1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name: VITON FLUOROElastomer

1.2 Uses and uses advised against

Use(s): ELASTOMER • INDUSTRIAL APPLICATIONS

1.3 Details of the supplier of the safety data sheet

Supplier name: AUSTRALASIAN SEAL COMPANY PTY LTD
Address: 1/17 Brennan Way, Belmont, WA, Australia, 6985
Telephone: (08) 9478 3300
Fax: (08) 9478 6600
Email: ausseaco@iinet.net.au
Website: Not supplied

1.4 Emergency telephone number(s)

Emergency: (08) 9478 3300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other Hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>EC number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-PROPENE, 1,1,2,3,3,3-HEXAFLUORO-, POLYMER WITH 1,1-DIFLUOROETHENE</td>
<td>9011-17-0</td>
<td>618-470-6</td>
<td>&gt;96%</td>
</tr>
<tr>
<td>4,4’-[2,2,2-TRIFLUORO-1-(TRIFLUOROMETHYL)ETHYLIDENE]DIPHENOL</td>
<td>1478-61-1</td>
<td>216-036-7</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>BARIUM SULPHATE</td>
<td>7727-43-7</td>
<td>231-784-4</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>BENZYLTRIPHENYLPHOSPHONIUM, SALT WITH 4,4’-[2,2,2-TRIFLUORO-1-(TRIFLUOROMETHYL)ETHYLIDENE]BIS[PHENOL] (1:1)</td>
<td>75768-65-9</td>
<td>278-305-5</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation: If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion: For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

First aid facilities: No information provided.

4.2 Most important symptoms and effects, both acute and delayed

No information provided.
Product name: VITON FLUOROELASTOMER

4.3 Immediate medical attention and special treatment needed
Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media
Dry agent, carbon dioxide or water fog. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture
Combustible. May evolve toxic gases (carbon oxides, fluorides, hydrocarbons) when heated to decomposition. Dust may form explosive mixtures with air. May evolve fluorinated olefins when heated to decomposition.

5.3 Advice for firefighters
Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code
None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning up
If spill, collect and reuse where possible.

6.4 Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

7.3 Specific end use(s)
No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reference</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>Barium sulphate</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
</tr>
</tbody>
</table>

Biological limits
No biological limit values have been entered for this product.

8.2 Exposure controls
Engineering Controls
Avoid inhalation. Use in well ventilated areas. Maintain dust levels below the recommended exposure standard.

PPE
CHEMALERT REPORT
Full Report

Product name: VITON FLUOROELASTOMER

- **Eye/Face**: Wear dust-proof goggles.
- **Hand**: No PPE specified.
- **Body**: No PPE specified.
- **Respiratory**: No PPE specified.

---

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Appearance**: WHITE TO OFF-WHITE PELLETS OR SHEETS
- **Odour**: ODOURLESS
- **Odour Threshold**: NOT AVAILABLE
- **pH**: NOT AVAILABLE
- **Melting Point**: NOT AVAILABLE
- **Boiling Point**: NOT AVAILABLE
- **Flash Point**: > 204°C
- **Evaporation Rate**: NOT AVAILABLE
- **Flammability**: COMBUSTIBLE
- **Upper Explosion Limit**: NOT AVAILABLE
- **Lower Explosion Limit**: NOT AVAILABLE
- **Vapour Pressure**: NOT AVAILABLE
- **Vapour Density**: NOT AVAILABLE
- **Solubility (water)**: INSOLUBLE
- **Partition Coefficient**: NOT AVAILABLE
- **Autoignition Temperature**: NOT AVAILABLE
- **Decomposition Temperature**: NOT AVAILABLE
- **Viscosity**: NOT AVAILABLE
- **Explosive Properties**: NOT AVAILABLE
- **Oxidising Properties**: NOT AVAILABLE
- **Specific Gravity**: 1.75 to 1.9

9.2 Other information

- **% Volatiles**: NOT AVAILABLE

---

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with fluorine, boron, magnesium, titanium, heat and ignition sources. Also incompatible with aluminium, powdered metals, alkali metals and alkaline earth metals.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon oxides, fluorides, hydrocarbons) when heated to decomposition. May evolve fluorinated olefins when heated to decomposition.
11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary
Low toxicity. Under normal conditions of use, adverse health effects are not anticipated. Inhalation of fumes may result in a flu-like illness known as polymer fume fever, which may not develop until several hours after exposure and may last for one or two days.

