

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/26/2016

Reviewed on 07/25/2016

1 Identification

- **Product identifier**
- **Trade name:** VpCI®-377
- **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:** regulatory@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**

Causes skin irritation.

Causes serious eye irritation.

- **Precautionary statements**

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

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

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

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

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- **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:**

CAS: 158706-62-8	Maleated tall oil fatty acids ammonium salt  Skin Irrit. 2, H315; Eye Irrit. 2A, H319	25-50%
	proprietary ammonia derivate  Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-10%
CAS: 68131-39-5 NLP: 500-195-7	Alcohols, C12-15, ethoxylated  Eye Irrit. 2A, H319	2.5-10%
CAS: 95-14-7 EINECS: 202-394-1	Benzotriazole  Acute Tox. 3, H301	≤ 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**
- **After inhalation** In case of unconsciousness place patient stably on 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** Immediately call a 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.
- **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.

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- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.

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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
Inform respective authorities in case of seepage into water course or sewage system.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

- **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**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

- **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:** Store away from foodstuffs.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.
Keep product from freezing.

- **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.

- **Additional information:** The lists that were valid during the creation were used as basis.

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· Exposure controls

· 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:



Use suitable respiratory protective device in case of insufficient ventilation.

· 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

· Protective Gloves I.E., Nitrile, Viton, Neoprene

· 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: Tightly sealed goggles.

· Body protection: Protective work clothing.

* 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid

Color: Dark brown

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value at 20 °C (68 °F): 7.5-9.5

· Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: 100 °C (212 °F) (*)

· Flash point: >120 °C (>248 °F) (*)

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature: 305 °C (581 °F) (*)

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg) (*)

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· Density at 20 °C (68 °F):	1.056-1.068 g/cm ³ (8.812-8.912 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: dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content: VOC Content:	4.1 % 85.2 g/l / 0.71 lb/gl
· Other information	The above data are typical values and do not constitute a specification. *Properties have been calculated.

10 Stability and reactivity

- **Reactivity** Reacts with acids.
- **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:** Acids
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

· Information on toxicological effects

- **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:

Harmful

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Tertiary alkanolamine

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· NTP (National Toxicology Program)

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

68131-39-5 Alcohols, C12-15, ethoxylated

LC50	1.4 mg/l (Pimphales promelas)
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EC50	0.14 mg/l (Daphnia magna) (48 hours)
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ErC50	0.75 mg/l (Selenastrum capricornutum) (96 hours)
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· 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.

· Ecotoxicological effects:

· Remark: Toxic for fish

· 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



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

· DOT, ADR, ADN, IMDG, IATA	Void
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· UN proper shipping name

· DOT, ADR, ADN, IMDG, IATA	Void
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· Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA	Void
· Class	Void

· Packing group

· DOT, ADR, IMDG, IATA	Void
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· 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":	Void

* 15 Regulatory information

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

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act) (Substances not listed)

All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Canadian Domestic Substances List (DSL) (Substances not listed)

All ingredients are listed.

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

Maleated tall oil fatty acids ammonium salt

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

All ingredients are listed.

· Australian Inventory of Chemical Substances (Substances not listed)

Maleated tall oil fatty acids ammonium salt

· New Zealand Inventory of Chemicals (Substances not listed)

Maleated tall oil fatty acids ammonium salt

· Existing Chemical Substances (Substances not listed)

Maleated tall oil fatty acids ammonium salt

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

· Hazard pictograms



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- **Signal word** Warning
- **Hazard statements**
 - Causes skin irritation.
 - Causes serious eye irritation.
- **Precautionary statements**
 - Wear protective gloves.
 - Wear eye protection / face protection.
 - Wash thoroughly after handling.
 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Specific treatment (see first aid statements on this label).
 - If skin irritation occurs: Get medical advice/attention.
 - If eye irritation persists: Get medical advice/attention.
 - IF ON SKIN: Wash with plenty of water.
 - Take off contaminated clothing and wash it before reuse.
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
Wasser	46.5
NK	4.1
- **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** 07/26/2016 / -

- **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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

LC50: Lethal concentration, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- *** Data compared to the previous version altered.**

USA