



Information on safety and protection

General notes

Silikal reactive resins are safe, unproblematic and do not pose any risk to health when properly handled. Nevertheless, like other chemicals, they must be handled according to strict rules. The manufacturer is obliged to print hazard information on the labels and to make safety data sheets available. The user must display operating instructions when setting up the construction site or instruct personnel at prescribed intervals. (Sample operating instructions are provided on the BG Bau website. All Silikal resins have the GISCODE RMA 10. This code must be cited on every label and technical data sheet and in the safety data sheet.) The application site and its surroundings must be kept clean and tidy. Food, tobacco products and personal clothing items must not be stored at the workplace. It is obligatory to wear protective work clothing, safety goggles, safety gloves and other personal protective equipment. Work clothing contaminated with resin must be changed immediately. Applicators must thoroughly clean their hands after finishing work and particularly before eating. First aid equipment such as first aid kit, eye rinsing kit etc. must be kept within easy reach at the workplace. It must be ensured that there is adequate ventilation (cross-ventilation) with fresh air during the application. Hazard information and safety advice given on containers must be observed.

Flammable liquids

Silikal MMA resins are flammable liquids. Observing regulations on handling, storing and processing flammable liquids is mandatory. Accordingly, operating instructions describing how to handle flammable liquids must be drawn up and displayed at the construction site. Appropriate fire protection equipment (e.g. fire extinguishers) must be provided. These examples are not exhaustive: for all precautions which need to be taken, refer to the corresponding regulations.

Emissions

When Silikal reactive resins are applied, a certain amount of methyl methacrylate evaporates. Sufficient ventilation must be provided. This evaporation may be perceived as an unpleasant odour. The threshold limit value (TLV) is the highest permitted concentration of the particular substances, such as MMA, at the workplace which generally has no negative effect on the health of the employees even in the case of repeated and prolonged exposure (generally 8 hours of exposure) according to the current state of knowledge. We recommend checking the TLV at the construction site. Measurements can be performed with portable electronic equipment or detector tubes. Respiratory protection is generally recommended during mixing, transport and application (filter class A 1 or A 2), and filter devices with an active fan ("Airstream helmets" or "CleanSpace" respiratory masks) should be used where possible. These are not subject to the wearing time limits under No. 6.3 of ZH1/701 "Rules for the use of respiratory equipment" or to occupational health check-ups under employers' liability insurance association principle G26, or to the keeping of a protocol log according to VBG 100. As section 19 of the German Hazardous Substances Ordinance (GefStoffV) states that wearing respiratory equipment must not be a permanent measure, the corresponding exceptional approval needs to be obtained from the Trade Supervisory Office responsible.

Safety data for methyl methacrylate (MMA)

Flashpoint:	+10 °C
Lower explosion limit:	2.1 vol. %
Upper explosion limit:	12.5 vol. %
Ignition temperature:	+430 °C
Ignition group:	G 2 or T 2
TLV:	50 ppm or 210 mg/m ³ or 0.005 vol. %

Contact with eyes

When handling Silikal products, appropriate eye protection (e.g. safety goggles) must be worn. If splashes of resin nevertheless get into the eyes, rinse thoroughly with plenty of clear tap water. An eye specialist should be consulted.

Contact with the skin

When handling Silikal products, suitable safety gloves should be worn. Appropriate protective cream should be rubbed into any exposed skin. Splashes which make contact with the skin should be swabbed with absorbent paper. Then wash the skin with a plenty of water and mild soap, dry and apply skin cream.



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First aid

See Silikal safety data sheets.

Instruction sheets of the German Chemical Trade Association

M 001: "Organic peroxides"

M 004: "Irritants / corrosive substances"

M 017: "Handling solvents"

M 042: "Preventing industrial skin diseases"

T 005: "Handling empty containers"

These can be obtained from: Jedermann-Verlag, Postfach 10 31, 69021 Heidelberg

Information from the German Construction Trade Association:

GISCODE RMA 10 "Coatings, containing methyl methacrylate, irritant": Operating instructions, safety data sheets, exposure description

The following must also be observed

VBG 23 "Applying coating substances" (this must always be available at the place of work).

Status report of the Deutsche Bauchemie: "Methacrylate resins in the building industry and the environment"

If fillers containing quartz flour are used, the safety guidelines and precautionary measures for avoiding dust named in the safety data sheets must be observed.