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|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 1/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name: POLYFAST
Cat. No. 40100036, 40100037

Container size: 1 kg, 7,5 kg

Relevant identified uses of the substance or mixture and uses advised against

Application: For embedding of materialographic specimens

Details of the supplier of the safety data sheet

Supplier: Struers A/S
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

Responsible for material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI
Any questions to the contents of this material safety data sheet should be sent to:
Lisbeth.Mygind@struers.dk

Emergency telephone number

Emergency telephone: Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

The product is not classified. Test has determined that the product is not sensitizing by skin contact. (*)

Physical and Chemical Hazards: The dangerous properties of the product are considered limited. Fine particles may form explosive vapor/air mixtures.

Human health: Inhalation of dust may irritate the respiratory system. May irritate eyes and skin.

Environment: The environmental hazard of the product is considered to be limited.

Label elements

(*)

Based on information from the manufacturer regarding the chemical composition, the product is not liable to classification, but the following labeling must be applied:

NFPA Rating: Health:1 Fire:1 Reactivity:0 Other:-

Safety data sheet available for professional user on request.

Other hazards

PBT/vPvB: Not relevant.

SAFETY DATA SHEET

Product name: POLYFAST Page: 2/8
Revision Date: 2013-12-19 Print date: 2013-12-19
Document No.: M0042 SDS-ID: US-EN/12.0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: resin. (*)

67/548/EEC:

| <u>%:</u> | <u>CAS-No.:</u> | <u>EC No.:</u> | <u>REACH Reg. No:</u> | <u>Chemical name:</u> | <u>Hazard classification:</u> | <u>Notes:</u> |
|-----------|-----------------|----------------|-----------------------|-----------------------|-------------------------------|---------------|
| 1-<5 | 100-97-0 | 202-905-8 | 01-2119474895-20- | Methenamine | F;R11 R43 | |
| 10-<15 | 7782-42-5 | 231-955-3 | - | Graphite | - | |

GHS:

| <u>%:</u> | <u>CAS-No.:</u> | <u>EC No.:</u> | <u>REACH Reg. No:</u> | <u>Chemical name:</u> | <u>Hazard classification:</u> | <u>Notes:</u> |
|-----------|-----------------|----------------|-----------------------|-----------------------|--|---------------|
| 1-<5 | 100-97-0 | 202-905-8 | 01-2119474895-20- | Methenamine | Flam. Sol. 2;H228 Skin Sens. 1;H317 | |
| 10-<15 | 7782-42-5 | 231-955-3 | - | Graphite | - | |

References: The full text for all R-phrases and hazard statements are displayed in section 16.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Not known.

SAFETY DATA SHEET

| | | | |
|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 3/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Special hazards arising from the substance or mixture

Specific hazards: When heated and in case of fire, toxic vapors/gases may be formed.

Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid inhalation of dust. Avoid inhalation of vapors and contact with skin and eyes.

Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Spill Cleanup Methods: Collect spillage with shovel, broom or the like. Dispose of collected dust according to agreement with local authorities.

Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Avoid inhalation of dust. Avoid contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Work practice should minimize contact. Use work methods which minimize dust production. (*)

Technical precautions: Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container. Store at room temperature.

Specific end use(s)

Specific use(s): Not relevant.

SAFETY DATA SHEET

Product name: POLYFAST Page: 4/8
Revision Date: 2013-12-19 Print date: 2013-12-19
Document No.: M0042 SDS-ID: US-EN/12.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits:

