

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/24/2023

Reviewed on 10/24/2023

1 Identification

- **Product identifier**
- **Trade name:** VpCI®-326
- **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**



GHS08 Health hazard

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 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



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

White Mineral Oil (petroleum)

Alkyltriazole

- **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

P201

Obtain special instructions before use.

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P202	Do not handle until all safety precautions have been read and understood.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P321	Specific treatment (see first aid statements on this label).
P331	Do NOT induce vomiting.
P302+P352	If on skin: Wash with plenty of water.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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:**

8042-47-5	White Mineral Oil (petroleum)	50-100%
108-01-0	Tertiary alkanolamine	≥1-≤2.5%
29385-43-1	Alkyltriazole	≥0.1-≤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**
DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If affected person is fully conscious, give one glass of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.
- **Information for doctor** Show this safety data sheet to the doctor in attendance.

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- **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.
- **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**
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
- **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.

Ensure adequate ventilation

- **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).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
No dangerous substances are released.
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.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** None.
- **Storage class** 10
- **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 section 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.
- **Exposure controls** Use local exhaust ventilation to control airborne concentrations below exposure limits.
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:**



Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device only when aerosol or mist is formed.

Suitable respiratory protective device recommended.

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

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Color:	Light yellow

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· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value at 20 °C (68 °F):	8.7-10 (1% aqueous)
· Change in condition	
Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined
· Flash point:	110 °C (230 °F) (*)
· Flammability (solid, gaseous)	Not applicable.
· Auto igniting:	220 °C (428 °F) (*)
· Decomposition temperature:	Not determined.
· Ignition temperature:	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):	0.1 hPa (*)
· Density at 20 °C (68 °F):	0.86-0.89 g/cm ³ (7.18-7.43 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic at 40 °C (104 °F):	11.429 mm ² /s
· 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** 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:** Acids
- **Hazardous decomposition products:** No dangerous decomposition products known

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11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

8042-47-5 White Mineral Oil (petroleum)

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

108-01-0 Tertiary alkanolamine

Oral	LD50	1,183 mg/kg (rat)
Dermal	LD50	1,219 mg/kg (rabbit)
Inhalative	LC50/4 h	6 mg/l (rat)

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
111-42-2	2,2'-iminodiethanol	2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

8042-47-5 White Mineral Oil (petroleum)

LC50	>100 mg/l (Daphnia)
	>10,000 mg/l (Fish)

108-01-0 Tertiary alkanolamine

LC50	146.6 mg/l (Leuciscus idus (ide or orfe)) (96 hours)
EC50	66.08 mg/l (Desmodemus subspicatus) (72 Hours)
	98.37 mg/l (Daphnia magna) (48 Hours)

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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.

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 |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | not classified as dangerous goods |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | not classified as dangerous goods |
| · Environmental hazards: | Not applicable. |
| · 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": | not classified as dangerous goods |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

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· SARA Section 313 (specific toxic chemical listings)	
111-42-2	2,2'-iminodiethanol

· TSCA (Toxic Substances Control Act): (All ingredients are listed.)	
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· Hazardous Air Pollutants	
111-42-2	2,2'-iminodiethanol

· Proposition 65	
· Prop 65 - Chemicals known to cause cancer	
2,2'-iminodiethanol	

· Chemicals known to cause reproductive toxicity for females	
None of the ingredients is listed.	

· Chemicals known to cause reproductive toxicity for males	
None of the ingredients is listed.	

· Chemicals known to cause developmental toxicity	
None of the ingredients is listed.	

· Carcinogenicity 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.	

· Canadian Non-Domestic Substances List (NDSL): (Substances not listed)	
None of the ingredients is listed.	



· Philippines Inventory of Chemicals and Chemical Substances: (Substances not listed)	
All ingredients are listed.	

· Chinese Chemical Inventory of Existing Chemical Substances: (Substances not listed)	
All ingredients are listed.	

· Australian Inventory of Chemical Substances: (Substances not listed)	
All ingredients are listed.	

· New Zealand Inventory of Chemicals: (Substances not listed)	
All ingredients are listed.	

· Existing Chemical Substances	
White Mineral Oil (petroleum)	
Tertiary alkanolamine	2-297, 2-353
Alkyltriazole	

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).	
· Hazard pictograms	
	
GHS07	GHS08
· Signal word Danger	



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- **Hazard-determining components of labeling:**

White Mineral Oil (petroleum)
Alkyltriazole

- **Hazard statements**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P321 Specific treatment (see first aid statements on this label).
P331 Do NOT induce vomiting.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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** 10/24/2023

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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 Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

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Toxic to Reproduction 2: Reproductive toxicity – Category 2
Aspiration Hazard 1: Aspiration hazard – Category 1

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

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