

# VHF FERRITE ABSORBER TILES 3600

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING


Product Detail : 3600 VHF ferrite absorber tiles  
 Application of the substance / the preparation: for new anechoic chambers or for upgrading existing rooms for radiated-emission and immunity tests.  
 Manufacturer / supplier: Holland Shielding Systems B.V.  
 Jacobus Lipsweg 124  
 3316 BP Dordrecht  
 the Netherlands  
 Ph: +31(0)78- 204 90 00  
 Fax: +31(0)78- 204 90 08  
 www.hollandshielding.com  
 info@hollandshielding.com

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Skin sensitisation (Category 1)  
 Carcinogenicity, Inhalation (Category 1A)  
 Specific target organ toxicity- repeated exposure (Category 1) Acute aquatic toxicity (Category 1)  
 Chronic aquatic toxicity (Category 1)

### 2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]	
Hazard pictograms	
Signal word	DANGER
Hazard statements	H317: May cause an allergic skin reaction H350: May cause cancer H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects
Precautionary statements	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P261: Avoid breathing dust / fume / gas / mist / vapours / spray. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/ face protection. P281: Use personal protective equipment as required. P321: Specific treatment Reference to supplemental first aid instruction. P363: Wash contaminated clothing before reuse. P391: Collect spillage. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P308 + P313: IF exposed or concerned: Get medical advice/attention. P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention. P405: Store locked up. P501: Dispose of contents/container to in accordance with local / regional / national / international regulation.

### 2.3. Other hazards

No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Mixture

Components	CAS No.	Classification	%
Iron Oxide (Fe2O3)	1309-37-1	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	45.0-80.0
Nickel Oxide (NiO)	1313-99-1	Skin sensitisation (Category 1) Carcinogenicity, Inhalation (Category 1A) Specific target organ toxicity- repeated exposure (Category 1) Chronic aquatic toxicity (Category 4)	0.0-40.0
Zinc Oxide (ZnO)	1314-13-2	Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1)	0.0-40.0
Copper Oxide (CuO)	1317-38-0	Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 3)	0.0-15.0

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## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

General information	Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation	Move to fresh air.
Skin contact	Wash with soap & water.
Eye contact	Flush with water for at least 15minutes.
Ingestion	Call MD immediately (FP N).

### 4.2 Most important symptoms /effects, acute and delayed

No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media	Wear NIOSH/MSHA approved SCBA & Full protective equipment (FP N).
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### 5.2 Special hazards arising from the substance or mixture

If in instant contact with any open flame, may tend to shatter.

### 5.3 Advice for firefighters

Use media suitable for surrounding fire (FP N).

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

None.

### 6.2 Environmental precautions

None.

### 6.3 Methods and material for containment and cleaning up

None.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

None.

### 7.2 Conditions for safe storage, including any incompatibilities

None.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Occupational exposure limits

No data available

### 8.2 Appropriate engineering controls

General ventilation. Grind wet to eliminate dust.

### 8.3 Personal protection equipment

Respiratory protection	NIOSH/MSHA approved dust-fume type if not ground with liquid coolant.
Hand protection	Waterproof gloves.
Eye / face protection	Chemical workers goggles (FP N).
Body protection	NONE.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Odour	Odorless
Odour threshold	No data
pH	Not available
Melting point/Freezing point	1500°C
Boiling point and range	Not available
Flash point	No data
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper/lower flammability or explosive limits	No data
Vapor pressure	No data
Vapor density	No data
Relative density	5.1
Solubility	No data
Partition coefficient: n-octanol/water	No data
Auto-ignition temperature	No data
Decomposition temperature	No data
Viscosity	No data
Explosive properties	No data
Oxidizing properties	No data

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

None specified by manufacturer.

### 10.5 Incompatible materials

Acids

### 10.6 Hazardous decomposition products

May form hydrogen if dissolved in acids.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Routes of exposure

No data available

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## 11.2 Information on toxicological effects

Acute toxicity	No relevant information found.
Skin corrosion/irritation:	No relevant information found.
Serious eye damage/irritation	No relevant information found.
Respiratory or skin sensitisation	No relevant information found.
Germ cell mutagenicity	No relevant information found.
Carcinogenicity	No relevant information found.
Reproductive toxicity	No relevant information found.
STOT-single exposure	No relevant information found.
STOT-repeated exposure	No relevant information found.
Aspiration hazard	No relevant information found.

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

No relevant information found.

### 12.2 Persistence and degradability

No relevant information found.

### 12.3 Bioaccumulative potential

No relevant information found.

### 12.4 Mobility in soil

No relevant information found.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal instructions

Can be disposed of as non-hazardous solid waste with local, state and federal laws

### 13.2 Waste from residues / unused products

No data available

### 13.3 Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

No data available

### 14.2 UN proper shipping name

Not dangerous goods

### 14.3 Transport hazard class(es)

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### 14.4. Packing group

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### 14.5. Environmental hazards

No

### 14.6. Transport in bulk

No data available



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### 14.7. International shipping information

No data available

## 15. REGULATORY INFORMATION

### 15.1 Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical Safety Assessment

No data available

### 15.3 Inventory status

No data available

## 16. OTHER INFORMATION

The contents and format of this MSDS/SDS are in accordance with Regulation (EC) No 1907/2006.

The information contained in the safety data sheet has been compiled from the information supplied on the materials contained in the product. No specific toxicological or ecological investigations have been carried out on the foil.

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