| <u>CAS-No.:</u> | <u>Chemical name:</u> | <u>As:</u> | <u>Exposure limits:</u> | <u>Type:</u> | <u>Notes:</u> | <u>References:</u> |
|-----------------|--|------------|-------------------------|--------------|---------------|--------------------|
| 7782-42-5 | Graphite (all forms except graphite fibers), respirable fraction | - | 2 mg/m3 | TWA | - | ACGIH |
| - | Particles (Insoluble or Poorly Soluble), not Otherwise Specified, inhalable particles | - | 10 mg/m3 | TWA | - | ACGIH |
| - | Particles (Insoluble or Poorly Soluble), not Otherwise Specified, respirable particles | - | 3 mg/m3 | TWA | - | ACGIH |
| 7782-42-5 | Graphite, synthetic, total dust | - | 15 mg/m3 | TWA | - | OSHA |
| 7782-42-5 | Graphite, synthetic, respirable fraction | - | 5 mg/m3 | TWA | - | OSHA |
| 7782-42-5 | Graphite, natural, respirable dust | - | 15 mppcf | TWA | - | OSHA |
| - | Particulates not otherwise regulated (PNOR), total dust | - | 15 mg/m3 | TWA | - | OSHA |
| - | Particulates not otherwise regulated (PNOR), respirable fraction | - | 5 mg/m3 | TWA | - | OSHA |

Exposure controls

Engineering measures: Observe Occupational Exposure Limits and minimize the risk of inhalation. Local exhaust is recommended.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with combination filter, type A2/P2.

Hand protection: Risk of contact: Wear protective gloves. Butyl rubber gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Risk of contact: Wear goggles/face shield.

Skin protection: Wear apron or protective clothing in case of contact. (*)

Hygiene measures: Wash hands after handling. (*)

Environmental Exposure Controls: Not available.

SAFETY DATA SHEET

| | | | |
|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 5/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Solid. (*)

Color: Various colors (*)

Odor: Characteristic. (*)

pH: Not available.

Boiling point: Not available.

Flash point: Not available.

Explosion limits: Not available.

Relative density: Not available. (*)

Solubility: Not available. (*)

Other information

Other data: VOC (Volatile Organic Substances): 0 g/l (calculated) (*)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: None known.

Chemical stability

Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions

Hazardous Reactions: None known.

Conditions to avoid

Conditions/materials to avoid: Avoid contact with acids and oxidizing substances. Avoid dust close to ignition sources. (*)

Incompatible materials

Incompatible materials: None known.

Hazardous decomposition products

Hazardous decomposition products: When heated and in case of fire, toxic vapors/gases may be formed.

SAFETY DATA SHEET

| | | | |
|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 6/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhalation: Dust may irritate throat and respiratory system and cause coughing. Vapors liberated during curing of the product may in high concentrations irritate the throat and respiratory system and cause coughing. (*)

Skin contact: Prolonged contact may cause redness and irritation. Test has determined that the product is not sensitizing by skin contact. (*)

Eye contact: Dust and vapors may irritate.

Ingestion: May irritate and cause malaise.

Specific effects: None known.
Carcinogenicity:
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.
(*)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity: The environmental hazard of the product is considered to be limited.

Persistence and degradability

Degradability: The degradability of the product has not been stated.

Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: Not relevant.

Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Note that fully cured material is not considered as hazardous waste.

Waste from residues: EWC-code: 16 05 09

SAFETY DATA SHEET

| | | | |
|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 7/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

UN number

UN-No: -

UN proper shipping name

Proper Shipping Name: -

Transport hazard class(es)

Class: -

Packing group

PG: -

Environmental hazards

Marine pollutant: -

Environmentally Hazardous substance: -

Special precautions for user

Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: TSCA: N/A (*)

National regulation: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Europe/USA:

This Material Safety Data Sheet has been prepared according to the EU-regulation.

Threshold Limit Values (2013), ACGIH, by the American Conference on Governmental Industrial Hygienists.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

Chemical Safety Assessment

CSA status: Not relevant.

SAFETY DATA SHEET

| | | | |
|----------------|------------|-------------|------------|
| Product name: | POLYFAST | Page: | 8/8 |
| Revision Date: | 2013-12-19 | Print date: | 2013-12-19 |
| Document No.: | M0042 | SDS-ID: | US-EN/12.0 |

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 2, 3, 7, 8, 9, 10, 11, 15.

The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Wording of H-statements:

| | |
|------|--|
| R11 | Highly flammable. |
| R43 | May cause sensitisation by skin contact. |
| H228 | Flammable solid. |
| H317 | May cause an allergic skin reaction. |

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
www.dhigroup.com.