

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** VPS 2978

### Other means of identification

None.

### Recommended restrictions

**Recommended use:** For industrial use

**Restrictions on use:** Not determined.

### Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation  
299 Jefferson Road  
Parsippany, NJ 07054  
USA

Telephone : +1 973 929 8000

Fax : +1 973 929 8040

E-mail : product-regulatory-services@evonik.com

### Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Serious Eye Damage/Eye Irritation Category 1

Skin sensitizer Category 1

### Label Elements

#### Hazard Symbol:



#### Signal Word:

Danger

**Hazard Statement:**

Causes serious eye damage.  
 May cause an allergic skin reaction.

**Precautionary Statements**
**Prevention:**

Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.

**Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):**

None.

<b>3. Composition/information on ingredients</b>
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**Mixtures**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) <sup>*</sup>
1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-[(ethenylphenyl)methyl], Derivate, hydrochlorides		171869-89-9	>=30 - <50%
methanol		67-56-1	>=0.1 - <1%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition Comments:**

Aqueous preparation

The exact concentration has been withheld as a trade secret.

<b>4. First-aid measures</b>
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**Description of necessary first-aid measures**
**General information:**

Immediately remove contaminated clothing.

**Inhalation:**

If aerosol or mists are formed: Move to fresh air. Get medical attention if any discomfort continues.

**Skin Contact:**

Wash off immediately with plenty of water. If skin irritation persists, call a physician.

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**Eye contact:** With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Continue rinsing process with eye rinsing solution. Protect unharmed eye. Call ambulance. (Cue: caustic burn of the eyes) Immediate further treatment in eye clinic/by eye doctor. continue rinsing eye until arrival at ophthalmic hospital.

**Ingestion:** Have the mouth rinsed with water. Only when patient fully conscious: Have patient drink plenty of water in small sips. Get medical attention immediately.

**Personal Protection for First-aid Responders:** No data available.

#### Most important symptoms and effects, both acute and delayed

**Symptoms:** After absorbing large amounts of substance: Liberation of reaction products (Methanol) can lead to symptoms of poisoning. Possible signs of poisoning: daze, dizziness, nausea, colicky abdominal pain, respiratory disturbance. Symptoms upon increasing intoxication: dysopia, loss of eyesight.

**Hazards:** None known.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** If required, therapy of irritative effect. Treatment Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, aspirate leftover substance. Detection of substance (Methanol) possible in: Blood Antidote treatment: ethanol. Allergic reactions cannot be excluded. Treatment of allergic reaction if necessary.

### 5. Fire-fighting measures

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Water spray, foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media:** No data available.

**Special hazards arising from the substance or mixture:** Standard procedure for chemical fires.

#### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Special protective equipment for fire-fighters:** In case of fire: wear a self contained respiratory apparatus As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

### 6. Accidental release measures

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

Use personal protective equipment. Ensure adequate ventilation.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Fill into marked, sealable containers. To be disposed of in compliance with existing regulations. Suitable absorbents: sand (for damming up)

**Environmental Precautions:**

Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

**7. Handling and storage**
**Handling**
**Technical measures (e.g. Local and general ventilation):**

Provide good ventilation or extraction.

**Safe handling advice:**

Provide good ventilation or extraction. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and amendments (CE certification). If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Avoid contact with skin and eyes. Do not breathe in vapours or aerosols.

**Contact avoidance measures:**

No data available.

**Storage**
**Safe storage conditions:**

Normal measures for preventive fire protection. Keep containers tightly closed in a cool, well-ventilated place.

**Safe packaging materials:**

No data available.

**8. Exposure controls/personal protection**
**Control Parameters**
**Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values		Source
methanol	TWA	200 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	250 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	250 ppm	325 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	REL	200 ppm	260 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	200 ppm	260 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

### Biological Limit Values

Chemical name	Parameters / Sampling Time	Exposure Limit Values	Source
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**Appropriate Engineering Controls** Provide good ventilation or extraction.

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Safety glasses with side shields

### Skin Protection

**Hand Protection:** Material: Butyl rubber.  
 Break-through time:  $\geq 480$  min  
 Material: Fluorinated rubber (Viton)  
 Break-through time:  $\geq 240$  min  
 Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., The suitability for a specific workplace should be discussed with the producers of the protective gloves., The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

**Skin and Body Protection:** suitable protective clothing - Use disposable clothing if appropriate. A safety shower and eye wash fountain must be readily available. In order to determine further specifications applicable to the personal protection equipment, a hazard assessment according to the OSHA standards (29 CFR 1910.132) for personal protection equipment (PPE) is recommended before the product is used.

