

SAFETY DATA SHEET

KLINGERtop-chem-2000

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1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name KLINGERtop-chem-2000

Other Names PTFE Sheeting/Jointing/Gaskets KLINGERtop-chem-2000

Recommended Use High temperature gasket material

Supplier KLINGER Limited (ABN 95 008 679 838)
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2 - HAZARDS IDENTIFICATION

Not classified as hazardous according to the criteria of **Safe Work Australia** and **GHS (Globally Harmonized System of Classification and Labelling of Chemicals)**.

Classification according to GHS: Not Classified

GHS Label Elements: Not Applicable for these products.

Other Hazard Information: The product is considered harmless to health and the environment in the form supplied and if stored and handled in the correct manner – see Section 7. No hazards are known based on present information.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient | CAS | Proportion |
|---|-------------|------------|
| PTFE (Polytetrafluoroethylene) (99-100%) | 9002-84-0 | >60% |
| Siliconcarbide(SiC) | 000409-21-2 | <10% |

4 - FIRST AID MEASURES

| | |
|-------------------|---|
| Inhalation | Dust arising from working the product should be treated as nuisance particulate material. Inhalation of dust may cause irritation to the mucous membranes and upper respiratory tract. Movement of exposed individual to fresh air is recommended. When material is heated to above 300°C thermal decomposition begins to occur. Thermal decomposition products of fluorinated products may cause polymer fume fever with flu-like symptoms which subside within 36 to 48 hours |
| Skin | Generation of dust may cause mechanical abrasion. Wash skin with soap and water. Launder heavily contaminated clothing before reuse. Seek medical advice if irritation develops. |
| Eye | May cause mechanical irritation in contact with eyes. Remove small solid particles and rinse with water for a minimum of 15 minutes. In all cases of eye contamination, it is a sensible precaution to seek medical advice. |
| Ingestion | Not hazardous. Not a likely source of exposure. If ingested, give plenty of fluid to assist passage through system. Seek medical attention if irritation occurs. |

5 - FIRE FIGHTING MEASURES

| | |
|--|---|
| Suitable Extinguishing Media | Water, carbon dioxide, powder extinguishers, foam extinguishers |
| Hazards from Combustion Products | Fluorinated olefins, Carbonyl fluoride, Hydrogen Fluoride. At temperatures exceeding 400°C the quantity of pyrolysis product increases rapidly and so does their toxic nature. Small amounts of octafluoroisobutylene have been identified. |
| Precautions for Firefighters and Special Protective Equipment | Breathing apparatus and eye protection must be worn to protect from dust and fumes. |

6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures Fire: See Section 5
Personal: See Section 4
Environmental: No known environmental hazards exist.

Methods and Materials for Containment and Cleanup

Approved vacuum cleaners with high efficiency filters (HEPA) conforming to AS3544 or equivalent must be used to clean areas. Spills which involve powder, dusts or granules may create a slip hazard and should be cleaned up immediately. Sweep up but avoid generating dusts.

Additional In the case of improper use (see Section 8) fine dust may result. Adequate suction and filtering of the exhaust air should be ensured.

7 - HANDLING AND STORAGE

Handling No special precautions necessary when handling the material in its finished form. However, whenever further processing of the product is undertaken, potential for the generation of dust exists. See Section 8.

Storage Store in a cool, dry, well ventilated area removed from foodstuffs. Material is only flammable through the effects of intensive heat. Excessive heat in the storage area may diminish the product's performance in its intended application.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards (Time-Weighted Averages) PTFE Dust 10mg/m³ ES-TWA
(Recommended - Note that PTFE has no current assigned exposure standard, however as a general safety precaution the above guideline may be used.)

Biological Limit Value No Biological Limit Value allocated.

Engineering Controls Ensure adequate ventilation exists to maintain air concentrations below exposure standards. Do not inhale dust. Use localised extraction or wet methods of work to control dust levels.

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Personal Protective Equipment No special precautions necessary when handling the material in its finished form. However, whenever further processing of gaskets is undertaken, the potential for the release of particulates that may cause mechanical abrasion exists. In the case of particle generation exceeding the above-noted National Exposure Standards, recommended PPE are rubber/PVC gloves, coveralls, safety glasses and a P2 particulate (AS1716 or equivalent) respirator. When removing embrittled or spent material or when high levels of dust exist a full-face class H particulate cartridge respirator or full-face positive pressure demand airline respirator (AS1716 or equivalent) is recommended. Good hygiene practices must always be maintained.

9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------------|---|
| Appearance | Form: Sheets or cut gaskets Colour: Grey |
| Odour | None |
| pH | Not applicable |
| Vapour Pressure | Not applicable |
| Vapour Density | Not applicable |
| Boiling Point/Range | Not applicable |
| Freezing/Melting Point | Not applicable |
| Flashpoint | Not-flammable |
| Solubility (water) | Insoluble |
| Specific Gravity/Density | 2.5g/cm ³ |
| Auto Ignition Temperature: | Not self-igniting |
| Additional: | None |

10 - STABILITY AND REACTIVITY

Chemical stability Stable under intended operating conditions.

Conditions to Avoid Not known

Incompatible Materials Not known

Hazardous Decomposition

Products When material is heated to above 300°C thermal decomposition begins to occur. Thermal decomposition products of fluorinated products may cause polymer fume fever with flu-like symptoms which subside within 36 to 48 hours.

11 - TOXICOLOGICAL INFORMATION

In case of the intended use no toxicological effects are known.

The most common source of exposure is experienced when smoking cigarettes contaminated with PTFE dust.

No toxicity was observed in male/female rats when fed PTFE (up to 25%) for a period of 90 days.

Rats were implanted with PTFE. Local sarcomas were induced during this testing procedure, however this is not considered relevant under normal industrial usage.

The agent is not classifiable as to its carcinogenicity to humans.

12 - ECOLOGICAL INFORMATION

Ecotoxicity Not known. Insoluble in water, precipitates. Although inert as a finished product, avoid contamination of drains or waterways to prevent accumulation in the aquatic environment.

Persistence and Degradability Not known. Not biologically degradable (self-classification).

Mobility Not known

13 - DISPOSAL CONSIDERATIONS

Disposal Methods No special requirements exist. This is a thermoplastic material hence recycling is preferable to landfill disposal. Do not dispose of in an incineration system under any circumstance. Local, state and federal statutory regulations must be observed

Special Precautions Not applicable

14 - TRANSPORT INFORMATION

UN Number None allocated

UN Proper Shipping Name None allocated

Class and Subsidiary Risks Not relevant

Packing Group Not relevant

Special Precautions for User Do not transport with Explosives, Oxidising agents, Organic peroxides and foodstuffs. In sheet and cut gasket form there is no risk associated with the product under normal transport conditions. Not defined as a Dangerous Good by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Hazchem Code None allocated

15 - REGULATORY INFORMATION

Regulations for dangerous materials not applicable.

16 - OTHER INFORMATION

Date of issue/revision: 05.03.25

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