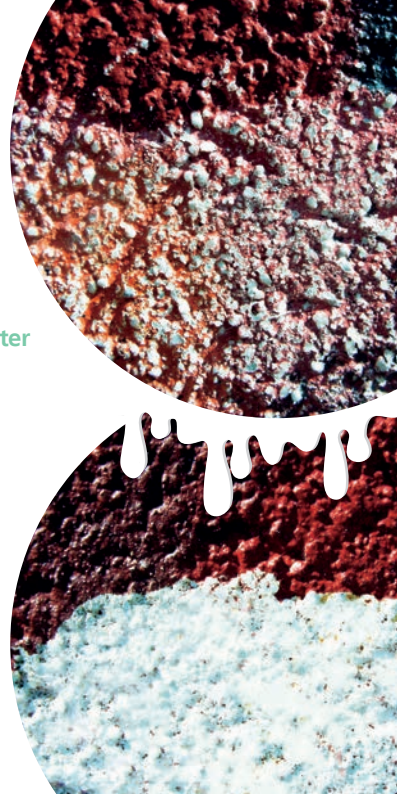
**RAL quality mark for Anti-Graffiti**

**UV- and weatherproof**

**Diffusion permeable**

1

2

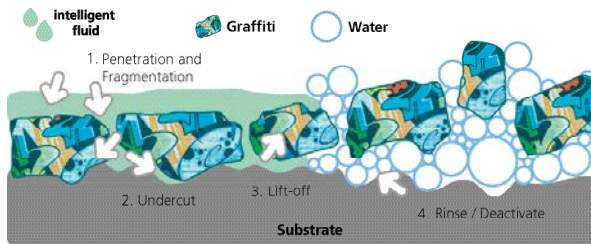


## Mode of Action

After applying an intelligent fluid onto a soiled or coated surface, molecular interactions within the fluid cause the penetration, fragmentation and undercut of the adhered organic layer. The moment the fluid reaches the subsurface, the adhered layer will be gently detached and lifted off from the substrate. Finally, the fragments can be rinsed completely with water. No chemical etching or dissolving processes take place as it does when using solvent-based chemicals. Even sensitive substrates and surfaces are spared.

### *Dynamic molecular teamwork.*

A huge variety of even persistent contaminants can be gently removed due to this intelligent, physico-chemical mechanism of action which links targeted functionality and unique effectiveness.



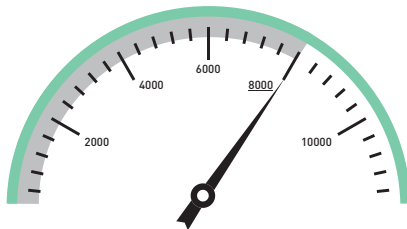
1 Application

2 Penetration

3 Undercut

4 Lift-off

5 Rinse



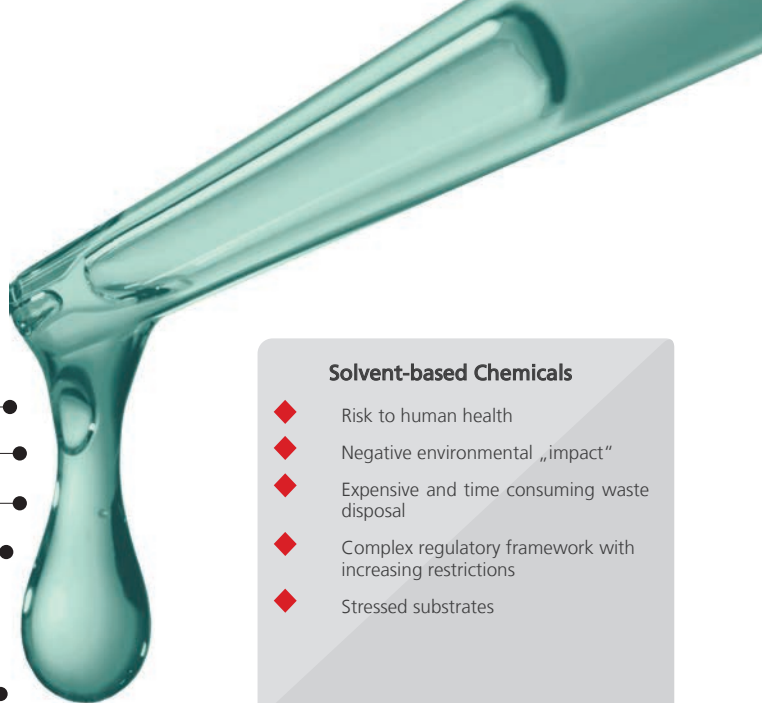
<< **micro earthquake effect** >>

Due to the highly dynamic molecular teamwork up to 8000 moves per second can be achieved.

# Characteristics

The highly powerful intelligent fluids® offer significant advantages: They do not only clean innovatively and highly effectively, but also do not harm equipment, environment and users due to their gentle ingredients.

