

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 03/20/2020

Reviewed on 03/20/2020

### 1 Identification

- **Product identifier**
- **Trade name:** VpCI®-649 MF
- **Application of the substance / the mixture** Corrosion inhibitors
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Cortec Corporation  
4119 White Bear Parkway  
St. Paul, MN 55110 USA  
Phone (651) 429-1100  
Fax (651) 429-1122
- **Information department:** compliance@cortecvci.com
- **Emergency telephone number:**  
Spill, Leak, Fire, Exposure, or Accident  
24 hour CHEMTREC contact:  
USA and Canada 1-800-424-9300  
International +1-703-527-3887 (collect calls accepted)

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

- **Precautionary statements**

P264 Wash thoroughly after handling.  
P280 Wear protective gloves / eye protection / face protection.  
P302+P352 If on skin: Wash with plenty of water.  
P321 Specific treatment (see first aid statements on this label)  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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- P332+P313      If skin irritation occurs: Get medical advice/attention.  
 P362+P364      Take off contaminated clothing and wash it before reuse.
- P337+P313      If eye irritation persists: Get medical advice/attention.
- **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.

- **Dangerous components:**

532-32-1	Sodium benzoate	≥10-≤25%
	Proprietary ammonia derivate	≥2.5-<10%
	Tertiary alkanolamine	≥2.5-<10%
	Proprietary amine carboxylate	≥0-≤2.5%
29385-43-1	Alkyltriazole	≤2.5%

- **Additional information**

In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR 1910.1200), the specific chemical identity and/or exact percentage composition has been withheld as a trade secret.

For the wording of the listed hazard phrases refer to section 16.

### 4 First-aid measures

- **Description of first aid measures**

- **General information**

Immediately remove any clothing soiled by the product.

- **After inhalation** Supply fresh air; consult doctor in case of complaints.

- **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing** If symptoms persist consult doctor.

- **Information for doctor**

Show this safety data sheet to the doctor in attendance.

- **Most important symptoms and effects, both acute and delayed**

The symptoms and effects are as expected from the hazards shown in section 2. No specific product related symptoms are known.

No further relevant information available.

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· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**  
No further relevant information available.
- **Advice for firefighters** Self-contained breathing apparatus
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

### 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**  
Do not allow undiluted product 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).
- **Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling**
- **Precautions for safe handling**  
Store in cool, dry place in tightly closed receptacles.  
Ensure good ventilation/exhaustion at the workplace.
- **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.

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- **Information about storage in one common storage facility:**  
Do not store together with acids.  
Store away from foodstuffs.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.
- **Storage class 12**
- **Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

- **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.
- **Additional information:**  
The lists that were valid during the creation were used as basis.
- **Exposure controls**  
Use local exhaust ventilation to control airborne concentrations below exposure limits.
- **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.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
Not necessary if room is well-ventilated.



Use suitable respiratory protective device in case of insufficient ventilation.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). To determine the appropriate type of respiratory protection that should be used, a hazard assessment should be performed prior to using the product. Environmental conditions such as ventilation and other contaminants may affect the type of respiratory protection that is chosen.

- **Protection of hands:**  
Protective gloves  
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.
- **Protective Gloves** I.E., Nitrile, Viton, Neoprene

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- **Eye protection:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing.

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### 9 Physical and chemical properties

#### · Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

<b>Form:</b>	Liquid
<b>Color:</b>	Yellow to amber
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C (68 °F):** 8.5-9.5

##### · Change in condition

<b>Melting point/Melting range:</b>	undetermined
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

##### · Explosion limits:

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density at 20 °C (68 °F):** 1.1-1.15 g/cm<sup>3</sup> (9.2-9.6 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

##### · Solubility in / Miscibility with

**Water:** Fully miscible

· **Partition coefficient (n-octanol/ water):** Not determined.

##### · Viscosity:

<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.

##### · Other information

The above data are typical values and do not constitute a specification.  
\*Properties have been calculated.

