

SECTION 0: Introduction

The European Regulation N° 1907/2006 REACH (Registration, Evaluation, Authorization and Restriction of CHemicals) enforced on June 1st 2007 does require Safety Data Sheet (SDS) only for hazardous substances and mixtures in compliance with article 31 of REACH and the European Regulation n°1272/2008 on Classification, Labelling and Packaging (CLP).

Vapour control layers, such as ISOVER Vario® smart vapour retarders, are articles under REACH and therefore, SDS is not legally required.

Nevertheless, Saint-Gobain ISOVER decides to provide its customers with the appropriate information for assuring safe handling and use of Vario® smart vapour retarders through this Safe Use Instructions Sheet.

SECTION 1: Identification of the article and of the company/undertaking

1.1. Product identifier

Type	: Article
Trade name	: Vario® KM Vario® KM Duplex UV Vario® KM Triplex Vario® Xtra Vario® XtraSafe Vario® Xtra XL

1.2. Relevant identified uses of the article and uses advised against

1.2.1. Relevant identified uses

Use of the article : Vapour control layer.

1.2.2. Uses advised against

None.

1.3. Details of the supplier

Address
Telephone number, fax number
Email address if any

SECTION 2: Hazards identification

2.1. Classification

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

Adverse physicochemical, human health and environmental effects

None.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

None.

2.3. Other hazards

General information	: Product can only form ignitable mixtures or burn if it is heated to temperatures above the flash point.
Warming	: None.
Overheating	: None.
Fire hazard	: In case of fire, toxic gases can be produced during burning (see also Section 5 & 10).
Sparking	: Risk of electrostatic charging.
Others	: Films lying on the floor can cause a risk of slipping.

SECTION 3: Composition/information

Vario® KM	: Polyamide film
Vario® KM Duplex UV	: Polyamide-based film, Polypropylene non-woven
Vario® KM Triplex	: Polyamide-based film reinforced with a Polyethylene grid, Polypropylene non-woven
Vario® Xtra	: Polyamide-based film, Polypropylene non-woven
Vario® XtraSafe	: Polyamide-based film, Polyester non-woven
Vario® Xtra XL	: Polypropylene non-woven coated with special polymer coating

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SECTION 4: First aid measures

First-aid measures general : No special measures required.
In all cases of doubt, seek medical attention or call emergencies.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Adapt to the nature and extent of fire.
Water / foam / CO₂ / dry extinguisher.

5.2. Special hazards arising from the article

Vario® KM : At temperatures of > 300 °C can be emitted:
Oxides of Carbon
Hydrogen cyanide
Hydrocyanic acid
Under special fire conditions traces of other toxic substances are possible.
Formation of further decomposition and oxidation products depends upon the fire conditions.

Vario® KM Duplex UV : Combustion or thermal decomposition will involve toxic and corrosive vapours:
Oxides of Carbon
Nitrogen oxides
Smoke

Vario® KM Triplex : Combustion or thermal decomposition will involve toxic and corrosive vapours:
Oxides of Carbon
Nitrogen oxides
Smoke

Vario® Xtra : Combustion or thermal decomposition will involve toxic and corrosive vapours:
Oxides of Carbon
Nitrogen oxides
Smoke

Vario® XtraSafe : Combustion or thermal decomposition will involve toxic and corrosive vapours:
Oxides of Carbon
Nitrogen oxides
Smoke

Vario® Xtra XL : Combustion or thermal decomposition will involve toxic and corrosive vapours:
Oxides of carbon
Nitrogen Oxides
Ammonia
Hydrogen cyanide
Under special fire conditions traces of other toxic substances are possible.
Formation of further decomposition and oxidation products depends upon the fire conditions.

5.3. Advice for firefighters

In the presence of combustion or carbonisation gases, any fire-fighting, rescue and clearing up activities should be undertaken only with heavy-duty respiratory and eye protection equipment. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment : No special measures required.
Emergency procedures : No special measures required.
Films lying on the floor can cause a risk of slipping.

6.2. Environmental precautions

When used as directed, no special measures required.
Observe legal requirements for waste disposal.
Prevent from entering drainage system.

6.3. Methods and material for containment and cleaning up

Collect the product in suitable containers and either recycle or dispose of.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

General recommendations : Avoid contact with naked flames and hot surfaces as irritant and toxic decomposition products can be formed.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Storage on pallets in dry, enclosed rooms with solid foundation.
Stack loose bales in containers, racks or secure using wedges.
Pallets with lying bales must not be stacked.
Upright bales can be stacked up to a maximum of 3 high.
Stack products in cardboard boxes up to a maximum height of 5.5 m.

