

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** XIRAN® SM grades
- **Article number:** XIRAN® SM200; XIRAN® SM400; XIRAN® SM500
- **Synonyms:**
SMA / 2.5-furandione polymer with ethenyl benzene / m-SMA, SMA Compound with ABS, high impact styrene maleic anhydride copolymer, rubber modified SMA, SMA / ABS compound.
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Molding material and engineering plastic.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Polyscope Polymers BV
Prins de Lignesstraat 28
NL-6161 CZ Geleen
The Netherlands
tel: +31 467500010
web: www.polyscope.eu
- **Further information obtainable from:** NOldeRiekerink@polyscope.eu
- **Emergency telephone number:** +31 6 12 980 978

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
No hazards known.
Not applicable
- **Information concerning particular hazards for human and environment:**
Caution: spilled material creates extremely slippery conditions. When heated to decomposition thick, irritating smoke emerges. Skin contact with molten material can cause burns.
Product contains a suspect cancer hazard substance in very low concentration, embedded in the polymer matrix.
Fine dust may be irritating for skin, eyes and respiratory system. Vapours and fumes, released at elevated processing temperatures, may be irritating for the eyes, nose, throat and respiratory system. In case of overexposure they can cause nausea and headache.
Product is considered non-toxic. When heated above decomposition temperature toxic fumes may be released.
Product may block waterways and sewers. Marine life may ingest pellets, which may obstruct their digestive tract.
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Other hazards** With formation of dust a dust explosion is possible.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous components:** Not applicable
- **Additional information:**
The black product contains carbon black embedded in the polymer matrix.
For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Rinse mouth with clean water.
Do not induce vomiting.
If swallowed in small amounts health issues are not expected. If swallowed in large amounts warn a doctor.
- **Information for doctor:**
Treat symptoms. No specific antidote known. Unless symptoms reappear, no further treatment is necessary.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Carbon dioxide, carbon monoxide, low molecular weight (toxic) hydrocarbons, thick irritating smoke
Granulate is non-flammable, but in case of prolonged exposure to flame or high temperature, granules or moulded parts burn slowly with high smoke density.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
Keep away from ignition sources.
Ensure adequate ventilation
- **Environmental precautions:**
Cover spills so it does not spread by wind or rain.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Provide suction extractors if dust is formed.
No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Take precautionary measures against electrostatic discharges. Lower oxygen concentration by supplying nitrogen and/or controlling the transport speed.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**
Carbon black is anchored in the polymer matrix, not applicable to natural product.
Carbon black is not free above exposure limits during use in injection molding processes.
The lists valid during the making were used as basis.
In case of a hazardous material with no controlled concentration limit, it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Avoid skin contact with the liquefied material.
- **Respiratory protection:**
Wear a dust mask if dust is formed.
Use a gas mask (according to European standards (EN)) when the product decomposes by heating.
- **Protection of hands:**
Wear heat resistant gloves when handling molten material.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Use heat resistant face shield when handling hot melt.

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- **Limitation and supervision of exposure into the environment**
Prevent entering into surface- and ground water.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - **Form:** Granulate
 - **Colour:** Different according to colouring
- **Odour:** Pungent
- **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.
 - **Vicat softening point:** 105 - 120 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Ignition temperature:**
 - **Decomposition temperature:** Not determined.
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Dust explosion class:** St1
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Vapour pressure:** Not applicable.
- **Density at 20°C:** 1.06 - 1.08 g/cm³
- **Bulk density at 20°C:** 580 - 600 kg/m³
- **Relative density** Not determined.
- **Vapour density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with water:** Insoluble.
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not applicable.
 - **Kinematic:** Not applicable.
- **Solvent content:**
 - **Organic solvents:** 0.0 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions** Risk of dust explosion.
- **Conditions to avoid**
Avoid prolonged exposure to heat or UV light since this may influence material properties.
Material will burn when exposed to continuing source of ignition.
- **Incompatible materials:** Avoid contact with: strong acids, alkalis and oxidizing agents.
- **Hazardous decomposition products:** When heated: mono-styrene, CO and CO₂.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Skin contact with molten product may cause burns.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
- **Acute effects (acute toxicity, irritation and corrosivity)**
Fine dust may be irritating for the skin, eyes and respiratory tract.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Product is not considered to be carcinogenic, mutagenic or reprotoxic.
Carcinogenicity: Carbon black (CAS No.): 1333-86-4 IARC Monograph 65, 1996: Group 2B (possibly carcinogenic to humans)
Carbon Black is embedded in the polymer matrix and therefore less dangerous than in its pure form.
Decomposition of the material could cause dangerous fumes.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** Product is not soluble in water and not toxic.
- **Persistence and degradability** This product is according to previous experiences inert and non-degradable.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** Not mobile.
- **Ecotoxicological effects:**
- **Remark:**
Aquatic organisms can swallow pellets which can block their digestive systems.
Product is non-toxic but small particles could have an effect on organisms in water and on land.
- **Remark:** Product is not soluble in water and therefore can be mechanically separated from water
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** Product may block waterways or sewage systems.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

- **UN-Number**
- **ADR, ADN, IMDG, IATA** Not applicable
- **UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Not applicable
- **Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Not applicable
- **Packing group**
- **ADR, IMDG, IATA** Not applicable
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet with information from the manufacturer.

The information, data and recommendations are made to the best ability and obtained from reliable sources. Completeness is not guaranteed. This MSDS is intended only as a guideline for the treatment of XIRAN® products and provides no guarantee of product properties or contractual agreements. It remains the responsibility of the user to meet local and national legislation.

- **Abbreviations and acronyms:**

NOEC: No Observed Effect Concentration

IC50: Inhibition Concentration, 50 percent

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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Safety data sheet
according to 1907/2006/EC, Article 31

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ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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