

Safety Data Sheet

SECTION 1: Identification

1.1 Product identifier

Product name Vector 5.9% Peracetic Acid

Product number 959

Brand Crown Chemical, Inc.

1.2 Other means of identification

Vector 5.9% Peracetic Acid

1.3 Recommended use of the chemical and restrictions on use

Sanitizing, disinfecting, cleaning

1.4 Supplier's details

Name Crown Chemical, Inc. Address 4701 W. 136th. St.

Crestwood, Illinois 60418

U.S.A.

Telephone 708-371-6990 Fax 708-371-6992

email info@crown-chem.com

1.5 Emergency phone number(s)

800-535-5053

SECTION 2: Hazard identification

General hazard statement

Causes serious eye damage; Causes severe skin burns and eye damage; Harmful if swallowed.

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A
- Acute toxicity, oral, Cat. 4
- Oxidizing liquids, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram







1. Corrosion; 2. Exclamation mark; 3. Flame over circle

Signal word Danger

Hazard statement(s)

H272 May intensify fire; oxidizer H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220 Keep/Store away from clothing/.../combustible materials.
P221 Take any precaution to avoid mixing with combustibles/...

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER /doctor/...if you feel unwell,

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P321 Specific treatment (see ... on this label).

P330 Rinse mouth.

P363 Wash contaminated clothing before reuse. P370+P378 In case of fire: Use ... to extinguish.

P405 Store locked up.

P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

None identified

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Corrosive Mixture; Oxidizing Liquid

Components

1. Hydrogen peroxide

Concentration 20 - 30 % (By Weight)

EC no. 231-765-0 CAS no. 7722-84-1 Index no. 008-003-00-9

- Oxidizing liquids, Cat. 1

Skin corrosion/irritation, Cat. 1A
Acute toxicity, inhalation, Cat. 4
Acute toxicity, oral, Cat. 4

H271 May cause fire or explosion; strong oxidizer
H314 Causes severe skin burns and eye damage

2. Acetic acid

Concentration 5 - 10 % (By Weight)

EC no. 200-580-7 CAS no. 64-19-7 Index no. 607-002-00-6

Flammable liquids, Cat. 3Skin corrosion/irritation, Cat. 1A

H226 Flammable liquid and vapor

H314 Causes severe skin burns and eye damage

3. PERACETIC ACID

Concentration 5 - 10 % (By Weight)

EC no. 201-186-8 CAS no. 79-21-0 Index no. 607-094-00-8

Flammable liquids, Cat. 3
Organic peroxides, Type D
Acute toxicity, inhalation, Cat. 4
Acute toxicity, dermal, Cat. 4
Acute toxicity, oral, Cat. 4
Skin corrosion/irritation, Cat. 1A

- Hazardous to the aquatic environment, short-term (acute), Cat. 1

H226 Flammable liquid and vapor
H242 Heating may cause a fire
H302 Harmful if swallowed
H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled
H400 Very toxic to aquatic life

4. Phosphonic acid, P,P'-(1-hydroxyethylidene)bis-

Concentration 1 - 3 % (By Weight)

EC no. 220-552-8 CAS no. 2809-21-4

5. Sulfuric acid

 Concentration
 1 % (By Weight)

 EC no.
 231-639-5

 CAS no.
 7664-93-9

 Index no.
 016-020-00-8

- Skin corrosion/irritation, Cat. 1A

H314 Causes severe skin burns and eye damage

Trade secret statement (OSHA 1910.1200(i))

The specific chemical identities and/or actual concentrations for one or more components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Do not breathe vapors or mists. Wash hands thoroughly after handling. Do not

eat, drink or smoke when using this product. Wear protective rubber gloves and chemical splash goggles or face shield when using this product. If inhalable particles of vapors or mists may occur during use, wear NIOSH approved respiratory protection. Mix ONLY with water. Keep away from heat, sparks, open flames and hot surfaces. Store away from clothing, cardboard, paper, rags and

other combustible materials. Take any precaution to avoid mixing with combustibles. Keep only in original container. Keep in cool, well-ventilated area.

If inhaled Remove person to fresh air immediately and keep comfortable for breathing. Call

a Poison Control Center or doctor for treatment advice.

