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

- · Product identifier
- · Trade name: VpCI-414
- · Application of the substance / the preparation

Alkaline cleaner/ detergent

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:

Product safety department.

info@cortecvci.com

· Emergency telephone number: Chemtrec (for spill, leak, fire exposure or accident): 1-800-424-9300

2 Composition/information on ingredients

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

CAS: 141-43-5 2-aminoethanol

EINECS: 205-483-3

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

3 Hazards identification

· Classification of the substance or mixture



> GHS07

H315 Causes skin irritation.

H333 May be harmful if inhaled.

H320 Causes eye irritation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
- · Information concerning particular hazards for human and environment:

Irritating to eyes, respiratory system and skin.

Harmful if swallowed.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard statements

May be harmful if inhaled.

Causes skin irritation.

Causes eye irritation.

(Contd. on page 2)

<3%

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· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/attention.

- · Classification system
- · NFPA ratings (scale 0-4)



Health = 1Fire = 1Reactivity = 0

· HMIS rating system (0-4)



1 Health = 1Flammability = 1REACTIVITY 0 Reactivity = 0

4 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 If symptoms persist consult doctor.

5 Firefighting measures

· Suitable extinguishing agents

CO2, 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

· Personal precautions, protective equipment and emergency procedures





Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

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).

· Reference to other sections No dangerous substances are released.

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7 Handling and storage

- · Handling
- · **Precautions 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: No special requirements.
- · Information about storage in one common storage facility: Do not store together with acids.
- · Further information about storage conditions: Protect from frost.

8 Exposure controls/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 (<3%)

PEL 6 mg/m³, 3 ppm

REL Short-term value: 15 mg/m³, 6 ppm Long-term value: 8 mg/m³, 3 ppm TLV Short-term value: 15 mg/m³, 6 ppm Long-term value: 7.5 mg/m³, 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 when high concentrations are present.
- · 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.

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

9 Physical and chemical properties

· General Information

· Appearance:

Form: Liquid
Color: Light yellow
Odor: Characteristic

• pH-value at 20°C (68 °F): 10.9-11.4 (Neat)

· Change in condition

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

• Flash point: $100^{\circ}C (212 ^{\circ}F)$

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	(Contd. of page
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure at 20°C (68°	F): 23 hPa (17 mm Hg)
· Density at 20°C (68 °F):	1.03-1.04 g/cm³ (8.595-8.679 lbs/gal)
· Solubility in / Miscibility with Water:	h Fully miscible
· Solvent content: Organic solvents: Water:	0.0 % 75-80 %
Solids content: · Other information	18-25 % The above data are typical values and do not constitute a specification. Vapo pressure data are calculated unless otherwise noted.

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Hazardous decomposition products: 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.

12 Ecological information

- · Acquatic toxicity: 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.

USA

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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

- · DOT regulations:
- · Hazard class:
- · Identification number: Not Regulated
- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · UN-Number: Not applicable
- · Maritime transport IMDG:
- · IMDG Class:
- · UN Number: Not applicable
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class:
- · UN "Model Regulation": -

15 Regulatory information

· 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.

- · Cancerogenity 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.

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· 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.

- · GHS label elements The product is classified and labelled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard statements

May be harmful if inhaled.

Causes skin irritation.

Causes eye irritation.

· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/attention.

· National regulations

· Technical instructions (air):

Class	Share in %
Wasser	75.0
NK	1.5

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.

· 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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

TICA