# SAFETY DATA SHEET SPECTRUM®



Revision date 09-March-2022

**Revision Number** 3

# 1. Identification

**Product identifier** 

Product Name PROPIONIC ACID, REAGENT, ACS

Other means of identification

Product Code(s) PR125

UN/ID no UN3463

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

**Supplier Address** 

Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

#### Classification

| Acute toxicity - Dermal           | Category 3                |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation         | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1                |
| Flammable liquids                 | Category 3                |

# Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

# Danger

#### Hazard statements

Toxic in contact with skin

Causes severe skin burns and eye damage

Flammable liquid and vapor



Appearance Clear Oily Physical state Liquid Odor No information available

#### **Precautionary Statements - Prevention**

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/.?/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

#### **Precautionary Statements - Response**

Specific treatment (see .? on this label)

Immediately call a POISON CENTER or doctor

Specific treatment (see .? on this label)

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

Immediately call a POISON CENTER or doctor

Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam to extinguish

#### **Precautionary Statements - Storage**

Store locked up.

Store in a well-ventilated place. Keep cool

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Other information

May be harmful if swallowed. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

# 3. Composition/information on ingredients

#### **Substance**

| Chemical name  | CAS No  | Weight-% | Trade secret |
|----------------|---------|----------|--------------|
| Propionic Acid | 79-09-4 | 100      | *            |

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

## **Description of first aid measures**

**General advice** 

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get immediate medical

advice/attention.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin,

eyes or clothing.

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. Fire-fighting measures

Suitable Extinguishing Media Large Fire Dry chemical. Carbon dioxide (CO2). water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products Carbon dioxide (CO2).

**Explosion data** 

Sensitivity to mechanical impact none.

Sensitivity to static discharge yes.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material.

Other information

Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

#### Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

# 7. Handling and storage

#### Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** 

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Protect from moisture. Keep out of the reach of children. Store away from other materials.

# 8. Exposure controls/personal protection

#### Control parameters

**Exposure Limits** 

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

#### Appropriate engineering controls

**Engineering controls** 

Showers

Eyewash stations Ventilation systems.

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

Eye/face protection Tight sealing safety goggles. Face protection shield.

Wear suitable gloves. Impervious gloves. Hand protection

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not

> be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid **Appearance** Clear Oily Color Colorless

Odor No information available No information available Odor threshold

Property Values Remarks • Method

На no data available None known -21 °C / -5.8 °F None known Melting point / freezing point 141 °C / 285.8 °F **Boiling point / boiling range** None known 51 - 54 °C / 123.8 - 129.2 °F Flash point None known **Evaporation rate** no data available None known Flammability (solid, gas) no data available None known Flammability Limit in Air None known

Upper flammability or explosive 17%

limits

Lower flammability or explosive 2.6%

limits

Vapor pressure 0.3 @ 20°C (kPa) None known Vapor density 2.56 None known Relative density 0.993 - 0.998 None known Water solubility Miscible in water None known Solubility(ies) Soluble in Alcohol None known

> Soluble in Ether Soluble in Chloroform

log Kow = 0.33**Partition coefficient** None known 465 - 513 °C / 869 - 955.4 °F None known **Autoignition temperature Decomposition temperature** None known no data available

Kinematic viscosity None known **Dynamic viscosity** No data available None known

Other information

No information available **Explosive properties** No information available **Oxidizing properties** No information available Softening point No information available Molecular weight **VOC Content (%)** No information available **Liquid Density** No information available **Bulk density** No information available

# 10. Stability and reactivity

**Reactivity** No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions 
None under normal processing.

**Conditions to avoid** Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

**Incompatible materials** Acids. Bases. Oxidizing agent.

Hazardous decomposition products None known based on information supplied.

# 11. Toxicological information

#### Information on likely routes of exposure

Product Information .

**Inhalation** Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Corrosive to the eyes and may cause severe damage

including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns. Toxic in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity** 

**Numerical measures of toxicity** 

**Component Information** 

| Chemical name             | Oral LD50          | Dermal LD50          | Inhalation LC50      |
|---------------------------|--------------------|----------------------|----------------------|
| Propionic Acid<br>79-09-4 | = 2600 mg/kg (Rat) | = 496 mg/kg (Rabbit) | = 4650 ppm (Rat) 8 h |

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes burns.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Risk of serious damage to eyes.

Causes burns.

Respiratory or skin sensitization Germ cell mutagenicity

No information available. No information available. Reproductive toxicity No information available.

STOT - single exposure
STOT - repeated exposure
Target organ effects

No information available.
No information available.
respiratory system, Eyes, Skin.