In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water. Wash

contaminated clothing before reuse. Immediately call a Poison Control Center or

doctor for treatment advice.

In case of eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Immediately call a Poison Control

Center or doctor for treatment advice.

If swallowed Immediately call a Poison Control Center or doctor for treatment advice. Rinse

out mouth. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person.

4.2 Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards arising from the chemical

Sulfuric acid: No data available.

5.3 Special protective actions for fire-fighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire.

Further information

Evacuate area. Risk of explosion. Decomposition will release of oxygen, which will intensify fire. Closed containers may explode dues to heat from fire. Cool with water spray. No responsive action should be taken without proper training.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Initiate spill containment procedures immediately using containment or absorbtion methods. Keep people away from area. Put on appropriate protective equipment (see Section 8).

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Do not allow spilled material to enter sewers, waterways or soil. Neutralize with water. Mop, sweep or otherwise collect spilled material and hold for disposal. Consult local government authorities for allowable disposal methods. After removal, rinse area completely with water to remove residue.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes, skin or clothing. Avoid contact with combustible materials. Avoid inhalation of dust or vapors. Use in a well ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a locked location inaccessible to small children. Keep container closed when not in use. Store in a well ventilated area between 60-100°F (15- 38°C).

Specific end use(s)

Consult product label for EPA prescribed Storage and Disposal information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Hydrogen peroxide (CAS: 7722-84-1)

PEL (Inhalation): 1.4 mg/m3; USA (OSHA) OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 1 ppm; USA (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 1 ppm; USA (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 1 ppm; USA (ACGIH) OSHA Annotated Table Z-1, www.osha.gov

2. Acetic acid (CAS: 64-19-7 EC: 200-580-7)

PEL (Inhalation): 25 mg/m3; USA (OSHA) OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 10 ppm, (ST) 15 ppm, (C) 40 ppm; USA (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 10 ppm, (ST) 15 ppm; USA (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 10 ppm, (ST) 15 ppm; USA (ACGIH)

OSHA Annotated Table Z-1, www.osha.gov

TWA (Inhalation): 10 ppm; USA (ACGIH)

USA. ACGIH Threshold Limit Values (TLV)/ Pulmonary function

STEL (Inhalation): 15 ppm; USA (ACGIH)

USA. ACGIH Threshold Limit Values (TLV)/Pulmonary function. Upper Respiratory Tract irritation. Eye irritation

ST (Inhalation): 15 ppm 37 mg/m3; USA (NIOSH) USA. NIOSH Recommended

Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm 25 mg/m3; USA (NIOSH) USA. NIOSH Recommended

Exposure Limits/ Can be found in concentrations of 5-8% in vinegar

TWA (Inhalation): 10 ppm 25 mg/m3; USA (OSHA)

USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air

Contaminants

C (Inhalation): 40 ppm; USA (Cal/OSHA)

California permissible exposure limits for chemical contaminants

(Title 8, Article 107)

3. Sulfuric acid (CAS: 7664-93-9 EC: 231-639-5)

PEL (Inhalation): 1 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 0.1 mg/m3, (ST) 3 mg/m3 (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 1 mg/m3; USA (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 0.2 mg/m3, (Thor.); USA (ACGIH)

OSHA Annotated Table Z-1, www.osha.gov

TWA (Inhalation): 0.2 mg/m3; USA (ACGIH) USA. ACGIH Threshold Limit Values (TLV)

TWA (Inhalation): 1 mg/m3; USA (OSHA)

USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

8.2 Appropriate engineering controls

Use with adequate ventilation to maintain exposure limits below listed thresholds.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear chemical splash goggles or face shield when using this product.

Skin protection

Wear protective rubber gloves, a long sleeve shirt and, if necessary, a rubber apron to prevent contact.

Body protection

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid contact with clothing or shoes. Wash contaminated items before reuse. Avoid wearing contact lenses when using this product.

Respiratory protection

Wear a NIOSH respirator approved for corrosive vapors or mists.

Thermal hazards

No data available.

