Freudenberg FCCT KG

Technical Safety Information Sheet on a voluntary basis (TSIS)

according to 91/155/EEC

Productname: H2315 C2

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1. Product- and company identification

Productname	:	H2315 C2
Company	:	**Freudenberg FCCT KG** D-69465 Weinheim
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2. Composition / information on ingredients

This document provides Material Safety Information (TSIS) for nonwovens on a voluntary basis. The TSIS is a means of transferring essential hazard information (including information on transport, handling, storage and emergency actions) from the supplier of a nonwoven product to the recipient of the product. As nonwovens are generally not hazardous, TSIS is not legally requested but must be considered as information. It is based on the EC recommendation for MSDS (Commission directive 91/155/EC).

The information contained in this Material Safety Information Sheet has been developed by the Company on the express request of its customer and to the best of its knowledge. Therefore, the Company does not assume any liability with respect to the correctness and/or completeness of the information provided by this Material Safety Information Sheet. The customer in particular shall not be released from his duty to check all safety relevant properties of the delivered nonwovens and to refer to the official texts for full information on the local obligations.

Chemical nature (product)

Description	:	Carbonized nonwoven fabric with micro porous coating
May contain	:	Carbon, carbon black, fluoropolymers
Further information	:	

3. Possible hazards

No hazardous product under normal conditions.

Accidental

Thermal decomposition can present hazards. During processing, irritant (fibre) dusts may possibly be released. See Section 8. for additional information.

Carbon fibres are electrical conductive and may cause a short circuit in electrical equipment. Electrical protection must be increased (IP54).

Fluoropolymers can emit toxic vapours at temperatures exceeding 370°C. See Section 5. for additional information.

4. First-aid measures

Under normal conditions ...

After inhalation	:	... if a big amount of dust is inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, and get medical attention immediately.
After skin contact	:	... wash with plenty of soap and water. Fibers may cause skin irritation.
After eye contact	:	... in case of direct contact, immediately flush eyes with plenty of water for at least 15 minutes. If continued irritation, get medical attention.
After ingestion	:	... give victim a glass of water. Never give anything by mouth to an unconscious person. If adverse reaction, get medical attention immediately.
Information for the doctor	:	... no specific measure to be taken.

5. Fire-fighting measures

Suitable extinguishing media	:	Foam, carbon dioxide, water spray, extinguishing powder.
Unsuitable extinguishing media	:	Direct water jet.
Exposure hazards	:	Dust may start to smolder beyond 350°C in an oxidic atmosphere. In the event of fire or smolding carbon dioxide (CO2), carbon monoxide and organic decomposition products may be generated. The thermal decomposition products are highly dependant upon the combustion conditions. Noxious or toxic fumes may be generated, some of which may be toxic or irritating. Fluoropolymers can emit toxic fumes when heated to temperatures exceeding 370°C.
Protective equipment for fire-fighters	:	None, in case of sufficient ventilation (CO/CO2).
Further information	:	For flammable and toxic fumes see § 10.

6. Accidental release measures

Personal precautions	:	Protective mask (P1), if necessary
Environmental precautions	:	No specific measure to be taken
Methods for cleaning up	:	Remove mechanically
Further information	:	None

7. Handling and storage

Handling	:	No specific measure to be taken
Protection against fire and explosion	:	Remove fine dust regularly
Storage	:	No specific measure to be taken

8. Expose controls and personal protection

Technical protective measure	:	During processing (e.g. cutting, laminating), irritant (fibre) dusts may possibly be released. In these cases a suck-off equipment should be present or a proper ventilation should be implemented at least.
Exposure control limits	:	No specific control limits. Use typical limits for dusts (see e.g. TRGS 900 or TLV-TWA).
Personal protective equipment		**If (fibre) dusts are released in higher extent during processing, …**
Respiratory protection	:	… dust protective mask (P1)
Hand protection	:	Textile gloves generally
Eye protection	:	… tight closing safety glasses
Skin protection	:	… tight closing overall
General safety and hygiene measures		
Measures	:	Precautions similar to handling of chemicals are recommended.

9. Physical and chemical properties

Colour / odour	:	grey, black / none
Boiling, melting, freezing point (°C)	:	Not applicable
Flash point / Ignition temperature (°C)	:	Not easily inflammable / Not tested
Autoignition	:	none, if properly used and stored
Explosion hazard / Explosion limits	:	Not liable to explode / Not applicable
Vapour pressure (mbar)	:	Not applicable
Density (g/cm^3)	:	< 0.5
Solubility in water or other solvents	:	Not applicable
pH-value / Viscosity	:	Not applicable
Additional information	:	The nonwoven fabric is electrical conductive.

10. Stability and reactivity

Conditions to avoid	:	Under thermal decomposition flammable and toxic fumes can be generated.
Substances to avoid	:	Not liable to be unstable or reactive with other substances.
Hazardous decomposition products	:	Above 370°c may be released: toxic and flammable gases, carbon monoxide. The generation of cleavage and oxidation products is subject to fire conditions. Non burned residues and contaminated water after fire fighting should be disposed of in compliance with official regulations.
Additional information	:	None

11. Toxicological information

Under normal conditions …

Acute toxicitiy	:	… not applicable / not known
Specific symtoms in animal experiments	:	… not applicable / not known
Irritation effects	:	… not applicable / not known
Sensitization	:	… not applicable / not known
Subacute to chronic toxicity	:	… not applicable / not known
Carcinogenicity, mutagenicity, teratogenicity	:	… not applicable / not known
Information from practical experience	:	None
Additional information	:	Under thermal-chemical decomposition resp. in case of fire toxic substances may be generated, see § 10.

12. Ecological information

Biodegradability	:	Not biodegradable
Ecotoxicity	:	No ecotoxic effects are to be expected for regular transportation, storage and duly use.
Further ecological information	:	For transportation, storage, normal use, no toxicological effect known. Possible water pollution, if components are washed out.

13. Disposal considerations

Product	:	Product can be disposed of as non hazardous solid waste in compliance with existing regulations (e.g. by incineration or landfill).
Disposal code number (Germany)	:	
AVV-Code	:	040222

14. Transport information

Product is under normal conditions no hazardous good according to existing transport regulations.

15. Regulatory information

Labelling according to EC-directives	:	Product must not be labelled according to existing EU directives.
National directives	:	Product is not subjected to special national regulations for duly use.

16. Other information

None

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. The technical safety information sheet only describes the products in aspect to their safety requirements. Recipients of our product must take responsibility for observing existing laws and regulations.