

Product Handling Information Sheet (PHIS)

Information on the safe handling of products



TECAFORM AH LM

1. Identification of the article and of the company

Trade name:

TECAFORM AH LM grey, TECAFORM AH LM white

Application:

Semi-finished engineering plastics, finished parts

Note:

The present product is an article in the sense of regulation (EC) No 1907/2006 (REACH).

Manufacturer/Supplier:

Ensinger GmbH
Rudolf-Diesel-Straße 8
71154 Nufringen
Deutschland
Tel. +49 7032 819 0
www.ensingerplastics.com

Competent person:

phib@de.ensinger-online.com

2. Hazards identification

Classification and labelling:

The product is not classified and doesn't need any labelling.

Other hazards:

There are no known risks, if the regulation/details for handling are observed.

3. Composition/information on ingredients

Description:

Article based on polyoxymethylene copolymer (POM-C), CAS No 24969-26-4.
Possibly containing additives and processing aids.

Information on ingredients:

There are no substances from the candidatelist (SVHC) in the product present above a concentration of 0,1 % weight by weight (w/w).

The product doesn't contain any substance, which is supposed to be released under normal or reasonably foreseeable conditions of use.

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4. First aid measures

After inhalation:

After inhalation of thermal decomposition products (formaldehyde vapours), remove person from the danger zone. Keep warm and quiet in fresh air. Seek medical help if necessary.

After skin contact:

No special measures necessary.

After eye contact:

If a foreign body (splinter, chip) enters the eye do not rub. Immobilize the eye, cover both eyes with bandages, consult an eye specialist.

Indication of any immediate medical attention and special treatment needed:

No special measures necessary.

5. Firefighting measures

Suitable extinguishing media:

Water spray, alcohol-resistant foam, carbon dioxide, dry chemical foam.

Unsuitable extinguishing media:

Water jet.

Special hazards arising from the article:

With carbonization and incomplete combustion toxic gases develop, predominantly carbon dioxide and carbon monoxide. The development of further fission and oxidation products is dependent on the conditions of burning. Traces of other toxic substances may develop under certain conditions of burning. The release of formaldehyde, nitrogen oxides and traces of hydrogen cyanide is possible.

Advice for firefighters:

If exposed to fumes and carbonization gases during fire-fighting measures, rescue operations and cleanup wear a self-contained breathing apparatus.

The product ignites in a flame and continues to burn on removal of the source.

In an advanced state of fire, the molten polymer must be cooled with water. Water used to extinguish the fire and fire remainders must be collected and water disposed of, in accordance with local regulations.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No special measures necessary.

Environmental precautions:

No special measures necessary.

Methods and material for containment and cleaning up:

Mechanical cleaning up.

Dust deposits must be removed by humid or wet cleaning or with an appropriate industrial vacuum cleaner (minimum is dust class M). Dry sweeping or blowing-off of dust deposits with compressed air is not allowed.

7. Handling and storage

Precautions for safe handling:

Avoid overheating of material by improper handling. The "Ensinger machining recommendations for semi-finished engineering plastics" are to be observed.

Mechanical processing should generate as little dust as possible. Facilities, machines and devices are to be equipped with an appropriate exhaust system. As much dust/mist/vapour as possible should be drawn off at the outlet. The recirculation of air into the working place is only allowed after appropriate cleaning. Maintenance and functional testing of the exhaust system must be done on a regular basis. The working place must be kept clean, dust deposits must be removed immediately. Inhalation of dust/mist/vapour has to be avoided.

General industrial hygiene regulations are to be observed.

Wash hands before breaks and at the end of workday.

Tobacco should not be kept in the workplace.

Do not eat, drink or smoke in the workplace.

Conditions for safe storage, including any incompatibilities:

No special measures necessary.

The appropriate company regulations for fire prevention are to be followed.

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8. Exposure controls/personal protection

Control parameters:

In case of mechanical processing the general limit for dust is valid.

