

# Powerclean Paint Remover



## Technical Information

### m.a.c.s.® Paint Stripper + Paint Remover Table of Applications

	Protective building paints and plasters e.g. facades, walls, ceilings (e.g. stucco, ornaments)	Lacquers e.g. furniture, window shutters, metal fences	2K coatings e.g. car bodies, floor coatings
1. Choice	Asur	Asur	Oxystrip
Alternatives	SG94	Oxystrip	Blitz
	Separator	Blitz	Powerclean
	Powerclean	Powerclean	
	Post Paint Removal Cleaner: <b>Powerfluid</b>		

### Properties

Powerclean Paint Remover is CHC-free (chlorinated hydrocarbon) on the basis of slowly exhaling alcohol and other special solvents. In the first place, Powerclean Paint Remover **is suitable for the removal of coatings on wood and metal, especially water-based lacquers, oil paints, 2-component lacquers and for the removal of different multi-layer coatings on facades and in internal areas.**

Powerclean Paint Remover distinguishes itself due to its long open time and sustainable solving power over several hours up to several days, thus allowing for the removal of several paint layers in one operation. Powerclean Paint Remover does not cause changes of the building fabric after removal of the paint and restores mineral substrates thoroughly deep into their pores, wood does neither rove nor discolour. Powerclean Paint Remover features a high flash point.

### Application

Powerclean Paint Remover separates and removes 2-component lacquers, synthetic resin lacquers, oil paints, elastic painting systems, adhesives. Powerclean Paint Remover can be used in internal and external areas.

**Substrates:** all sorts of wood and metals, on all mineral and solvent-resistant grounds, concrete, pure mineral plasters, all sorts of natural stones, plaster (stucco), masonry like e.g. clinker, brickwork etc.

Glas is not attacked. A paint removal from plastic materials containing softeners is not possible.

**Technical limitations:** chemicals-resistant coatings, fire preventing paints.

### Technical Specifications

Density at 20°C:	ca. 1.09 g/cm <sup>3</sup>
Viscosity:	3,000 to 6,000 mPa
ph value (10 g/l):	6.00
Flash point:	ca. 100°C
Minimal processing temperature:	10°C
Storage period:	min. 2 years when cool and dry in closed container
Transport:	non-hazardous
Units:	1 l, 3 l, 10 l, 25 l
Item number:	132

Powerclean Paint Remover is ready for use and must not be modified.

### Consumption

Consumption depends on the total thickness of the paint and lacquer layers to be removed as well as on the characteristics of the substrates, whether they are absorbent or not.

With non-absorbent substrates, the thickness of the paint and varnish layers to be removed approximately corresponds with the layer thickness of Powerclean Paint Remover. With absorbent substrates the layer thickness of Powerclean Paint Remover has to be increased by about the factor 1.3 - 1.5.

The ideal basis for an exact calculation are several test areas on the original object. Material consumption can reach from at least 300 ml/m<sup>2</sup> to 2,000 ml/m<sup>2</sup>.

### Development of Properties

Powerclean Paint Remover is a CHC-free paint remover on the basis of slowly exhaling solvents, dissolving the binding agent system of the paints to be removed. As a result, they can easily be pushed-off or removed by washing off. In order to enable the full development of the dissolving properties, sufficiently generous application of material has to be ensured. If an insufficient amount of Powerclean Paint Remover was applied, the surface becomes dry and *whitish*. In this case, do not remove with water but apply a new layer of Powerclean Paint Remover; the dissolving process will be re-activated then. The solved coatings should always be removed at the optimal dissolving point saves evaporation times and costs

#### Disturbing influences:

Moist substrates, rain, draught, low temperatures (coldness), extremely absorbent substrates, insufficient ventilation possibilities during processing, insufficient application of material.

#### Supporting influences:

Warm temperatures, covering of the surfaces with thin PE-film after application of paint remover (not required!); thus the development of exhalations is considerably lowered in internal areas. Sufficiently long application time (test areas).

#### Application Time:

Several minutes up to hours or days under film.

### Application/Tools

Powerclean Paint Remover is ready for use and must not be modified. Open container. In case of settled-out liquid (not a fault) stir up product.

Apply Powerclean Paint Remover evenly with an airless device, brush, puff, roller, scraper, trowel, smoothing trowel (no plastic bristles).

Processing with airless system: completely remove filters and sieves from inside the device. Standard jets: mm/inch 0.530/0.021 to 1.070/0.043. Working pressure depending on jet used 40 - 80 bars. Air pressure operated airless device: working pressure ca. 2 Bar.

**Paint remover is always applied from bottom (socket) to top.**

Clean the used devices with Powerfluid mixed with water 1:10. Then rinse with clear water.

