

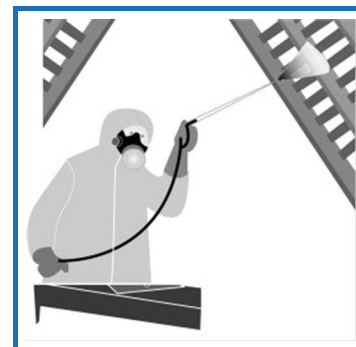
Wood preservatives: curative wood preservation in spray applications

Biocidal Products

Proper use of biocidal products

The Control Guidance Sheet details the fundamental organisational and hygiene rules, as well as technical measures, for spray and mist applications in curative wood preservation and describes the general information and measures that protect the professional user from exposure to hazardous substances. It is **to be used exclusively in combination with the CGS “General information on curative wood preservation” (BP 1082)** and serves as a checklist for the employer or their representative.

In the event that a product's directions for use (e.g. on the label, instruction leaflet or safety data sheet) demand greater protective measures than those stated here, the manufacturer's information takes priority.



Gathering of information and internal labelling

- The general basic rules of the BP 1000 series of Control Guidance Sheets for biocides are to be implemented.
- **Documentation:** Applications of pesticides are to be sufficiently documented by the competent person based on Annex II to TRGS 523. The records are to be kept for at least five years and are to be presented to the competent authority on demand.
- Only suitable, competent persons pursuant to Annex I No. 3 of the Hazardous Substances Ordinance may be tasked with spray applications with substances that are highly toxic, toxic or harmful to health. The competent person must regularly participate in further technical training.

Organisation of the working procedures & work organisation

- **Hygiene measures**
 - Employees are to be provided with wash rooms, as well as rooms with separate storage facilities for street and work clothing. If the risk assessment shows it to be necessary, changing rooms for street and work clothing are to be provided that are separated from one another by a wash room with showers.
 - A shower facility is to be provided if the manufacturer of the pesticide has specified in the directions for use that showering is required after handling.
 - Once spraying is complete, clothing must be changed and at least the face and hands must be washed with soap and water.
 - Work clothing soaked in spray liquid or wood preservative is to be changed immediately.
- **Activities involving the wood preservative and spray liquid**
 - Avoid inhalation of dust, clouds of spray, vapours, smoke or gases, as well as contact between the product and the eyes and skin.
 - Spray liquid is to be prepared outdoors or in well-ventilated rooms. Spray liquid must never be prepared in occupied rooms, in kitchens, or in storage rooms for food and feed.
 - The preparation of spray liquids must only be carried out using containers labelled for these purposes.
 - Prepared spray liquids, unused wood preservatives and used equipment must not be left unattended and must be kept under lock and key when stored in the longer term.
- **Special measures for solvent-containing biocidal products (e.g. fire and explosion protection)**
 - If solvent-containing wood preservatives are applied in rooms, fire- and explosion-protection measures must be taken.
- **Personal protective equipment (PPE)**
 - **Protective gloves**
 - a. If chemical protective gloves are required, these must be labelled as Cat. III (DIN EN 374) and with the Erlenmeyer flask pictogram. The gloves must also be specially suited to the substances used.



- b. The material, thickness, and protection level of the chemical protective gloves are taken from the safety data sheet or, if necessary, coordinated with the manufacturer of the protective gloves by presenting the safety data sheet to them.
- c. Disposable gloves are not reused.
- d. Disposable latex/medical gloves must not be used as chemical protection.
- e. Multi-use chemical protective gloves are to be cleaned after use and stored in a well-ventilated place, protected from UV radiation and high temperatures.
- f. Chemical protective gloves are liquid-tight and may therefore only be worn for longer than 4 hours in exceptional cases. Medical check-ups are to be offered after 2 hours and are compulsory after 4 hours.
- g. It is advisable to wear (e.g. cotton) glove liners under liquid-tight gloves to reduce sweat formation.
- An appropriate **protective suit** is to be selected for the exposure: at least type 4 (DIN EN 14605) for spray applications
- **Shoes:** chemical-resistant boots shall meet standard DIN EN 13832.
- **Respiratory protection**
 - a. If respiratory protection is necessary, the facepiece (e.g. mask) and the specific filter element are to be taken from the safety data sheet or coordinated with the PPE manufacturer by presenting the safety data sheet to them.
 - b. The reduction factor of the set of respiratory protection apparatus is to be taken from BGR 190 (tables 1–3).
 - c. Those with beards have to wear a hood or helmet (not a mask).
 - d. Limits on wearing time (BGR 190, Annex 2) are to be observed.
 - e. If filter-based respiratory protection is used, several suitable replacement filters should be present and ready for use.
- If there are other hazards, e.g. during preparation work (preparing the spray liquid, securing the area to be treated) or while tidying up (cleaning equipment that has been used, airing the treated area), corresponding PPE is to be worn in addition, e.g. hard hat, safety goggles, safety boots, rubber apron.

Further information

- Safety data sheet of the biocidal product used
- TRGS 523 “Technical Rules for Hazardous Substances: Pest control using highly toxic, toxic and health hazardous substances and preparations”, available on the BAuA's website: www.baua.de
- Control Guidance Sheets 120 (“Skin Protection – Basic Safety Precautions”) and 250 (“Skin Protection – Extended Safety Precautions”), available on the BAuA's website: www.baua.de
- Professional Association Rules BGR 189 “Benutzung von Schutzkleidung” [Use of protective clothing], BGR 190 “Benutzung von Atemschutzgeräten” [Use of respiratory protective equipment] and BGR 195 “Benutzung von Schutzhandschuhen” [Use of protective gloves]; Federation of Professional Associations (HVBG), 10/2007, available at www.dguv.de or www.arbeitssicherheit.de
- BGI 736 “Holzschutzmittel – Handhabung und sicheres Arbeiten” [Handling and safe use of wood preservatives], available on the German Statutory Accident Insurance's website: www.dguv.de
- GISBAU/WINGIS/GIS Codes on wood preservatives, available at www.wingis-online.de
- Gloves database (protective glove recommendations) from GISBAU, www.gisbau.de
- Standards can be acquired from Beuth Verlag in their respective latest versions; website: www.beuth.de
- The exposure of the user during spraying can be estimated using the program SprayExpo, which is available on the BAuA's website: www.baua.de

What must be included in the operating instructions?

- Workplace, working area, activity
- Name of and, if necessary, further declarations on the active substance
- Risks to health and environment
- Protective measures and code of conduct (skin protection: employees are briefed on the use of skin products (skin protection, cleaning and care) annually)
- Conduct in case of danger and first-aid measures in the event of accidents
- Proper disposal and destruction of waste