

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 02/04/2010

Reviewed on 02/04/2010

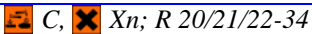
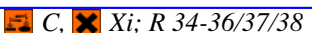
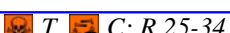
1 Identification of substance:

- **Product details:**
- **Trade name:** VpCI-418 Liquid
- **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.
info@cortecvci.com
- **Emergency information:** Chemtrec (for spill, leak, fire exposure or accident): 1-800-424-9300

2 Composition/Data on components:

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

· Dangerous components:

CAS: 141-43-5 EINECS: 205-483-3	2-aminoethanol		1-5%
CAS: 6834-92-0 EINECS: 229-912-9	Disodium metasilicate		1-3%
CAS: 64665-57-2 EINECS: 265-004-9	Tolyltriazole, sodium salt		<0.5%

3 Hazards identification

- **Information pertaining to particular dangers for man and environment:** not applicable
- **Classification system**
- **NFPA ratings (scale 0-4)**



- **HMIS rating system (0-4)**

HEALTH	2	Health = 2
FIRE	1	Flammability = 1
REACTIVITY	1	Reactivity = 1

4 First aid measures

- **After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.

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- If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
 - **After swallowing** Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** 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).
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
- **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:**

141-43-5 2-aminoethanol (1-5%)

PEL	6 mg/m ³ , 3 ppm
REL	Short-term value: 15 mg/m ³ , 6 ppm Long-term value: 8 mg/m ³ , 3 ppm
TLV	Short-term value: 15 mg/m ³ , 6 ppm Long-term value: 7.5 mg/m ³ , 3 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Use suitable respiratory protective device only when aerosol or mist is formed.
- **Protection of hands:** Protective gloves
- **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.

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

9 Physical and chemical properties:

· General Information

Form:	Liquid
Color:	Light yellow
Odor:	Mild

· Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined

· **Flash point:** >100°C (>212°F)

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

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

· **Density at 20°C (68°F):** 1.05-1.08 kg/l (8.8-9.0 lb/gal)

· **Solubility in / Miscibility with Water:** Fully miscible

· **pH-value at 20°C (68°F):** 11-12 (1% water)

· Solvent content:

Organic solvents:	3.0 %
Water:	80-85 %

Solids content: 8-12 %

· **Additional information** The above data are typical values and do not constitute a specification.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **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 is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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12 Ecological information:

- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation** Dispose of in accordance with local, state, and federal regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Identification number:** Not Regulated
- **Land transport ADR/RID (cross-border)**
- **UN-Number:** Not applicable
- **Maritime transport IMDG:**
- **UN Number:** Not applicable
- **Marine pollutant:** No

15 Regulations

- **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)**
All ingredients are listed.
- **Prop 65 - Chemicals known to cause cancer**
None of the ingredients is listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)**
None of the ingredients is listed.
- **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
- **NTP (National Toxicology Program)**
None of the ingredients is listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

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· Markings according to EU guidelines:*Observe the general safety regulations when handling chemicals**The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).***· National regulations****· Technical instructions (air):**

Class	Share in %
Water	83.0
NK	3.0

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.

USA