# Technical Information

## Instructions on use

### Preparing measures:

The object respectively environment conditions have to be checked (see "Development of Properties"). As far as the dissolved coatings are to be removed with a hot water high-pressure washer, in the scope of the erection of a scaffold, collection devices have to be considered (see removal process). The object has to be notified to the responsible authorities. We recommend to cover the scaffold with a tarpaulin when processing Powerclean Paint Remover using an airless device.

### Test surfaces

With big objects several test areas at different places should be treated in order to determine the layer construction and the dissolving progress. Size of the test area: DIN A4 landscape format. Using a trowel apply at least 3 mm of Powerclean Paint Remover at the beginning and let it run out against zero at the end. Cover one half with film in landscape format. Note date, time and temperature and check the test area in different intervals. Thus you find out about application time, possible consumption and open time of the paint remover. If the product does not deliver the desired result, further test areas according to the table of applications are necessary. For this purpose, use the m.a.c.s. paint stripper + paint remover system bag or the m.a.c.s. paint stripper + paint remover test box.

## Removal of separated coatings

### General:

The removal of the separated coatings should always be done at the optimal dissolving point. The longer the already separated coatings remain on the substrate, the more difficult it will be to wash them off. This might lead to longer cleaning periods.

### Machine Removal

#### 1. Hot water high-pressure washer

Hose the separated paint layers, plasters etc. with the high-pressure washer and **hot** water at 80°C in a range between 60 to 130 Bar, from **the bottom to the top and towards the already cleaned surface**. Thereby, the splash lance is always directed away from the application area in order to avoid a reaction stop of the paint stripper due to water. The wastewater has to be collected (see disposal).

#### 2. Spray-Suction Method

Dissolved coatings can also be removed with the spray-suction method (e.g. Reinigungskrake 80 (octopus cleaner)). Thus, the above mentioned wastewater collection tank is not needed.

### Manual Removal

Separated coatings can also be pushed-off with a scraper or a surface pusher. Subsequently, the pushed-off surfaces are washed with water (as warm as possible, ca. 40°C) under addition of Powerfluid, the cleaner used after paint removal, with a coarse scrubbing brush or a sponge. For wooden surfaces, a thick round masked brush with about 1 cm long bristles is suitable best. Warm water up to 40°C makes the subsequent washing easier. Finally, rinse again with clear cold water.

### Note:

No incompatibilities with new coatings have been reported after a complete removal of the coatings. Before it is newly painted, the stripped surface has to be flashed-off and dry. When used in the interior, sufficient ventilation has to be made sure. Always work with film sheets in the interior. If used in foods companies, all risk-bearing sectors have to be outsourced.

With PCB restoration works in internal areas do not apply the product using the airless method if possible (underpressure, ventilation, aerosol formation).

## Product and Wastewater Disposal

### General:

Before starting the works the situation should always be cleared with the authorities. In most municipalities, the wastewater (mix of dissolved colour and CHC-free paint stripper) can be discharged directly into the wastewater system after separation of the solid matter (by gravel bed, settling out or similar). Expertises about the biodegradability of the paint remover are at hand and can be ordered.

### Wastewater Catch Grooves:

In order to set up a waste water catch basin you can proceed as follows: apply acrylic sealing compound to the wall. Lay in a Delta tarpaulin and screw it to the wall with a roof batten. Pull the Delta tarpaulin up the scaffold and fix it. Put crossbars into the catch basin, create settle-out basins and hang in the wastewater pump. If necessary, put up a wastewater reservoir.

### Water Treatment:

In case authorities demand a wastewater treatment, corresponding reaction separation agents can be produced which ensure the compliance with the local wastewater limiting values. In this case, the produced wastewater has to be collected in the course of the works (e.g. 1,000 l container). Then we would ask you to send 10 l of wastewater together with the discharge values of your discharge authority to our wastewater treatment service, the company Mehne (subject to charges.) Within a few days you will receive the reaction separation agent and processing information.

Then, the settled-out colour sludge has to be disposed according to composition.

## Disposal considerations

Waste code numbers:

Product rests: EAK no. 080 111

Paint sludge: EAK no. 080 117

Water

hasard: WGK 1

UBA no.: 08090518

Contains: Alcohols, ester

Powerclean Paint Remover is registered as washing and cleaning agent at the Federal Environment Agency.

## Information on Hasards

Harmful to health. Contains benzyl alcohol. Harmful to health when inhaled or swallowed. In case of contact with the eyes, flush eyes out with water thoroughly and consult your doctor. Use in well-ventilated areas only. Do not inhale the exhalation. Keep out of reach of children. In case of swallowing seek advice from your doctor immediately and show packaging or label there. With the airless method and interior use A2/P2 protective mask. Wear solvent-resistant gloves.

### Measures of Precaution:

Mask plastic surfaces.

With PCB-restorations do not apply material using the airless method.

All details in this technical information are based on practical experience. A general binding character is excluded because of the different practical preconditions. Self-tests have to be made. All earlier editions get void with the publishing of this technical information.

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