

# P.H.C.

Photovoltaic cleaner



## The benefits at a glance

- Tested material compatibility by Fraunhofer CSP Institute
- Biodegradable\*
- Economical concentrate
- Excellent cleaning effect
- Reduces resoiling
- Not subject to labelling according to CLP



## Properties

**Rivolta P.H.C.** is a material-friendly, highly efficient and biodegradable\* cleaning concentrate for removing dirt from photovoltaic systems.

**P.H.C.** is based on a combination of special active ingredients, each of which gently removes various residues and soiling, e.g. dust, pollen, soot, bird droppings, green coatings, road dirt and other environmental deposits from PV modules.

**P.H.C.** is supplied exclusively as a concentrate and must be diluted with water before use. The application concentration depends on the type of process and the degree of soiling of the modules to be cleaned.

## Fields of application

**Rivolta P.H.C.** is equally used in solar parks, the entire industry, agriculture, etc. for the material-friendly and efficient cleaning of photovoltaic systems.

## Instructions for use

**Rivolta P.H.C.** can be used for large-area cleaning with brushes / abseiling brushes, cleaning robots and all common roller brush systems. For small PV modules, it can also be applied manually by spraying and washing down using a pressure pump sprayer with foam nozzle.

If necessary, rinse with clear water.

Suitable application devices and accessories in our [accessories brochure](#).

<b>Form</b>	liquid
<b>Colour</b>	clear
<b>Odour</b>	characteristic

	Value	Norm
<b>Density at +15 °C</b>	1,02 g/cm <sup>3</sup>	DIN 51757
<b>pH value undiluted at +20 °C</b>	10,6	DIN 19268

\* The surfactants used in this product are considered biodegradable as they meet the legal requirements regarding biodegradability (e.g. according to the Washing and Cleaning Agents Act - WRMG). Detergents and Cleaning Agents Act - WRMG). In addition, all organic ingredients are considered readily biodegradable according to OECD 301 (inorganic ingredients that are not subject to biodegradability, such as water, are not considered).

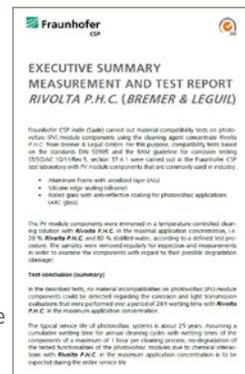
## Material compatibility

Extensive material compatibility tests were carried out for **Rivolta P.H.C.** by the **Fraunhofer CSP** Institute in order to analyse possible risks for PV modules when wetted with the cleaning agent. In the process, the following customary components were tested:

- Aluminium frame with anodised coating
- Silicone edge sealing and
- PV rolled glass with anti-reflective coating

**Result:** The typical service life of photovoltaic systems is about 25 years. Based on the test results, no impairment of the tested functionalities of the photovoltaic modules due to chemical interactions as a result of contact with **Rivolta P.H.C.** is to be expected during the entire service life – with an annual cleaning cycle and a wetting time of the components of maximum 1 hour per cleaning process and use of the cleaner in the maximum application concentration (1:4).

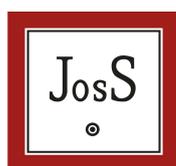
(Source: Measurement and Test Report Fraunhofer Center for Silicon-Photovoltaic CSP)



## Examples for mixing ratios

We recommend the following ratios for cleaning:

For heavy soiling	1:100
For maintenance cleaning	1:500



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