**Respiratory Protection:** In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self contained respiratory apparatus Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Note time limit for wearing respiratory protective equipment. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**Hygiene measures:** When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

**Physical state:** liquid  
**Form:** Clear Liquid  
**Color:** Colorless, Yellow-orange  
**Odor:** stinging  
**Odor Threshold:** No data available.  
**Freezing point:** No data available.  
**Boiling Point:** 212 °F/100 °C (1,013 hPa) Literature

**Flammability:** No data available.

#### Upper/lower limit on flammability or explosive limits

**Explosive limit - upper:** No data available.  
**Explosive limit - lower:** No data available.  
**Flash Point:** > 203 °F/> 95 °C (DIN EN ISO 2719)  
**Self Ignition Temperature:** No data available.  
**Decomposition Temperature:** No decomposition if used as directed.

**pH:** 2.5 - 4 (DIN 38404-C5) Measured 1:1 with water while agitating.

#### Viscosity

**Dynamic viscosity:** 70 - 700 mPa.s (68 °F/20 °C, DIN 53015)  
**Kinematic viscosity:** No data available.  
**Flow Time:** No data available.

#### Solubility(ies)

**Solubility in Water:** Soluble  
**Solubility (other):** No data available.  
**Partition coefficient (n-octanol/water):** No data available.  
**Vapor pressure:** No data available.  
**Relative density:** No data available.  
**Density:** Approximate 1 g/cm<sup>3</sup> (68 °F/20 °C) (DIN 51757)  
**Bulk density:** No data available.  
**Relative vapor density:** No data available.

#### Particle characteristics

**Particle Size:** Not applicable  
**Particle Size Distribution:** Not applicable  
**Specific surface area:** No data available.  
**Surface charge/Zeta potential:** No data available.  
**Shape:** Not applicable  
**Crystallinity:** Not applicable  
**Surface treatment:** Not applicable

#### Other information

**Minimum ignition** No data available.

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**temperature:****Peroxides:** Not applicable**Evaporation Rate:** No data available.**10. Stability and reactivity****Reactivity:** No dangerous reaction known under conditions of normal use.**Chemical Stability:** Stable under recommended storage conditions.**Possibility of hazardous reactions:** Spontaneous polymerisation may occur in the presence of various catalytic agents e.g.: acids, Friedel-Crafts catalysts, radical formers.**Conditions to avoid:** Keep away from heat and sources of ignition.**Incompatible Materials:** Acids.**Hazardous Decomposition Products:** Hydrogen chloride.**11. Toxicological information****Information on toxicological effects****Information on likely routes of exposure****Inhalation:** No data available.**Skin Contact:** No data available.**Eye contact:** No data available.**Ingestion:** No data available.**Acute toxicity (list all possible routes of exposure)****Oral****Product:** ATEmix: 3,333 mg/kg**Dermal****Product:** ATEmix: > 5,000 mg/kg**Inhalation****Product:** ATEmix: > 200 mg/l Vapour**Repeated dose toxicity****Product:** No data available.**Components:**1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-[(ethenylphenyl)methyl], Derivate, hydrochlorides  
NOAEL (Rat, Oral): 100 mg/kg**Skin Corrosion/Irritation****Product:** No data available.**Components:**

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1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N- [(ethenylphenyl)methyl], Derivate, hydrochlorides methanol	OECD 404 (Rabbit): Not irritating  Literature (Rabbit): Not irritating
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**Serious Eye Damage/Eye Irritation**

**Product:** Risk of serious damage to eyes.

**Respiratory or Skin Sensitization**

**Product:** May cause an allergic skin reaction.

**Carcinogenicity**

**Product:** No data available.

**Components:**  
 methanol Not classified

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogens present or none present in regulated quantities

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogens present or none present in regulated quantities

**Germ Cell Mutagenicity**
**In vitro**

**Product:** No data available.

**Components:**

1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-  
 Ames test (OECD 471): negative  
 gene mutation test (OECD 476): negative

[(ethenylphenyl)methyl],  
 Derivate, hydrochlorides  
 methanol  
 Ames test (OECD 471): negative  
 gene mutation test (OECD 476): negative  
 Micronucleus test: negative

**In vivo**

**Product:** No data available.

**Components:**

1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-  
 Micronucleus test (OECD 474) Intraperitoneal (Mouse, Female, Male):  
 negative

[(ethenylphenyl)methyl],  
 Derivate, hydrochlorides  
 methanol  
 Micronucleus test (OECD 474) Intraperitoneal (Mouse, Female, Male):  
 negative  
 Chromosomal aberration Intraperitoneal (Mouse, Female, Male): negative