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### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under recommended storage conditions
- **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:**

#### Proprietary ammonia derivate

Oral	LD50	825 mg/kg (rat)
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#### Tertiary alkanolamine

Oral	LD50	4,190 mg/kg (rat)
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#### 29385-43-1 Alkyltriazole

Oral	LD50	675 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **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

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Tertiary alkanolamine	3
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

Tertiary alkanolamine	
LC50/ 96 h	11,800 mg/l (Oncorhynchus mykiss (rainbow trout)) (4 days)
LC50 (static)	>1,000 mg/l (Pimephales promelas (Fathead minnow)) (96 hours)
EC50	609.88 mg/l (Ceriodaphnia dubia) (48 Hours) 512 mg/l (Selenastrum capricornutum) (3 days)
EC50/21 D	>16 mg/l (Daphnia magna) (21 days)
NOEC	16 mg/l (Daphnia magna) (21 days)
29385-43-1 Alkyltriazole	
LC50	73.7 mg/l (Daphnia) (48 Hours) 21.4 mg/l (Fish) (96 hours)

- **Persistence and degradability**

No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **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**

Dispose of in accordance with local, state, and federal regulations.

- **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**

- **DOT, ADR, ADN, IMDG, IATA** not classified as dangerous goods

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA** not classified as dangerous goods

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- |  |                                   |
|--|-----------------------------------|
| · <b>Transport hazard class(es)</b>  |                                   |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |                                   |
| · <b>Class</b>   | not classified as dangerous goods |
| · <b>Packing group</b>   |                                   |
| · <b>DOT, ADR, IMDG, IATA</b>  | not classified as dangerous goods |
| · <b>Environmental hazards:</b>  | Not applicable.                   |
| · <b>Special precautions for user</b>  | Not applicable.                   |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                   |
| · <b>UN "Model Regulation":</b>  | not classified as dangerous goods |

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

<b>· SARA Section 355 (extremely hazardous substances)</b>
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None of the ingredients is listed.
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<b>· SARA Section 313 (specific toxic chemical listings)</b>
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None of the ingredients is listed.
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<b>· TSCA (Toxic Substances Control Act)</b>
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All ingredients are listed.
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<b>· Hazardous Air Pollutants</b>
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None of the ingredients is listed.
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<b>· Proposition 65</b>
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<b>· Prop 65 - Chemicals known to cause cancer</b>
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None of the ingredients is listed.
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<b>· Chemicals known to cause reproductive toxicity for females</b>
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None of the ingredients is listed.
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<b>· Chemicals known to cause reproductive toxicity for males</b>
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None of the ingredients is listed.
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<b>· Chemicals known to cause developmental toxicity</b>
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None of the ingredients is listed.
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<b>· Cancerogenity categories</b>
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<b>· EPA (Environmental Protection Agency)</b>
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None of the ingredients is listed.
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<b>· NIOSH-Ca (National Institute for Occupational Safety and Health)</b>
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None of the ingredients is listed.
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**· Canadian Domestic Substances List (DSL): (Substances not listed)**

All ingredients are listed.

**· Philippines Inventory of Chemicals and Chemical Substances: (Substances not listed)**

Proprietary amine carboxylate

**· Chinese Chemical Inventory of Existing Chemical Substances: (Substances not listed)**

All ingredients are listed.

**· Australian Inventory of Chemical Substances: (Substances not listed)**

Proprietary amine carboxylate

**· New Zealand Inventory of Chemicals: (Substances not listed)**

Acrylic polymer (Proprietary)

**· Existing Chemical Substances**

Sodium benzoate	3-1272, 3-1293
Proprietary ammonia derivate	
Tertiary alkanolamine	2-308
Alkyltriazole	

**· GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

**· Hazard pictograms**


GHS07

**· Signal word** Warning

**· Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

**· Precautionary statements**

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 If on skin: Wash with plenty of water.

P321 Specific treatment (see first aid statements on this label)

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

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· **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.

· **Date of preparation / last revision 03/20/2020 / -**

· **Abbreviations and acronyms:**

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

DOT: US Department of Transportation

IATA: International Air Transport Association

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

· **\* Data compared to the previous version altered.**

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