

PRODUCT DESCRIPTION

erstosan is a biocide-free formulated fluid for microbe-inhibiting surface treatment in demanding interior spaces, technical areas and hygiene-sensitive environments.

The product supports the formation of a stabilising protective film on suitable surfaces and contributes to the acute and preventive stabilisation of hygiene-sensitive surfaces.

erstosan is suitable for extensive applications, spraying as well as cold and warm fogging in suitable areas, installations and technical systems.

FUNCTION WITHIN THE ersto HYGIENE SYSTEM

erstosan is the extensive and room-oriented prevention component of the ersto Hygiene System.

After cleaning with erstoclean, erstosan can be used to treat suitable surfaces in a microbe-inhibiting manner and to form a stabilising protective film.

The fluid is particularly suitable for:

- extensive surface treatments
- hard-to-reach installation areas
- air-conditioning units
- air-conditioning ducts
- ventilation and air circulation systems
- technical zones
- areas that can only be reached to a limited extent by manual treatment
- regular hygiene-protective treatments

The specific system sequence depends on the target area, substrate, contamination situation and existing hygiene, cleaning or maintenance concept.

erstoshield can be used additionally for critical moisture, edge, connection and problem zones.

AREAS OF APPLICATION

erstosan is intended for professional prevention applications in demanding interior, technical and hygiene-sensitive areas outside the ASPEREX target markets.

Suitable areas of application include in particular:

- interior spaces
- technical areas
- air-conditioning, ventilation and air circulation systems, e.g. in buildings, installations and vehicles
- sanitary, moisture-exposed, technical and hygiene-sensitive areas
- gastronomy and hospitality
- veterinary practices
- physiotherapy
- medical practices, clinics and comparable hygiene-sensitive facilities
- commercial surfaces
- cavities, inspection areas and hard-to-reach technical areas
- B2B and B2C applications with increased requirements for surface hygiene

MODE OF ACTION

erstosan is based on a biocide-free, biophysical mode of action using special chitosan biopolymer complexes.

On suitable surfaces, a film-forming biopolymer complex is created, which can bind microorganisms on the surface and inhibit their mobility and ability to reproduce.

The ersto mode of action is described as a non-biocidal HYDROSORB mechanism. It supports the preventive stabilisation of hygiene-sensitive surfaces without relying on aggressive oxidative chemistry or classic biocidal mechanisms of action.

PRODUCT PROPERTIES

- biocide-free formulated preventive fluid
- microbe-inhibiting surface treatment
- suitable for spraying
- suitable for cold and warm fogging
- sustainable protective film technology
- biophysical mode of action
- chitosan biopolymer complexes
- no aggressive oxidative chemistry required
- odour-neutral after application
- non-perfumed
- hypoallergenic
- biodegradable
- non-hazardous to water
- 100% organic active-ingredient basis
- development and production in Germany

TECHNICAL KEY DATA

Property	Specification
Product name	erstosan
Product type	aqueous preventive fluid / emulsion
Physical state	liquid
Appearance	cloudy / beige-yellow / orange
Odour	characteristic, without long-lasting odour
pH value	3.0–4.5
Viscosity at 25 °C	0.8–2.0 mPas
Water solubility	fully miscible
Density	aqueous; exact value not specified
Flash point	not applicable
Storage class	12 – non-combustible liquids
Water hazard classification	NWG – non-hazardous to water according to AwSV
Transport	not dangerous goods within the meaning of transport regulations
Shelf life	24 months in unopened original container
Storage temperature	5 °C to 35 °C

CONSUMPTION

When applied from a spray bottle, the recommended dosage is approx. 2–3 spray actuations per 20 cm × 20 cm surface area.

Based on a measured output of approx. 4 ml per 3 spray actuations, this results in a calculated application rate of approx. 50 spray actuations/m² and a guideline consumption of approx. 70–100 ml/m².

Application is carried out by spraying evenly onto the surface and subsequently distributing the product using a wiping technique, without completely removing the protective film being applied. Allow the treated surface to dry completely.