**Aspiration hazard** No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

| Chemical name  | Algae/aquatic plants | Fish                 | Toxicity to    | Crustacea |
|----------------|----------------------|----------------------|----------------|-----------|
|                |                      |                      | microorganisms |           |
| Propionic Acid | EC50: =43mg/L (96h,  | LC50: 73 - 99.7mg/L  | -              | -         |
| 79-09-4        | Desmodesmus          | (96h, Lepomis        |                |           |
|                | subspicatus) EC50:   | macrochirus) LC50:   |                |           |
|                | =45.8mg/L (72h,      | =51mg/L (96h,        |                |           |
|                | Desmodesmus          | Oncorhynchus mykiss) |                |           |
|                | subspicatus)         | LC50: >1mg/L (96h,   |                |           |
|                |                      | Pimephales promelas) |                |           |

Persistence and degradability Bioaccumulation

No information available. Inherently biodegradable.

**Component Information** 

| Chemical name  | Partition coefficient |  |
|----------------|-----------------------|--|
| Propionic Acid | 0.25 - 0.33           |  |
| 79-09-4        |                       |  |

Other adverse effects No information available.

# 13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

# 14. Transport information

DOT

UN/ID no UN3463
Proper Shipping Name: Propionic acid

Hazard class 8
Subsidiary Class 3
Packing group: ||

Special Provisions IB2, T7, TP2

Marine Pollutant Severe Marine Pollutant

**Description:** UN3463, Propionic acid, 8 (3), II

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**TDG** 

UN-No: UN3463
Proper Shipping Name: Propionic acid

Hazard class 8
Subsidiary Class 3
Packing Group: ||

**Description:** UN3463, Propionic acid, 8 (3), II

MEX

UN-No UN3463
Proper Shipping Name Propionic acid

Hazard class 8
Subsidiary Class 3
Packing Group II

**Description** UN3463, Propionic acid, 8 (3), II

ICAO (air)

UN-No: UN3463
Proper Shipping Name: Propionic acid

Hazard class 8
Subsidiary hazard class 3
Packing Group: ||

**Description:** UN3463, Propionic acid, 8 (3), II

**IATA** 

UN number UN3463
Proper Shipping Name: Propionic acid

Transport hazard class(es) 8
Subsidiary hazard class 3
Packing group ||

**Description:** UN3463, Propionic acid, 8 (3), II

<u>IMDG</u>

UN number UN3463
Proper shipping name Propionic acid

Transport hazard class(es) 8
Subsidiary hazard class 3
Packing group II
EmS-No F-E, S-C
Marine pollutant NP1

**Description** UN3463, Propionic acid, 8 (3), II, (51°C c.c.)

RID

UN number UN3463
Proper Shipping Name: Propionic acid

Transport hazard class(es) 8
Packing group II
Classification code CF1

**Description:** UN3463, Propionic acid, 8 (3), II

Labels 8 + 3

ADR

UN number 3463

Proper Shipping Name: Propionic acid

Transport hazard class(es) 8
Subsidiary hazard class 3
Packing group II
Classification code CF1
Tunnel restriction code (D/E)

**Description:** 3463, Propionic acid, 8 (3), II, (D/E)

Labels 8 + 3

**ADN** 

UN/ID No UN3463
Proper shipping name Propionic acid

Transport hazard class(es) 8

Packing Group II Classification code CF1

**Description** UN3463, Propionic acid, 8 (+ 3), II

Hazard label(s) 8 + 3
Limited quantity (LQ) 1 L
ventilation VE01

**Equipment Requirements** PP, EP, EX, A

# 15. Regulatory information

#### **International Inventories**

TSCA Complies

DSL/NDSL Complies EINECS/ELINCS Complies

**ENCS IECSC**This product complies with ENCS:
This product complies with China:

KECL Complies PICCS Complies

AICS All the constituents of this material are listed on the Australian Inventory of Chemical

Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

## **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

## **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name  | Hazardous Substances RQs | Extremely Hazardous Substances RQs |  |
|----------------|--------------------------|------------------------------------|--|
| Propionic Acid | 5000 lb final RQ         | -                                  |  |
| 79-09-4        | 2270 kg final RQ         |                                    |  |

#### **US State Regulations**

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

| Chemical name  | New Jersey | Massachusetts | Pennsylvania         |
|----------------|------------|---------------|----------------------|
| Propionic Acid | 1599       | Present       | Environmental hazard |
| 79-09-4        |            |               |                      |

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. Other information

**NFPA** 

Health hazards 3 Flammability 2 Instability 0

Physical and chemical properties -

**HMIS** 

Health hazards 3 Flammability 2 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 09-March-2022

Revision Note No information available.

**Disclaimer** 

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**