# 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	KLINGERtop-chem-2005
Other Names	PTFE Sheeting/Jointing/Gaskets KLINGERtop-chem-2005
Recommended Use	High temperature gasket material
Supplier	KLINGER Limited (ABN 95 008 679 838) 38 McDowell St Welshpool WA 6106 AUSTRALIA Tel +61 (0)8 9251 1600 or 1300 798 279 (0800 – 1700 Australian Western Standard Time – GMT +8 hrs) Fax +61 (0)8 9350 9286
Emergency Telephone Number	<b>:</b> +61 412626010

#### **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%
Inorganic Filler Material Pigment red 101 Fe <sub>2</sub> O <sub>3</sub>	14808-60-7 1309-37-1	<10% <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
	octafluroisobutylene 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

<b>Emergency Procedures</b>	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.)
<b>Biological Limit Value</b>	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.
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 or 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: Colour: Sheets or cut gaskets Red

Odour

None

рН	Not applicable
Vapour Pressure	Not applicable
Vapour Density	Not applicable
<b>Boiling Point/Range</b>	Not applicable
Freezing/Melting Point	Not applicable
Flashpoint	Not-flammable
Solubility (water)	Insoluble
Specific Gravity/Density	2.2g/cm3
Additional	None

# **10 - STABILITY AND REACTIVITY**

Chemical stability	Stable under intended operating conditions.
Conditions to Avoid	Not known
Incompatible Materials	Not known
Hazardous Decompositio Products	<b>n</b> 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**

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**: 05.03.21

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#### END OF MSDS