Actual consumption depends on the spray head, spray pattern, surface structure, absorbency of the substrate, desired treatment intensity and application technique.

SUBSTRATE and PRELIMINARY TESTING

The surfaces to be treated must be clean, load-bearing and suitable for an aqueous preventive treatment.

Before large-area application, a test area must be prepared in an inconspicuous location.

The following in particular must be checked:

- material compatibility
- visual change
- surface reaction
- residue formation
- suitability for the intended use and hygiene situation

Sensitive materials, technical components, coated surfaces, visually relevant surfaces and installation areas must be assessed on an object-specific basis.

SYSTEM COMBINATION

erstosan can be used:

- after cleaning with **erstoclean**
- additionally to **erstoshield**
- for extensive areas, large surfaces and hard-to-reach installation areas
- as part of a regular hygiene and prevention concept

The specific order of erstosan / erstoshield depends on the target area, surface and application situation.

REPEAT TREATMENT

In the case of increased occurrence of microbiological contamination, the ersto system treatment should be repeated as part of suitable basic cleaning or maintenance cycles.

For less sensitive surfaces and working areas, the treatment can be repeated at intervals of 1 to 6 months.

APPLICATION INSTRUCTIONS and OCCUPATIONAL SAFETY

The information in the current safety data sheet must be observed during application.

General notes:

- avoid contact with eyes
- do not eat, drink or smoke while working
- ensure adequate ventilation
- do not inhale gas / vapour / aerosol
- wear suitable protective clothing
- wear tight-fitting safety goggles when decanting and transferring
- wear suitable protective gloves
- close containers tightly after removing product
- use suitable respiratory protection for fogging applications

In the event of an accident, feeling unwell, eye contact or ingestion, observe the instructions in the safety data sheet.

APPLICATION – SPRAY AND FOGGING APPLICATION

erstosan can be applied by fine spraying or cold fogging.

Fogging is preferably carried out via suitable access points to air-conditioning, ventilation and air circulation systems.

When used in ventilation and air-conditioning systems, fogging can be carried out over 1 to 3 cycles of the system.

System areas can be treated while de-energised or in accordance with technical approval.

After fogging, wait until the fog has settled and the treated interior areas have completely dried. ONLY then should systems be put back into operation.

APPLICATION–SURFACE TREATMENT

- i. Clean the surface with erstoclean.
- ii. Allow the surface to dry sufficiently or wipe it dry.
- iii. Apply or spray erstosan evenly onto the suitable surface.
- iv. If necessary, wipe to improve distribution without completely removing the protective film.
- v. Allow the treated surface to dry completely.
- vi. After sufficient drying, the surface can be used again in accordance with the object-specific requirements.

RESPIRATORY PROTECTION DURING FOGGING

In spray, cold fogging and warm fogging applications, inhalation of aerosols must be avoided.

Suitable respiratory protection is recommended for fogging applications.

The specific selection of respiratory protection depends on:

- room size
- fogging device
- aerosol exposure
- ventilation situation
- exposure duration
- occupational safety requirements

A specific filter class must be determined on an object- and occupational-safety-specific basis.

Do not inhale aerosols during spray, cold fogging or warm fogging applications.

Ensure adequate ventilation and use suitable respiratory protection.

The current safety data sheet is authoritative.

STORAGE

- store in a cool, dry and well-ventilated place
- storage temperature: 5 °C to 35 °C
- protect from frost
- protect from direct sunlight and excessive heat
- keep container tightly closed
- shelf life in unopened original container: 24 months



DISPOSAL

Dispose of packaging in accordance with the applicable official regulations. Observe the information in the current safety data sheet.

PACKAGING

erstosan is available as:

- 5,000 ml pouch canister
- 1,000 litre IBC

NOTES

This Technical Data Sheet describes the intended technical use of the product. It does not replace the safety data sheet and does not release the user from the obligation to check substrates, operational requirements, hygiene specifications and material compatibility on an object-specific basis.

CONTACT

ERST



ERST GmbH
Aiterhofener Str. 4
94330 Salching, Germany
+49 9426 76 33 033
info@erst.de
www.erst.de

