

Material Safety Data Sheet for SMART-X[®]

according to Regulation (EC) No. 1907/2006

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revised: 22.06.2015

1. Identification of substance / preparation and of the company	
Trade name:	SMART-X[®] – Lightweight foam sheets
Use:	Semi finished sheets (boards) for visual communication and event marketing
Manufacturer:	Airex AG 5643 Sins, Switzerland Tel +41 41 789 66 00 (only serviced during office hours) Fax +41 41 789 66 60 E-Mail: corematerials@3AComposites.com
2. Hazards identification	
If used as intended, SMART-X – lightweight foam sheets do not constitute any risk to public health and the environment.	
Possible health issues:	Harmful to health when inhaling dust and vapours during unpacking, sawing and routing. Harmful to health when ingesting dust generated during sawing and routing.
3. Composition / Information on ingredients	
Lightweight foam sheets made of expanded (foamed) Polystyrene. Surface layers made of solid Polystyrene. Also containing processing aids and pigments. Produced by expansion (foaming) using physical blowing agents.	
Blowing gas:	Carbon dioxide (CO ₂), Hydrocarbons.
Further ingredients:	Inorganic color pigments, UV stabilisers.
4. First aid measures	
Inhalation of processing fumes:	Move the person concerned to fresh air; seek medical assistance if breathing difficulties occur.
Inhalation of smoke from fire:	Move the person concerned to fresh air and call doctor.
Skin contact:	Wash with fresh water.
Eye contact:	Wash with fresh water if irritation develops.
Ingestion:	No special measures required. Seek medical assistance if symptoms develop.
5. Fire-fighting measures	
Suitable extinguishing media:	Water spray, foam.
Extinguishing media which must not be used:	Direct water jet.
Hazardous combustion products:	Not applicable.
Breathing equipment with independent air supply is required for fire fighting.	
6. Accidental release measures	
No special measures required. Remove by mechanical means.	

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7. Handling and storage

Handling: Ensure good ventilation and dust extraction on processing machines and at other places where dust may develop.

Storage: Stow away from immediate and dangerous sources of ignition. Danger of electrostatic charges when stored in very dry areas.

8. Exposure controls / Personal protection

General protection measures: Sufficient air circulation is required during processing.

Occupational exposure limits

	Source	Type of limit	Value (mg/m ³)	Remarks
Dust	SUVA	Max. expos. at workplace	10	inhalable particles

Personal protection equipment: Respiratory protection: Efficient breathing mask.
Skin (hand) protection: Gloves.
Eye protection: Safety goggles.

9. Physical and chemical properties

Physical state: Rigid foamed plastic sheets.
Colour: white or various colours.
Softening temperature: > 100 °C
Ignition temperature: > 435 °C (data from literature).
Apparent density: 200 kg/m³
Solubility: Insoluble in: Water, sea water.
Soluble in: all solvents.

10. Stability and reactivity

General information: Stable in normal conditions.
Conditions to avoid: Not applicable.
Materials to avoid: Solvents, hydrocarbons.
Hazardous thermal decomposition products: Possible formation of styrenic monomer, Aldehydes, organic acids
Carbon monoxide (CO)

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11. Toxicological information

Toxicological tests:	No data available.
Experiences from practical use:	
Skin contact:	Grinding dust may cause irritation to people with sensitive skin.
Eye contact:	Dust may cause irritation.
Inhalation:	Dust may cause irritation of respiratory tract. Dizziness, nausea and headaches may occur if processing (sawing or grinding work) is done without sufficient ventilation and respiratory protection during several hours in small, poorly ventilated areas.
Ingestion:	No symptoms known.

12. Ecological information

Eco toxicity:	Not toxic to organisms in the water.
Mobility:	Insoluble in water, ground water contamination is unlikely.
Persistence and degradability:	Biologically not degradable.

13. Disposal considerations

SMART-X sheets and waste thereof can be disposed of together with household waste and similar industrial refuse. Disposal by incineration must only be undertaken in facilities which are equipped with a flue gas cleansing unit.

14. Transport information

Railroad	RID	No restriction.
Road	ADR	No restriction.
Sea	IMDG code	No restriction.
Air	ICAO-TI/IATA-DGR	No restriction.
UN classification		Not required.

15. Regulatory information

SMART-X sheets do not require special markings under the dangerous substances and preparation directives 67/548/EWG and 1999/45/EG

16. Other information

This issue of the safety data sheet replaces the issue released on 30.07. 2012 (changed entries relate to the blowing gases, the additives and the ignition temperature).
The information given in this material safety data sheet is accurate to the best of our current knowledge and experiences, but without any guarantee. The safety data sheet describes SMART-X sheets with regard to safety requirements. The information given does not represent a guarantee of the properties and quality of the material.