

## Material Safety Data Sheet

### 1. Product and producer

|  |   |
|--|---|
| Manufacturer<br>TennVac Inc.<br>13F-3, NO31-1, Lane 169, Kang-Ning St,<br>Hsi-Chih, Taipei Hsien, Taiwan | Product name<br>F5801<br>Conductive silicone rubber for manufacturing of<br>dispensed gaskets |
|  | Date of issue<br>31.08.2004   |

### 2. Composition / Information on Ingredients

| Chemical Name     | CAS-No     | EINECSNo. | Symbol(s) | R-phrases | Concentration |
|-------------------|------------|-----------|-----------|-----------|---------------|
| Petroleum naphtha | 6472-48-9  |           | Xn        | R65/66    | 1-5 wt %      |
| Silicone rubber   | 63394-02-5 |           |           |           | 30 - 50 wt %  |
| Nickel            | 7440-02-0  |           |           |           | 30 - 50 wt %  |
| Silver            | 7440-22-4  |           |           |           | 10 - 20 wt %  |

### 3. Hazards Identification

|                           |   |
|---------------------------|---|
| Symbol:                   | The product is not considered as hazardous according to directive 91/155/EEG  |
| Risk marking:             | No risk marking required  |
| Acute risk on eye:        | Contact may cause eye irritation.   |
| Acute risk on skin:       | May cause de-fatting and drying of the skin upon prolonged and repeated contact.<br>This may lead to irritation and dermatitis. |
| Acute risk on inhalation: | Inhalation of high concentrations of solvent may cause headache or respiratory irritation                                       |
| Acute risk on ingestion:  | May irritate digestion if swallowed.  |
| Chronic risks:            | None  |

### 4. First Aid Measures

|              |  |
|--------------|--|
| Eye contact  | Immediately flush eye with running water for at least 15 minutes, keeping eyelids open. Obtain medical attention if irritation persists. |
| Skin contact | Wash contaminated skin with soap and water. Remove contaminated clothing and wash before reuse.  |
| Inhalation   | Allow the person to rest in well ventilated area. Obtain medical attention if irritation persists..                                      |
| Ingestion    | Rinse mouth with water. Do not induce vomiting. Obtain medical attention.  |

## 5. Fire-Fighting Measures

|                           |   |
|---------------------------|---|
| Extinguishing             | Carbon dioxide, water foam, water, dry chemical.  |
| Fire fighting procedures  | If large quantities of material is involved, fight fire from a safe distance. Use self-contained breathing apparatus and protective clothing. |
| Fire- and explosion risks | None.   |

## 6. Accidental Release Measures

|                           |  |
|---------------------------|--|
| Personal precautions      | Avoid fumes if the material is exposed to heat.  |
| Environmental precautions | Limit the release. Prevent the release to enter sewers or water ways.  |
| Methods for cleaning up   | Take up by mechanical means. If possible collect material for reuse.<br>Final cleaning can be made with a cloth soaked in petroleum naphtha. |

## 7. Handling and Storage

|          |   |
|----------|---|
| Handling | Do not allow contact with eyes or skin. Avoid exposure by inhalation of vapour especially when the material is exposed to heat for the first time.          |
| Storage  | Store in a cool, dry location with adequate ventilation. Store in tightly closed container. Keep away from heat, sparks, flames and other ignition sources. |

## 8. Exposure Controls / Personal Protection

|   |  |
|---|--|
| <b>Components with workplace control parameters</b> |  |
| Precautions   | Arrange working place to procedures to avoid direct contact with the product. Provide local exhaust ventilation to capture vapours generated by the process. Use ex proof equipment unless a process and equipment evaluation indicates that this action is not needed. Ventilation must be sufficient to maintain airborne levels of components below their exposure limits and explosion limits. |
| Exposure limits                                     | Component CAS-no TLV/TWA TLV/STEL<br>mg/m <sup>3</sup> (SE) mg/m <sup>3</sup> (SE)<br>Petroleum naphtha 6472-48-9 350 500 Silicone rubber 63394-02-5 No threshold limit values established<br>Nickel 7440-02-0 No dusting expected in operation<br>Silver 7440-22-4 No dusting expected in operation   |
| Eye   | Wear protective safety glasses   |
| Skin  | Wear protective gloves and clothes to prevent skin contact.<br>Wash contaminated clothes before reuse.   |
| Inhalation  | Use approved respiratory protection if adequate ventilation is not provided.   |

## 9. Physical and Chemical Properties

|                     |  |
|---------------------|--|
| Physical state      | Beige paste with an odour of solvent             |
| Specific gravity    | > 1000 kg/m <sup>3</sup>                         |
| Vapour pressure     | Not established. 0,1 kPa @ 20 C for the naphtha. |
| Explosion limits    | 1-6 vol % for the naphtha                        |
| Flame point         | Not established. > 64 C for the naphtha          |
| Ignition point      | Not established. > 200 C for the naphtha         |
| Volatile content    | 5-10 wt %  |
| Solubility in water | Insoluble  |

## 10. Stability and Reactivity

|                          |  |
|--------------------------|--|
| Chemical stability       | The product is stable  |
| Hazardous polymerisation | Will not occur   |
| Conditions to avoid      | Avoid storage in open containers, exposure to heat, sparks and open flames.  |
| Incompatibilities        | None.  |
| Hazardous decomposition  | Thermal or chemical composition may produce carbon monoxide, carbon dioxide, silicone dioxide as well as silver and nickel powder. |

## 11. Toxicological information

|                          |  |
|--------------------------|--|
| Routes of entry          | Skin contact, inhalation and ingestion.  |
| Toxicity to animal       | Not established.   |
| Acute risk on eye        | Contact may cause eye irritation.  |
| Acute risk on skin       | May cause de-fatting and drying of the skin upon prolonged and repeated contact. This may lead to irritation and dermatitis.   |
| Acute risk on inhalation | Inhalation of high concentrations of solvent may cause respiratory irritation.   |
| Acute risk on ingestion  | May be irritating if swallowed.  |
| Chronic risks            | None   |
| Remark                   | The nickel is totally covered by a layer of silver. It is not considered likely that the risks for allergic reactions associated with nickel exists with this product. |

## 12. Ecological Information

|             |  |
|-------------|--|
| Ecotoxicity | The material is not considered to have an effect on fish and aquatic invertebrates |
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## 13. Disposal considerations

|                |  |
|----------------|--|
| Waste disposal | Recycle to process if possible. Dispose of waste according to local regulations. In most cases the waste material can be disposed of as normal industrial waste. |
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## 14. Transport Information

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|-------------------------|--|
| Classification          | The material is not classified as dangerous goods according to ADR, RID, IMDG, IATA. |
| Transport consideration | No special requirements.   |

### 15. Regulatory Information

|              |   |
|--------------|---|
| Symbol       | The product is not considered as hazardous according to directive 91/155/EEG and is not subject to the directive of classification, packaging and labelling of dangerous goods. |
| Risk marking | No risk marking required.   |

### 16. Other information

This material data sheet is made according to directive 91/155/EEG.