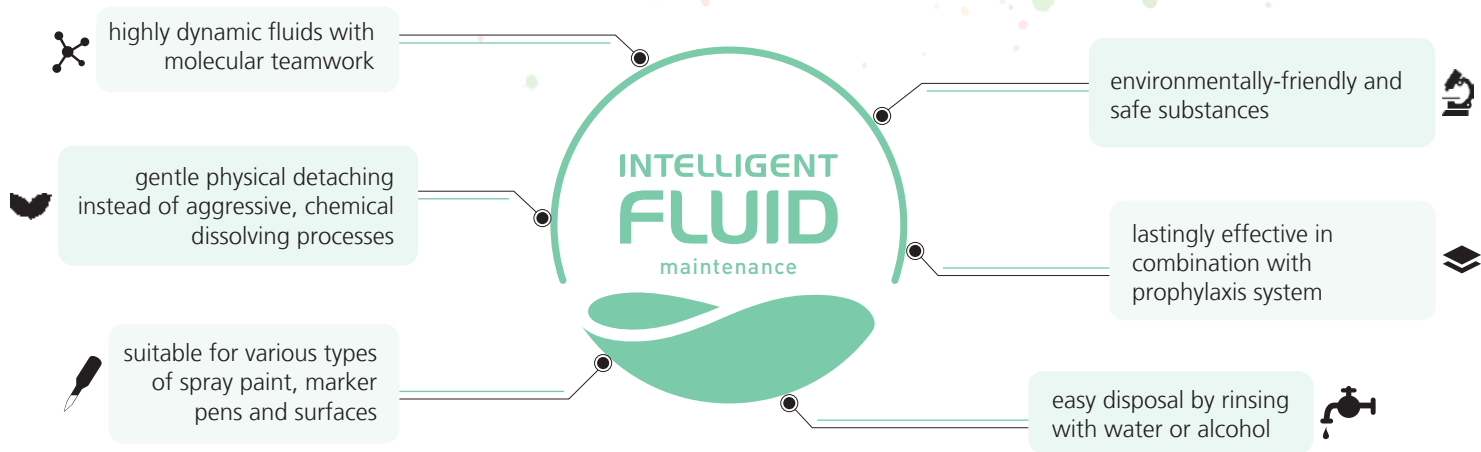
- 👍 waterbased
- 👍 biodegradable
- 👍 dermatologically approved
- 👍 physical lift-off function
- 👍 pH neutral
- 👍 non-inflammable
- 👍 thermodynamically stable



## Solvent-based Chemicals

- ◆ Risk to human health
- ◆ Negative environmental „impact“
- ◆ Expensive and time consuming waste disposal
- ◆ Complex regulatory framework with increasing restrictions
- ◆ Stressed substrates

# Features



## The intelligent fluids<sup>®</sup> Effect

Unwanted graffiti can damage facade surfaces in a short time, affect the appearance of a building and can usually only be removed with considerable effort. Substrates and cladding materials are often damaged during conventional cleaning.

Intelligent fluids<sup>®</sup> enter the pores of the surfaces to be cleaned, diffuse through layers of colour and lift the contamination off the substrate, without smearing or leaving residues. Thus, unpleasant paint layers are removed powerfully but yet gently, deep into the pores, without attacking the surface.



**1** Spray paint on a stone tile, which is to be removed with intelligent fluids<sup>®</sup>



**2** Application of the intelligent fluid<sup>®</sup> causes swelling and flaking of the paint



**3** Swollen graffiti paint can be removed after 2 to 10 minutes with a brush and water



**4** After rinsing the surface thoroughly with water, the graffiti is completely removed at the points of application

# graffitiCRACK MM3

graffitiCRACK MM3 is an efficient high performance cleaner which removes lacquer, spray paint and marker graffiti. The powerful graffiti remover was developed for porous as well as smooth surfaces.

## ⚙️ Substrates

smooth and mineral substrates of buildings, facilities and vehicles such as:

- glass
- metal
- tiles
- 2 component lacquers
- natural stone
- powder painting
- concrete
- plaster

## 👍 Advantages

- fast removal (2-5 min.)
- does not contain NMP, halogenated or toxic solvents
- punctual cleaning
- rinse with cold water
- biodegradable
- dermatologically tested
- leaves less tinted shadows



graffitiCRACK MM3 gel



# graffitiCRACK KFL

graffitiCRACK KFL has been developed especially for the removal of graffiti from plastic surfaces and foils. Since conventional graffiti remover often corrode plastics, blur surfaces or lead to stress corrosion graffitiCRACK KFL has been developed in order to create a product which enables a gentle removal of paint from plastic surfaces.

## Substrates

Plastic surfaces such as:

- foils
- 2 component lacquers
- polymers (e.g. PET, PE, PP)

## Advantages

- components from renewable raw materials
- easily biodegradable
- does not contain halogenated solvents
- dermatologically tested
- gets inactivated when adding water



graffitiCRACK KFL liquid

# graffitiBLOCK CSC

GraffitiBLOCK CSC is a preliminary protective layer for areas threatened by graffiti attacks to be target of graffiti attacks. This sacrificial layer is based on special wax and prevents spray colours from permeating into the surface.



## Substrates

Painted and unpainted matt surfaces such as:

- concrete
- plaster
- brick



## Advantages

- does not contain halogenated solvents
- invisible
- vapour permeable
- UV and weather resistant
- enables fast graffiti removal



graffitiBLOCK CSC

## In Short

no smearing  
ready-for-use  
gentle on facade surfaces for sensitive substrates  
selective application  
safe substances  
**biodegradable**  
no chemical dissolution fast graffiti removal environmentally-friendly  
for various surfaces  
not leaving residues  
residue-free removal



natural stone  
mineral surfaces  
metal  
plastic surfaces  
stone floor  
glass  
plaster  
acrylic glass  
concrete  
foils  
polycarbonate  
2 component lacquers



Contact your expert

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