

## HEALTH & SAFETY DATA SHEET

### 1. Identification of the Substance/Preparation and of the Company

**Product name:** BACTIGLAS AM 93562

**Company:** Wells Plastics Limited, Emerald Way, Stone Business Park, Stone, Staffordshire, ST15 OSR, UK

**Telephone:** +44 (0)1785 817421      **Fax:** +44 (0) 1785 817771

### 2. Composition/Information on ingredients

**Product description:** Antimicrobial concentrate of an inorganic antimicrobial agent (Silver) contained within a Polypropylene polymeric matrix.

Component	CAS-Reg.No	EINECS
Silver releasing inorganic additive	65997-17-3	266-046-0
Polypropylene carrier	9003-07-0	-
Inert inorganic filler	Proprietary	
Antibacterial active ingredient	7440-22-4	231-131-3

### 3. Hazard Identification / First Aid Measures

As the active ingredients are encapsulated in polymer the product is not classified as hazardous to health if the usual precautions for handling chemicals are observed.

**Skin Contact:** Wash with soap and plenty of water. Do not use organic solvents. Molten material can cause severe burns. Do not try to peel molten polymer from the skin. Cool affected area under water immediately. When the product is cold seek medical attention. Treat the affected areas as thermal burns.

**Eye Contact:** Particles can cause eye irritation. Wash immediately with copious amounts of water for at least 15 minutes and seek medical attention if irritation persists. On contact with hot product cool eyes rapidly with cold water and seek immediate medical attention.

**Inhalation:** If dust or vapours inhaled during processing remove to fresh air and keep body temperature normal. If breathing difficulties are experienced seek medical attention.

**Ingestion:** Pellets can constitute a choking hazard and should not be ingested. In case of accidental ingestion wash out mouth with water, drink plenty of water and if adverse symptoms persist seek medical attention.

### 4. Fire Fighting Measures

**Suitable extinguishing media:** carbon dioxide, dry chemical or foam.

**Fire Fighting Protective Equipment:** a self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

### 5. Accidental Release Measures

Spilt pellets can cause a slipping hazard. Collect with a broom and shovel and put in to sealed containers for disposal. Avoid contact with skin and the formation of dust. Wear dust mask and safety goggles if necessary.

## 6. Handling and Storage

**Handling:** Observe the usual precautions for handling chemicals. Avoid ingestion, inhalation, skin and eye contact. Do not eat, drink or smoke when handling material. Avoid dust inhalation.

**Storage:** Store in dark, cool dry area away from sources of light and heat.

## 7. Exposure Controls/Personal Protection

**Exposure control:** Use of local exhaust ventilation recommended.

**Personal Protection:** In line with good practice wear protective goggles, dust mask, gloves and overalls when handling material.

## 8. Physical and Chemical Properties

**Appearance:** Solid cylindrical pellets

**Colour:** Off-white

**Melting point/range:** Polymer carrier 110°C - 190°C

**Decomposition temperature:** Polymer carrier > 250°C

**Autoignition temperature:** Polymer carrier >350°C

**Solubility (water):** Active component slightly soluble.

## 9. Stability and Reactivity

**Stability:** Stable under normal conditions of use.

**Conditions to avoid:** May discolour on contact with moisture and light. Avoid contact with oxidisers and acids. Avoid formulation of explosive compounds of silver (e.g. nitride, fulminate, acetylide, oxalate, tartrate).

**Hazardous decomposition products:** Oxygenated hydrocarbons, carbon monoxide, carbon dioxide, carbon particulate, and other possibly toxic gases/vapours.

Thermal decomposition of carrier can occur at temperatures above 250°C. At temperatures above 500°C the combustion of the carrier will occur.

## 10. Toxicological Information

### Silver containing glass powder:

General	: Regarded as a non hazardous material
Carcinogenic Toxicity	: No data available
Acute (Short -Term) Toxicity	: Greater than 2000 mg/kg (mouse; oral)
Chronic (Long-Term) Toxicity	: No data available
Mutagenicity	: Negative
Primary Irritation	: No irritation reaction
Skin Sensitisation	: No sensitisation reaction

### Silver :

The notification under the European Biocide Product Directive for "Silver" is as follows :

EC Number is 231-131-3. CAS Number is 7440-22-4. Registered in Annex I, 2, 4, 5, 9, 11. This active ingredient is generally regarded as safe.



**10. Toxicological Information (continued)**

**Inorganic carrier:**

LD50 Oral, rat : > 5000 mg/kg  
Not classified as harmful if swallowed.  
May cause eye irritation.

**11. Ecological Information**

Prevent any contamination of drains and surface waters. Risk phrase R53 – may cause long term adverse effects in the aquatic environment.

**12. Disposal Considerations**

Dispose of according to local or national waste disposal regulations.

**13. Transport Information**

Not Restricted or classified as Dangerous for Transport under ADR/RID, IMDG and ICAO/IATA.

As the active ingredient is encapsulated in polymer the product is not classified as hazardous to health if the usual precautions for handling chemicals are observed. However, for certain of the unencapsulated active ingredients the following risk phrases apply :

**Risk Phrases :** R53 - May cause long-term adverse effects in the aquatic environment.

**Safety Phrases :** S61 - Avoid release to the environment

**14. Regulatory Information**

Not classified as Dangerous for Supply/Use (see section 13)

**15. Other Information**

The details contained herein are based on our present knowledge and experience and are to characterise our product with regard to any possible safety requirements. We do, however, pass them on without any warranty or property assurances.

*If you require any further information please do not hesitate to contact our Technical Department on +44 (0) 1785 817421 or fax on +44 (0) 1785 817771.*