Substances with working place related, limits to be monitored or with biological limits are contained or may be released during mechanical processing.

substance	EC No	CAS No	exposure limit value	biological limit value	comment	source	country (type)
general dust limit value (a-dust)			4 mg/m ³		respirable fraction	Workplace Exposure Limit (WEL)	UK
general dust limit value (e-dust)			10 mg/m ³		inhalable fraction	Workplace Exposure Limit (WEL)	UK
Formaldehyde	200-001-8	50-00-0	2,5 mg/m ³		TWA (8 hrs)	Workplace Exposure Limit (WEL)	UK

Exposure controls:

If appropriate ventilation systems are used, the values will stay well below the limits.

Mechanical processing should generate as little dust as possible. Technical measures have priority over personal protective equipment.

The number of workers exposed as well as the time of exposure should be limited as far as possible.

Respiratory protection:

Wear protective breathing apparatus in case of insufficient ventilation. Composite filter for organic, inorganic, acetous inorganic and alkaline fumes/vapours and toxic particles (e.g. DIN EN 14387 type ABEK-P3).

Eye/face protection:

For mechanical operations wear safety glasses with side pieces or fully closed and tight-fitting goggles (DIN EN 166).

Hand protection/skin protection:

Skin protection should be used (barrier cream containing tanning agent).

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9. Physical and chemical properties

Appearance:

solid (semifinished or finished parts)

Melting point/Melting range:

ca. 166 °C

Relative density:

ca. 1,3 - 1,5 g/cm³

Flash point:

not applicable (solid)

Explosive properties:

not applicable

Solubility(ies):

insoluble (water, 20 °C)

Odour/odour threshold:

product-specific

Initial boiling point and Boiling range:

not applicable (solid)

Decomposition temperature:

> 240 °C

Flammability (solid, gas):

320 °C

Vapour pressure:

not applicable (solid)

Partition coefficient: n-octanol/water:

not applicable

10. Stability and reactivity

Chemical stability:

Product is stable. No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Conditions to avoid:

Do not heat to a temperature above the melting or decomposition temperature.

Incompatible materials:

Strong acids, strong alkalis, oxidizing agents, halogenated compounds.

Hazardous decomposition products:

No decomposition and hazardous reactions known when handled according to instructions.

In case of contact with incompatible substances: generation of formaldehydes, paraformaldehyde, formic acid, trioxanes.

By strong overheating of the material gaseous decomposition products, especially formaldehydes and paraformaldehydes may be released.

11. Toxicological information

Acute toxicity:

With proper use and in accordance with regulations there are no known dangers to health.

Chronic toxicity:

When used and handled according to specifications, the product does not have any harmful effects.

Other information:

No data available.

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12. Ecological information

No relevant information available.

Due to the consistency of the product a disperse distribution in the environment is not likely. Therefore, according to the present state of knowledge negative ecological effects are not expected.

13. Disposal considerations

Waste treatment methods:

Product residues can be treated in an energy recovery plant.

European waste catalogue:

The unpolluted product has no dangerous properties and is therefore not a hazardous waste within the meaning of regulation on the European List of wastes.

Waste codes/waste identification:

The exact assignment to a waste code must be carried out source- and use-related.

Proposals for the waste code numbers based on the probable use of the unpolluted product:

07 02 13 (waste plastic)

12 01 05 (plastics shavings and turnings).

Packaging:

Uncontaminated or cleaned packaging can be recycled without verification.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

Safety, health and environmental regulations/legislation specific:

According to annex II of the REACH regulation there is no legal obligation to compile safety data sheets for articles. We explicitly would like to point out that the present product handling information sheet (PHIS) is a voluntary information sheet for the handling of products, based on the same principle as our safety data sheets.

Information pursuant to Article 33: That article doesn't contain any substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 % weight by weight (w/w).

EU regulations:

According to regulation (EC) No 1272/2008 (CLP) articles are not subject to classification and labelling requirements.

No dangerous mixture in the sense of EU-directives.

Chemical safety assessment:

A chemical safety assessment is not necessary for articles and therefore has not been carried out.

National regulations:

Storage class VCI/TRGS 510 (Germany): 11 (flammable solid materials)

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16. Other information

Indication of changes:

First issue, status as of 04/18.

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values. They do not represent guaranteed properly values and therefore they must not be used for specification purposes. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. It is the user's responsibility to ensure that existing legislation and regulation are followed.