Eye
Low irritant. Contact may result in irritation, lacrimation and redness.

Inhalation
Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.

Skin
Low irritant. Prolonged or repeated contact may result in mild irritation.

Ingestion
Low toxicity. Ingestion of large quantities may result in nausea, vomiting and gastrointestinal irritation.

Toxicity data
No LD50 data available for this product.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability
No information provided.

12.3 Bioaccumulative potential
No information provided.

12.4 Mobility in soil
No information provided.

12.5 Results of PBT and vPvB assessment
No information provided.

12.6 Other adverse effects
No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal
Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

Legislation
Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>Land Transport (ADG)</th>
<th>Sea Transport (IMDG/IMO)</th>
<th>Air Transport (IATA/ICAO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Allocated</td>
<td>None Allocated</td>
<td>None Allocated</td>
<td>None Allocated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.2 UN proper shipping name</th>
<th>Land Transport (ADG)</th>
<th>Sea Transport (IMDG/IMO)</th>
<th>Air Transport (IATA/ICAO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Allocated</td>
<td>None Allocated</td>
<td>None Allocated</td>
<td>None Allocated</td>
</tr>
</tbody>
</table>

This report was compiled based on the SDS dated 06 Dec 2012
Product name: VITON FLUOROELASTOMER

14.3 Transport hazard classes
- DG Class: None Allocated
- Subsidiary risk(s): None Allocated

14.4 Packing group: None Allocated

14.5 Environmental hazards: None Allocated

14.6 Special precautions for user
- Hazchem Code: None Allocated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Poison schedule: Classified as a Schedule 6 Poison using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
- Classifications: None allocated
- Risk phrases: None allocated
- Safety phrases: None allocated

Inventory listing(s): AUSTRALIA: AICS (Australian Inventory of Chemical Substances)
All components are listed on AICS, or are exempt.

15.2 Chemical safety assessment
No information provided.

16. OTHER INFORMATION

Additional information: TEFLEX: Polymer-fume fever (flu-like illness) is reported in humans exposed to unfinished polymerised product dust or thermal decomposition products (i.e. tetrafluoroethylene monomers, hydrogen fluoride, fluorinated hydrocarbons and octafluoroisobutylene). Note: At temperatures > 400°C, the quantity of pyrolysis products and their toxic nature increases and humidity levels can influence what gases are evolved. Symptoms include dizziness, headache, nausea, chills, malaise, weakness, numbness, tingling arms/fingers, cough, pain in throat, tight chest, breathing difficulties and fever.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

COLOUR RATING SYSTEM: RMT has assigned all ChemAlert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all ChemAlert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a...
**Product name**
VITON FLUOROELASTOMER

---

guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>CAS #</td>
<td>Chemical Abstract Service number - used to uniquely identify chemical compounds</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>EC No.</td>
<td>EC No - European Community Number</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>GTEPG</td>
<td>Group Text Emergency Procedure Guide</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration, 50% / Median Lethal Concentration</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose, 50% / Median Lethal Dose</td>
</tr>
<tr>
<td>mg/m³</td>
<td>Milligrams per Cubic Metre</td>
</tr>
<tr>
<td>OEL</td>
<td>Occupational Exposure Limit</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>pH</td>
<td>relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts Per Million</td>
</tr>
<tr>
<td>REACH</td>
<td>Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
<tr>
<td>SUSMP</td>
<td>Standard for the Uniform Scheduling of Medicines and Poisons</td>
</tr>
<tr>
<td>SWA</td>
<td>Safe Work Australia</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
</tbody>
</table>

**Report Status**

This ChemAlert report has been independently compiled by RMT’s scientific department utilising the original Safety Data Sheet ('SDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer’s original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

**Prepared By**
Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

**Last Reviewed**: 26 Feb 2013
**Date Printed**: 09 Mar 2015
**Based on SDS dated**: 06 Dec 2012

**End of Report**