Risk of electrostatic charge : Take measures against electrostatic charge.

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Storage conditions : Store in dry, well-ventilated area.
Ambient temperature.
Atmospheric pressure.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1, the advice mentioned in this Section 7 is to be observed.
Let the product adjust to ambient temperature at least 24 hours before use.

Transport temperature : Ambient temperature.
Loading and unloading temperature : Ambient temperature.
Normal form of transportation : On pallets or goods wagons.

SECTION 8: Exposure controls

8.1. Control parameters

None.

8.2. Exposure controls

The usual rules of hygiene must be followed: wash hands before breaks and after work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Roll

Colour : Vario® KM : white; printed black
Vario® KM Duplex UV : white; printed black, grey and yellow
Vario® KM Triplex : white; printed black, grey and brown
Vario® Xtra : white; printed black, green and yellow
Vario® XtraSafe : white; printed black, grey, green and yellow
Vario® Xtra XL : white; printed black

Odour : Odourless

Odour threshold : Not applicable

pH-value : Not applicable

Melting point : Vario® KM : 200 °C
Vario® KM Duplex UV : PA: 220 °C; PP: 165 °C
Vario® KM Triplex : PA: 220°C; HDPE: 130°C; PP: 165°C
Vario® Xtra : PA: 220 °C; PP: 165 °C
Vario® XtraSafe : PA: 200 °C; PET: 250 °C
Vario® Xtra XL : No data available

Boiling point : Not applicable

Flash point : Vario® KM : No data available
Vario® KM Duplex UV : 330 °C
Vario® KM Triplex : 330 °C
Vario® Xtra : 330 °C
Vario® XtraSafe : 330 °C
Vario® Xtra XL : No data available

Relative evaporation rate (butylacetate=1) : Not applicable

Ignition point : Vario® KM : > 400 °C
Vario® KM Duplex UV : > 340 °C
Vario® KM Triplex : > 340 °C
Vario® Xtra : > 340 °C
Vario® XtraSafe : > 340 °C
Vario® Xtra XL : No data available

Explosive limits : Not applicable

Vapour pressure : Not applicable

Relative vapour density at 20 °C : Not applicable

Relative density : Not applicable

Density : Vario® KM : 1.12-1.15 g/cm³ (20 °C)
Vario® KM Duplex UV : No data available
Vario® KM Triplex : No data available
Vario® Xtra : No data available
Vario® XtraSafe : No data available
Vario® Xtra XL : No data available

Water solubility : Insoluble

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Partition coefficient	:	Not applicable
Self ignition temperature	:	Not applicable
Decomposition temperature	:	Vario® KM : > 300 °C Vario® KM Duplex UV : No data available Vario® KM Triplex : No data available Vario® Xtra : No data available Vario® XtraSafe : No data available Vario® Xtra XL : No data available
Viscosity, kinematic	:	Not applicable.
Viscosity, dynamic	:	Not applicable
Explosive properties	:	Not applicable
Oxidising properties	:	Not applicable

9.2. Other information

Hygroscopic characteristics: Yes.

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Temperatures above 200 °C and exposure to sun and UV-light could lead to decomposition of the polymers.

10.5. Incompatible materials

Do not bring into contact with: fluorine, strong oxidising agents.

10.6. Hazardous decomposition products

Vario® KM	:	Oxides of Carbon Hydrogen cyanide Hydrocyanic acid ε-caprolactam
Vario® KM Duplex UV	:	Hydrocarbons Oxides of Carbon Nitrogen oxides Smoke Reduced oxygen supply can cause the development of carbon monoxide and irritant smoke.
Vario® KM Triplex	:	Hydrocarbons Oxides of Carbon Nitrogen oxides Smoke Reduced oxygen supply can cause the development of carbon monoxide and irritant smoke.
Vario® Xtra	:	Hydrocarbons Carbon dioxide Carbon monoxide Smoke Reduced oxygen supply can cause the development of carbon monoxide and irritant smoke.
Vario® XtraSafe	:	Hydrocarbons Carbon dioxide Carbon monoxide Smoke Reduced oxygen supply can cause the development of carbon monoxide and irritant smoke.
Vario® Xtra XL	:	No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No data available.

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SECTION 12: Ecological information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The article does not contain any PBT or vPvB substance.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in accordance with relevant local regulations.

SECTION 14: Transport information

No dangerous good in sense of transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the article

None.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

No additional information available.

This information is based on our current knowledge and is intended to describe the article for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.