

Material Safety Data Sheet

Section 1: Chemical Product and Company Information

Identity: RM-XY,UR-XY,Neutral Density glass filter, Where X or Y is either 'N', 'D' or numerical i.e. 0 - 9.

Filter Identity: 'XY'. Where X or Y is either 'N', 'D' or numerical i.e. 0 to 9.

Manufactured by: Starna Scientific Ltd

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Date of preparation: 28 July 2008.

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Section 2: Composition

Glass filter contains: Schott NG type glass.

CAS No: 7631-86-9 (Glass)

Section 3: Hazards Identification

Under USA regulations, MSDSs are not required for these materials, and the information provided below is additional safety data as a service to our customers. Our reference filters are a fully-enclosed, manufactured item intended as an end-use product for customers. Therefore, our filter references are not classified as a "hazardous chemical" and are not treated as such under the U.S. OSHA Hazardous Communications Rule. Filter references are considered "articles" within the meaning of 29 CFR Section 1910.1200(c), since they are formed to a specific shape or design during manufacture, have an end-use dependent upon their shape or design, and do not release or otherwise result in exposure to hazardous chemicals under normal conditions of use.

Route of Entry - Inhalation: no (inert glass matrix).

Route of Entry - Skin: no (inert glass matrix).

Route of Entry - Ingestion: no (inert glass matrix).

Health Hazard acute and chronic: Due to the complete immobilisation of the neodymium and praeosodymium oxides in the glass matrix, the only health hazard would be from a cut from the sharp edge produced if the filter is broken.

Signs and symptoms of exposure: none.

Medical Conditions aggravated by exposure: none.

Section 4: First Aid Measures

Under normal circumstances no measures are required for contact with the filter glass.
In the event of breakage of the filter, safely dispose of the glass pieces, and treat as below.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Get medical attention immediately.

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5: Fire Fighting Measures

In the event of the heat from a fire causing fracture or melting of the glass, the small amount of the glass involved would not contribute to the incident or add any significant risk, and the measures shown below are for reference if the material is involved in a larger conflagration.

Suitable extinguishing agents: Carbon Dioxide, extinguishing powder, or water jet.

Protective equipment: Wear full protective clothing, and a self-contained breathing apparatus

Section 6: Accidental Release Measures

Spill: Dispose of contaminated product by usual local procedure for handling glass.

Section 7: Handling and Storage

When not being used for measurement, store closed in provided foam filled wooden box.

Protect from freezing.

Section 8: Exposure Controls, Personal Protection

Under normal use, no protective measures are required.
In the event of a breakage, the following will apply to any glass fragments

Respiratory Protection: none required.

Ventilation: none required.

Protective Gloves: Chemical resistant gloves.

Eye Protection: Chemical resistant goggles.

Other protective equipment: Have immediate availability of eyewash.

Section 9: Physical and Chemical Properties

Appearance: Grey transparent glass.

Boiling Point: n/a

Specific Gravity: n/a

Vapour Pressure (mm Hg): n/a

Melting Point: 475 °C.

Vapour Density: n/a.

Evaporation Rate: n/a.

Solubility in Water: insoluble.

Fire and Explosion Hazard:

Flash point: n/a.

Flammable limits: non-flammable.

Section 10: Stability and Reactivity

Stability: stable under normal operating conditions.

Conditions to avoid: Avoid contact with sharp edges if broken.

Incompatible Materials: none

Hazardous Decomposition Products: none

Hazardous Polymerization: will not occur.

Section 11: Toxicology Information

Routes of Entry: Inhalation, Ingestion

Hazardous in case of ingestion.

Carcinogenicity: none known .

Section 12: Ecological Information

Under normal conditions of use, these 'sealed-cell' references do not constitute any risk or hazard to the environment. If broken, do not allow liquid contents to reach ground water, water bodies or sewage system.

Section 13: Disposal Considerations

Incineration: Never incinerate filter references.

Landfill: Never dispose of filter references as landfill.

Recycling: Filter references must be recycled. Contact local Starna dealer for information. Starna Scientific has a recycling protocol for all types of returned filter references.

Section 14: Transport Information

Land transport ARD/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea

IMDG/GGVSea Class: None

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class: None

Section 15: Regulatory information

Designed according to EC guidelines: Observe the normal safety regulations when handling chemicals. This 'sealed-cell' reference is not subject to classification according to EC lists and other sources of literature known to us. The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (German GefStoffV).

Section 16: Other information

Other: none.

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