Environmental exposure controls

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Colorless Liquid

Odor Pungent Vinegar
Odor threshold No data available.
pH <1.0 (1% solution)

Melting point/freezing point

No data available.
Initial boiling point and boiling range

226°F

Flash point None to Decomposition

Evaporation rate N/A

Flammability (solid, gas)

Upper/lower flammability limits

Upper/lower explosive limits

No data available.

No data available.

No data available.

Vapor pressure 22 mm Hg @ 25 deg C

Vapor density >1.0
Relative density >1.0

Solubility(ies) Miscible in 120°F Water
Partition coefficient: n-octanol/water No data available.

Auto-ignition temperature 518°F

Decomposition temperature No data available.

Viscosity N/A

Explosive properties

No data available.

Oxidizing properties

May intensify fire; oxidizer.

SECTION 10: Stability and reactivity

10.1 Reactivity

Product is highly reactive with acids, bases, metals, oxidizing agents, reducing agents, organic and combustible materials. Reactions may produce hazardous conditions, including violent splattering of corrosive materials and emission of oxygen gas, which is flammable. NEVER mix this product with other chemicals. Mix this product ONLY with water.

10.2 Chemical stability

Product is stable under normal storage and usage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Acetic acid: Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium

permanganate, Amines, Alcohols, Nitric acid

Sulfuric acid: Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals

10.6 Hazardous decomposition products

Acetic acid: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

Sulfuric acid: Hazardous decomposition products formed under fire conditions. - Sulphur oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation

Skin corrosion/irritation

Irritation, pain, redness, blistering.

Serious eye damage/irritation

Irritation, pain, redness, watering.

Respiratory or skin sensitization

Coughing, choking, respiratory tract irritation, breathing difficulty.

Germ cell mutagenicity

No data available.

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH,NTP, or EPA classification

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No known significant effects or critical hazards.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No known significant effects or critical hazards.

SECTION 12: Ecological information

Toxicity

Toxic to aquatic life with long lasting effects. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available on product

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Disposal of the product

Avoid disposal of this product. Use complete contents according to directions. Do not release contents into a municipal sewer except through normal dilution and usage. Do not release contents onto the ground or into any body of water. Dispose of empty container by offering for recycling if available, or into a landfill. Follow all applicable state and local regulations.

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN Number: UN 3109,

Class: 5.2 Packing Group: II

Proper Shipping Name: UN 3109, Organic Peroxide Type F, Liquid (Peroxyacetic Acid, Type F, Stabilized), 5.2 (8), PG

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Note: Certain package sizes of this product may qualify for exceptions to DOT's packaging, labeling and other requirements, and thus may have different DOT shipping names. For bulk shipments, see the shipping documents.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

Hydrogen peroxide CAS-Number: 7722-84-1

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sulfuric acid

CAS number: 7664-93-9

SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Hydrogen peroxide CAS number: 7722-84-1 Troclosene sodium, dihydrate CAS: 51580-86-0 Ethaneperoxoic acid CAS number: 79-21-0

Acetic acid

CAS number: 64-19-7

Sulfuric acid

CAS number: 7664-93-9

Pennsylvania Right To Know Components

CAS-number: 7732-18-5

Hydrogen peroxide CAS number: 7722-84-1 Troclosene sodium, dihydrate CAS: 51580-86-0 Ethaneperoxoic acid CAS number: 79-21-0

Acetic acid

CAS number: 64-19-7

Sulfuric acid

CAS number: 7664-93-9

New Jersey Right To Know Components

Hydrogen peroxide CAS number: 7722-84-1 Troclosene sodium, dihydrate CAS: 51580-86-0 PEROXYACETIC ACID CAS number: 79-21-0

Acetic acid

CAS number: 64-19-7

Sulfuric acid

CAS number: 7664-93-9

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

WARNING! This product contains a chemical known to the State of California to cause cancer.

Sulfuric acid

CAS number: 7664-93-9

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulfuric acid

CAS number: 7664-93-9

SECTION 16: Other information

The information herein is believed to be correct, but is given without warranty or guaranty of any kind, express or implied. The hazards provided in this Safety Data Sheet apply to the product in its concentrated form, and may differ significantly after dilution.

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Crown Chemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Crown Chemical, Inc. has been advised of the possibility of such damages.