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

Product identifier

Product name: MULTIFAST GREEN AND RED
Cat. No. 40100030, 40100031, 40100060, 40100061, 40100062

Container size: 2,5 kg, 7,5 kg, 25 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 ApS
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: struers@struers.dk

Emergency telephone number

Emergency telephone: National Capital Poison Center: 1-800-222-1222 (*)

Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071
SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012:
- Skin Corrosive Category 1B
- Serious Eye Damage Category 1
- Skin Sensitizer Category 1
- Category 2 mutagen
- Category 2 Target organ toxicant - Repeated Exposure (*)

Label elements

Danger

H314  Causes severe skin burns and eye damage.
H317  May cause an allergic skin reaction.
H341  Suspected of causing genetic defects.
H373  May cause damage to organs through prolonged or repeated exposure.
Value  (*)

P280  Wear protective clothing, gloves, eye and face protection.
P303 + P361 + P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310  Immediately call a poison center/doctor.
P362 + P364  Take off contaminated clothing and wash it before reuse.
P501  Dispose of contents/container in accordance with local regulations.

NFPA Rating: Health: 3  Fire: 1  Reactivity: 0  Other:-

Other hazards

Fine particles may form explosive vapor/air mixtures. Inhalation of dust may irritate the respiratory system.
PBT/vPvB:  Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: pigments, resin and fillers.
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. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring 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.
SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: No specific precautions.

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 firefighters:
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: Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin and eyes. Avoid inhalation of dust and vapors.

Environmental precautions

Environmental precautions: Avoid 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 and reuse, if possible. Dispose of large amounts of spillage/waste 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 and 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.

Specific end use(s)

Specific use(s): Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits:
<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name:</th>
<th>As:</th>
<th>Exposure limits:</th>
<th>Type:</th>
<th>Notes:</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1305-62-0</td>
<td>Calcium hydroxide, total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>1305-62-0</td>
<td>Calcium hydroxide, respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin, total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin, respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, synthetic, total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, synthetic, respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, natural, respirable dust</td>
<td>-</td>
<td>15 mppcf</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>9004-34-6</td>
<td>Cellulose, total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>9004-34-6</td>
<td>Cellulose, respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>50-00-0</td>
<td>Formaldehyde</td>
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<td>0.75 ppm</td>
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<td>OSHA</td>
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<tr>
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<td></td>
<td>-</td>
<td>2 ppm</td>
<td>STEL</td>
<td>15min</td>
<td></td>
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<tr>
<td>14807-96-6</td>
<td>Talc, containing no asbestos, respirable dust</td>
<td>-</td>
<td>20 mppcf</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>Talc, containing asbestos</td>
<td>-</td>
<td>0.1 fibre/cm³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12001-26-2</td>
<td>Mica, respirable dust</td>
<td>-</td>
<td>20 mppcf</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
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<tr>
<td>108-95-2</td>
<td>Phenol</td>
<td>-</td>
<td>5 ppm</td>
<td>19 mg/m³</td>
<td>Skin</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>Particulates not otherwise regulated (PNOR), total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>Particulates not otherwise regulated (PNOR), respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>1305-62-0</td>
<td>Calcium hydroxide</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>Kaolin, respirable particulate matter</td>
<td>-</td>
<td>2 mg/m³</td>
<td>TWA</td>
<td>A4</td>
<td>ACGIH</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite (all forms except graphite fibers), respirable particulate matter</td>
<td>-</td>
<td>2 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
<tr>
<td>9004-34-6</td>
<td>Cellulose</td>
<td>-</td>
<td>10 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
<tr>
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<td>-</td>
<td>0.3 ppm</td>
<td>CLV</td>
<td>DSEN; RSEN; A2</td>
<td>ACGIH</td>
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<tr>
<td>14807-96-6</td>
<td>Talc, Containing no asbestos fibers, respirable particulate matter</td>
<td>-</td>
<td>2 mg/m³</td>
<td>TWA</td>
<td>A4</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>
Notes:  
A1: Confirmed Human Carcinogen.  
A2: Suspected Human Carcinogen.  
A4: Not Classifiable as a Human Carcinogen.  
DSEN: Dermal Sensitization.  
RSEN: Respiratory Sensitization.  
Skin: Danger of cutaneous absorption. (ACGIH)  
Skin: Skin absorption. (OSHA)

**Exposure controls**

**Engineering measures:**  
Provide adequate ventilation. 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 ANSI 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:**  
Wear protective gloves. Nitrile 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:**  
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.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

- **Form:** Solid, Granular.
- **Color:** Green, Red.
- **Odor:** Phenolic.
- **pH:** Not available.
- **Boiling point:** Not available.
- **Flash point:** Not available.
- **Explosion limits:** Not available.
- **Relative density:** Not available.
- **Solubility:** Insoluble in water

**Other information**

Other data: Volatile Organic Compound (VOC): < 35 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.
SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation: Causes severe skin burns and eye damage.
Serious eye damage/irritation: Causes serious eye damage.
Respiratory or skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: Suspected of causing genetic defects.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive Toxicity: Based on available data, the classification criteria are not met.
STOT - Single exposure: Based on available data, the classification criteria are not met.
STOT - Repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: Based on available data, the classification criteria are not met.
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: Phenol can be absorbed through the skin and cause chronic poisoning.
Ingestion: Corrosive. Even small amounts may cause serious damage.
Specific effects: Carcinogenicity:
IARC Cancer Review: Group 3 for Phenol.
IARC Cancer Review: Group 3 for Talc, not containing asbestiform fibres.
National Toxicology Program (NTP): Yes (Formaldehyde) (*)
OSHA: No.

SECTION 12: ECOLOGICAL INFORMATION

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

Persistence and degradability
Degradability: There are no data on the degradability of this product.

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

Waste from residues: Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste. Note that fully cured material is not considered as hazardous waste. EWC-code: 16 05 06

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

The product is covered by international regulation on the transport of dangerous goods (IMDG, IATA).

UN number

UN-No: 3244

UN proper shipping name

Proper Shipping Name: SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S.

Transport hazard class(es)

Class: 8

Packing group

PG: II

Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

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: As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

TSCA: N/A.


Europe/USA: This Material Safety Data Sheet has been prepared according to the EU-regulation.


NIOSH Pocket Guide to Chemical Hazards.

SAFETY DATA SHEET

Product name: MULTIFAST GREEN AND RED
Revision Date: 2016-12-20
Document No.: M0196
Page: 11/11
Print date: 2016-12-20
SDS-ID: US-EN/2.0

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: 1, 2, 11.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

[Signature]

Additional information: Classification according to HCS 2012:
Calculation method.

Wording of H-statements:

H228 Flammable solid.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

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.