**Reproductive toxicity**

**Product:** No data available.

**Components:**  
 methanol Not classified

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Components:**



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 methanol Dermal Oral Inhalation - vapor: optic nerve, Central nervous system. -  
 Category 1 Causes damage to organs.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.  
**Components:**  
 methanol Not classified

**Aspiration Hazard**

**Product:** No evidence of aspiration toxicity

**Information on health hazards**
**Other hazards**

**Product:** No toxicological tests are available on the product.;

**12. Ecological information**
**Ecotoxicity:**
**Acute hazards to the aquatic environment:**
**Fish**

**Product:** No data available.  
**Components:**  
 1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-  
 [(ethenylphenyl)methyl], Derivate, hydrochlorides  
 methanol LC 50 (Cyprinus carpio (Carp), 96 h): 75 mg/l (analogy)  
 LC 50 (Bluegill Sunfish, 96 h): 15,400 mg/l Literature

**Aquatic Invertebrates**

**Product:** No data available.  
**Components:**  
 1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-  
 [(ethenylphenyl)methyl], Derivate, hydrochlorides  
 methanol EC 50 (Daphnia magna, 48 h): 74 mg/l (analogy)  
 EC 50 (Daphnia magna, 96 h): 18,260 mg/l Literature

**Toxicity to Aquatic Plants**

**Product:** No data available.  
**Components:**  
 1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-  
 [(ethenylphenyl)methyl], Derivate, hydrochlorides  
 methanol EC 50 (Desmodesmus subspicatus (Scenedesmus subspicatus), 72 h): 69  
 mg/l (OECD 201) (analogy)  
 EC 50 (Selenastrum capricornutum (green algae), 96 h): Approximate  
 22,000 mg/l (OECD 201) Literature

**Toxicity to microorganisms**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**
**Fish**

**Product:** No data available.

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**Components:**

1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-[(ethenylphenyl)methyl], Derivate, hydrochlorides

NOEC (Oncorhynchus mykiss, 28 d): 5 mg/l (OECD 215) (analogy)  
Lowest Observed Effect Concentration (Oncorhynchus mykiss, 28 d): 16 mg/l (OECD 215) (analogy)

**Aquatic Invertebrates****Product:** No data available.**Components:**

1,2-Ethandiamine, N-[3-(trimethoxysilyl)propyl]-, N-[(ethenylphenyl)methyl], Derivate, hydrochlorides

NOEC (Daphnia magna, 21 d): 0.32 mg/l (OECD 211) (analogy)

**Toxicity to Aquatic Plants****Product:** No data available.**Toxicity to microorganisms****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**Components:**

methanol

98 % (28 d, (DOC; modif. OECD screening test / OECD 301 E)) Own study  
The product is easily biodegradable., aerobic

**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Components:**

methanol

Leuciscus idus (Golden orfe), Bioconcentration Factor (BCF): < 10 (Measured) No significant bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: No data available.**Mobility in soil:****Product** No data available.**Components:**

methanol

soil - Log Koc: 1 (calculated) Not expected to adsorb on soil.

**Results of PBT and vPvB assessment:****Product** No data available.**Other adverse effects:****Other hazards****Product:** An Expert Judgment stated that no classification is necessary based on present knowledge.

**Additional Information:** No ecotoxicological studies are available on the mixture.

### 13. Disposal considerations

**Disposal methods:** With respect to local regulations, e.g. dispose of to suitable waste incineration plant.

**Contaminated Packaging:** Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

### 14. Transport information

#### Domestic regulation

##### 49 CFR

Not regulated as a dangerous good

#### International Regulations

##### UNRTDG

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### 15. Regulatory information

#### US Federal Regulations

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

##### US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

##### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

##### CERCLA Hazardous Substance List (40 CFR 302.4):

###### Chemical Identity

methanol

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**Superfund Amendments and Reauthorization Act of 1986 (SARA)**
**Hazard categories**

Serious eye damage or eye irritation, Respiratory or Skin Sensitization

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**
**US. California Proposition 65**


**WARNING:** This product can expose you to chemicals including, methanol, which is [are] known to the State of California to cause birth defects or other reproductive harm.

 For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. New Jersey Worker and Community Right-to-Know Act**

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**
Chemical Identity

Hydrochloric acid ... %

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**16. Other information, including date of preparation or last revision**
**HMIS Hazard ID**

<b>Health</b>	2
<b>Flammability</b>	1
<b>Physical Hazards</b>	0
<b>PERSONAL PROTECTION</b>	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**Issue Date:** 11/24/2021

**Version #:** 1.3

**Further Information:** No data available.

**Revision Information** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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