

Plant: Rich. KLINGER Dichtungstechnik
GmbH & Co KG
Am Kanal 8-10
A-2352 Gumpoldskirchen

Date of Issue: 20.01.2011
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Safety Information

1. Material/Preparation and Company Name

1.1 Description of the prouduct:

Tradename: **KLINGER®top-graph-2000**

1.2 Application of the product:

Gasket material for the application in
flanged joints

1.3 Information on the manufacturer:

Rich.KLINGER Dichtungstechnik
GmbH & CO KG
Am Kanal 8-10; A-2352 Gumpoldskirchen
Division giving information:
Research & Development
Telephone: +43 (0)2252-62599-0
Telefax: +43 (0)2252-62599-299
Emergency call tel.: +43 (0)2252-62599-554
Medical advise: +43 (0)1-4064343

2. Composition/Information on Components

2.2 Chemical Characteristics

Material contents:

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|--|--|--|--|--|--|
| | | | | | |
| | Nitrile-butadiene rubber China-Clay Silicon dioxide Aramid-fibre Glass fibre Graphite | | | | |

Danger classification not necessary as no dangers are known based on the level of knowledge at the present time.

3. Possible Dangers

Identification of danger: In its form as supplied no hazards known.

4. First Aid Actions

After inhaling: Not applicable (accordingly see point 6)

After skin contact: Not applicalbe (accordingly see point 6)

After eye contact: Remove small solid particles and rinse with water approx. 10 min.
If provoking continues, a doctor must be consulted.

After swallowing: No measures necessarily.

Note for the doctor: Not applicable

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5. Measures for Firefighting

Suitable extinguishing agent: Water, carbon dioxide, powder extinguishers, foam extinguishers.

Extinguishing agent which is unsuitable for safety reasons: Not known.

Special dangers through the material or the preparation itself, its combustion products or resulting gases: In the case of combustion, the same gases are produced as with burning rubber. Heavy carbon black formation

The following can be produced in case of fire: Carbon monoxide, carbon dioxide, sulphur oxides and nitrous gases (NO_x), irritating/caustic, combustible as well as poisonous carbonisation gases.

Special protective equipment: When Firefighting, breathing apparatus and eye protection have to be worn against dust and fumes and burning rubber.

Additional note: There is the danger of the rubber re-igniting. For this reason, additional cooling after extinguishing is necessary.

6. Measures in Case of Unintentional Release

Precautionary measures related to persons: Avoid dust formation

Environmental protection measures: No dangers known.

Procedure for cleaning: Use of approved vacuum cleaners with fine dust filters.

6.1 Measures in Case of Unintentional exceeding Dust Release

General Note: In case of improper use and use which is not in compliance with stipulations e.g. grinding might cause an exceeding amount of fine dust. In this case proper exhausting and filtering is to apply respectively protective equipment (fine –dust respirator FFP1 acc. to EN149:2001) has to be worn.

After Inhaling: Bring to fresh air

After skin contact: Washing with soap

7. Handling and Storage

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7.1 Handling

Notes on safe handling: Measures for the avoidance of strong dust formation.

Notes on protection against fire and explosion: Material is flammable only through effects of an external flame.

7.2 Storage

Requirements on storage rooms and containers: Dry storage rooms. Material should not be stored in the vicinity of the heating as it can become brittle and no longer usable in accordance with stipulations.

Notes on storing together with other products: No restrictions or dangers known.

8. Limits of Exposure and Personal Protective Equipment

8.1 Expositions References

See point 7; no further measures necessarily

8.2 Personal Protective Equipment for processing

Breathing protection: in case of high fine dust concentrations use personal protective equipment (e.g. fine –dust respirator FFP1 acc. to EN 149:2000).
Accordingly see point 6.

Hand protection: Gloves

Body protection: Overall

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9. Physical and Chemical Characteristics

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|---------------------------------|----------------------------------|-------------|---------------|
| 9.1. Appearance | | | |
| Form: firm sheets | Colour: Surface: black | | |
| Odour: gummy | | | |
| 9.2 Safety-related data | | | |
| | Value/Range | Unit | Method |
| Change in state | not known | | |
| Boiling point/Boiling range: | n.a. | | |
| Melting point/Melting range: | n.a. | | |
| Decomposition of elastomer: | over 300°C | | |
| Flash point: | not known | | |
| pH-Wert: | n.a. | | |
| Ignitability of solid material: | not known | | |
| Ignition temperature | not known | | |
| Self-igniting solid material: | Not self-igniting | | |
| Fire-promoting properties: | self-burning | | |
| Danger of explosion | None | | |
| Explosion limits: | n.a. | | |
| Vapour pressure: | n.a. | | |
| Density: | 1,75 g/cm ³ (at 25°C) | | |
| Solubility in water/grease: | insoluble | | |

10. Stability and Reactivity

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| Conditions to be avoided: temperatures >450°C |
| Materials to be avoided: Not known |
| Dangerous decomposition products: hydrogen cyanide |
| The following can result in case of fire: Carbon monoxide, carbon dioxide, sulphur oxides and nitrous gases (NO _x), irritating/caustic, combustible as well as poisonous carbonisation gases. |
| The product is stable under standard conditions. |

11. Information on Toxicology

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| In the case of intended use no toxicological effects are known. |
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12. Information on Ecology

12.1 Information on elimination (Persistency and degradability)

Degree of elimination: not known

Persistency: Biologically not degradable (self-classification)

12.2 Mobility and (bio) accumulation potential:

water insoluble, fat insoluble, no in vivo resorption, bonding or accumulation known

12.3 Exotoxilogical Effects

Not known

For detailed information e.g. approvals and certificates (potable water, food contact, etc.) please visit www.klinger.co.at → material grade → approvals and certificates.

13. Notes on Disposal

13.1 Product

Recommendation: combustion by a certified recycling company .

Product contains $\geq 3\%$ organic carbon.

Waste Code No. in accordance with ÖNORM S2100: 57501 Waste name: Rubber

13.2 Contaminated Packaging

Recommendation: Disposal in accordance with the national regulations.

14. Information on Transport

14.1 Transport/Further Information

No dangers known.

15. Regulations

Regulations for dangerous material not applicable.

The product covered by this safety information is classified as an article according to regulation (EG) Nr. 1907/2006 (REACH). In compliance with REACH regulation it is not mandatory to issue material safety data sheets for articles.

Accordingly the present safety information is voluntary can not be regarded as a material safety data sheet as defined by regulation (EG) Nr. 1907/2006 (REACH).

Duty to communicate information according to regulation (EG) Nr.1907/2006 (REACH):

The article covered by the present safety information does not contain any substance of very high concern by the candidate list to be included in Annex XIV of REACH exceeding the limit of 0,1% (w/w).

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16. Other Information

The data rely on the present conditions of the knowledge and experiences and serve to describe the product regarding safety precautions which can be met. They do not represent a warranty of the product described by characteristics.

Data sheet issuing range:

Development

Contact person

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Revision state: 01

| Revision/Modification | Point / Sheet | Date |
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