

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 22.04.2004

Reviewed on 22.04.2004




### 1 Identification of substance:

- **Product details:**
- **Trade name:** VpCI-389
- **Application of the substance / the preparation** Corrosion inhibitors
- **Manufacturer/Supplier:**  
Cortec Corporation  
4119 White Bear Parkway  
St. Paul, MN 55110 USA  
Phone (651) 429-1100  
Fax (651) 429-1122
- **Information department:** Product safety department.

### 2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Ingredients:**

	Salt of triazole	 T; R 25-34	1-2%
	Tertiary alkanolamine	 C; R 20/21/22-34	1-2%
CAS: 5131-66-8 EINECS: 225-878-4	1-butoxypropan-2-ol	 Xi; R 36/38	1-2%

### 3 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**  
R 36/38 Irritating to eyes and skin.

### 4 First aid measures

- **After inhalation** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Do not induce vomiting; call for medical help immediately.

### 5 Fire fighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Person-related safety precautions:** Not required.

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- **Measures for environmental protection:**  
Prevent seepage into sewage system, workpits and cellars.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.

### 7 Handling and storage

- **Handling**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **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:** Keep receptacle tightly sealed.

### 8 Exposure controls and personal protection

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

- **Components with limit values that require monitoring at the workplace:**

#### Tertiary alkanolamine (1.0%)

OEL	Short-term value: 22 mg/m <sup>3</sup> , 6 ppm Long-term value: 7.4 mg/m <sup>3</sup> , 2 ppm
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device only when aerosol or mist is formed.
- **Protection of hands:** Protective gloves.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **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:** Safety glasses

### 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Viscous liquid
<b>Colour:</b>	Light beige
<b>Odour:</b>	Sweetish

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- **Change in condition**  
*Melting point/Melting range: undetermined*  
*Boiling point/Boiling range: undetermined*
- **Flash point:** *Not applicable*
- **Self igniting:** *Product is not selfigniting.*
- **Danger of explosion:** *Product does not present an explosion hazard.*
- **Density at 20°C:** *0.95-1.01 kg/l*
- **Solubility in / Miscibility with Water:** *Fully miscible*
- **pH-value at 20°C:** *9.5-10.5 (Neat)*
- **Solvent content:**  
*Organic solvents: 1.0 %*  
*Water: 34-36 %*
- **Solids content:** *35-43 %*

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **Dangerous reactions** *No dangerous reactions known*
- **Dangerous products of decomposition:** *No dangerous decomposition products known*

### 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** *Irritant to skin and mucous membranes.*
- **on the eye:** *Irritating effect.*
- **Sensitization:** *No sensitizing effects known.*
- **Additional toxicological information:**  
*The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*  
*Irritant*

### 12 Ecological information:

- **General notes:**  
*Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.*



*Do not allow product to reach ground water, water course or sewage system.*

*Danger to drinking water if even small quantities leak into the ground.*

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### 13 Disposal considerations

- **Product:**
- **Recommendation**



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.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **UN-Number:** not applicable
- **Label** not applicable

- **Maritime transport IMDG:**
- **IMDG Class:** not applicable
- **UN Number:** not applicable
- **Marine pollutant:** No
- **Propper shipping name:** Not applicable

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** not applicable
- **UN/ID Number:** not applicable
- **Propper shipping name:** Not applicable

### 15 Regulations

- **Markings according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials
- **Code letter and hazard designation of product:**  
Xi Irritant
- **Risk phrases:**  
36/38 Irritating to eyes and skin.
- **Safety phrases:**  
23 Do not breathe gas.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.  
60 This material and its container must be disposed of as hazardous waste.
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
Water	36.0
II	1.0
III	1.0

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· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

**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.*

· **Relevant R-phrases:**

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

25 Toxic if swallowed.

34 Causes burns.

36/38 Irritating to eyes and skin.

· **Department issuing MSDS:** R & D Laboratory

· **Contact:**

Dr. Margarita Kharshan, Laboratory Director

Boris Miksic, President/CEO

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