### 1 Identification of the substance/mixture and of the company/undertaking

<table>
<thead>
<tr>
<th><strong>Product identifier</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade name:</strong> VpCI-649 / S-69</td>
</tr>
<tr>
<td><strong>Relevant identified uses of the substance or mixture and uses advised against</strong></td>
</tr>
<tr>
<td>No further relevant information available.</td>
</tr>
<tr>
<td><strong>Application of the substance / the mixture</strong> Corrosion inhibitors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Details of the supplier of the safety data sheet</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturer/Supplier:</strong> Cortec Corporation</td>
</tr>
<tr>
<td>4119 White Bear Parkway</td>
</tr>
<tr>
<td>St. Paul, MN 55110 USA</td>
</tr>
<tr>
<td>Phone (651) 429-1100</td>
</tr>
<tr>
<td>Fax (651) 429-1122</td>
</tr>
<tr>
<td><strong>Information department:</strong> <a href="mailto:info@cortecvci.com">info@cortecvci.com</a></td>
</tr>
<tr>
<td><strong>Emergency telephone number:</strong></td>
</tr>
<tr>
<td>Spill, Leak, Fire, Exposure, or Accident</td>
</tr>
<tr>
<td>24 hour CHEMTREC contact:</td>
</tr>
<tr>
<td>USA and Canada 1-800-424-9300</td>
</tr>
<tr>
<td>International +1-703-527-3887 (collect calls accepted)</td>
</tr>
<tr>
<td>UK +(44)-870-8200418</td>
</tr>
</tbody>
</table>

### 2 Hazards identification

<table>
<thead>
<tr>
<th><strong>Classification of the substance or mixture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification according to Regulation (EC) No 1272/2008</strong></td>
</tr>
<tr>
<td>GHS07</td>
</tr>
<tr>
<td>Skin Irrit. 2  H315  Causes skin irritation.</td>
</tr>
<tr>
<td>Eye Irrit. 2  H319  Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

| **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void |
| **Information concerning particular hazards for human and environment:** |
| The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. |

<table>
<thead>
<tr>
<th><strong>Label elements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labelling according to Regulation (EC) No 1272/2008</strong></td>
</tr>
<tr>
<td>The product is classified and labelled according to the CLP regulation.</td>
</tr>
<tr>
<td><strong>Hazard pictograms</strong> GHS07</td>
</tr>
<tr>
<td><strong>Signal word</strong> Warning</td>
</tr>
<tr>
<td><strong>Hazard statements</strong></td>
</tr>
<tr>
<td>H315 Causes skin irritation.</td>
</tr>
<tr>
<td>H319 Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Precautionary statements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>P280  Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P321  Specific treatment (see on this label).</td>
</tr>
<tr>
<td>P362  Take off contaminated clothing.</td>
</tr>
<tr>
<td>P332+P313  If skin irritation occurs: Get medical advice/attention.</td>
</tr>
<tr>
<td>P337+P313  If eye irritation persists: Get medical advice/attention.</td>
</tr>
</tbody>
</table>
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.05.2014  Revision: 08.05.2014

Trade name: VpCI-649 / S-69

· Other hazards
· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
  · Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS: 64665-57-2</th>
<th>Tolyltriazole, sodium salt</th>
<th>≤ 2.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 265-004-9</td>
<td>T R25; C R34</td>
<td>Acute Tox. 3, H301; Skin Corr. 1B, H314</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS: 7631-95-0</th>
<th>Sodium molybdate</th>
<th>≤ 2.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 231-551-7</td>
<td>Xi R37/38</td>
<td>Skin Irrit. 2, H315; STOT SE 3, H335</td>
<td></td>
</tr>
</tbody>
</table>

· Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures
  · After inhalation Supply fresh air; consult doctor in case of complaints.
  · After skin contact Immediately wash with water and soap and rinse thoroughly.
  · After eye contact Rinse opened eye for several minutes under running water.
  · After swallowing Do not induce vomiting; call for medical help immediately.

· Information for doctor
  · Most important symptoms and effects, both acute and delayed No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

· Extinguishing media
  · Suitable extinguishing agents
    CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  · Special hazards arising from the substance or mixture No further relevant information available.

· Advice for firefighters
  · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.

· Environmental precautions: Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 3)
7 Handling and storage

- **Handling**
  - **Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** None.

- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Control parameters**

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures** Wash hands before breaks and at the end of work.

- **Breathing equipment:** Not necessary if room is well-ventilated.

- **Protection of hands:**
  - Rubber gloves
  - Latex
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Penetration time of glove material**
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling.

- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Colour:** Amber coloured
  - **Odour:** Characteristic
### 38.0.3 Properties

- **Odour threshold:** Not determined.
- **pH-value at 20 °C:** 9.1-9.8 (Neat)
- **Change in condition**
  - Melting point/Melting range: undetermined
  - Boiling point/Boiling range: undetermined
- **Flash point:** Not applicable
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 260.0 °C
- **Decomposition temperature:** Not determined.
- **Self igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure at 20 °C:** 23 hPa
- **Density at 20 °C:** 1.13-1.16 g/cm³
- **Relative density**
  - Not determined.
- **Vapour density**
  - Not determined.
- **Evaporation rate**
  - Not determined.
- **Solubility in / Miscibility with**
  - Water: Fully miscible
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - dynamic: Not determined.
  - kinematic: Not determined.
- **Solvent content:**
  - Organic solvents: 0.0 %
  - Water: 49-57 %
- **Solids content:** 43-51 %
- **Other information**
  - The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
  - **Possibility of hazardous reactions** No dangerous reactions known
  - **Conditions to avoid** No further relevant information available.
  - **Incompatible materials:** No further relevant information available.
  - **Hazardous decomposition products:** No dangerous decomposition products known
11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - Components | Type | Value | Species
      | Alkyltriazole | LD-50 | 675 mg/kg | Rat
- Primary irritant effect:
  - on the skin: Repeated or prolonged skin contact with this product may produce skin irritation.
  - on the eye: May be irritating.
- Sensitization: No sensitizing effects known.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation
  ![Warning symbol]
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
  - ADR, ADN, IMDG, IATA: Void
- UN proper shipping name
  - ADR, ADN, IMDG, IATA: Void

(Contd. on page 6)
Trade name: VpCI-649 / S-69

- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA
  - Class Void
- Packing group
  - ADR, IMDG, IATA
  - Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
- UN "Model Regulation": -

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Cortec Corporation does not warranty any translation of this SDS not created by Cortec Corporation.

- Relevant phrases
  H301 Toxic if swallowed.
  H314 Causes severe skin burns and eye damage.
  H315 Causes skin irritation.
  H335 May cause respiratory irritation.
  R25 Toxic if swallowed.
  R34 Causes burns.
  R37/38 Irritating to respiratory system and skin.

- Abbreviations and acronyms:
  ICAO: International Civil Aviation Organization
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent

- * Data compared to the previous version altered.