# SAFETY DATA SHEET SPECTRUM®



Revision date 05-August-2022

**Revision Number** 2

# 1. Identification

**Product identifier** 

Product Name Vanadyl Sulfate, hydrate

Other means of identification

Product Code(s) V1020

UN/ID no UN2931

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 - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3

# Hazards not otherwise classified (HNOC)

Not applicable

## **Label elements**

Warning

#### Hazard statements

Harmful if swallowed Causes skin irritation Causes eye irritation

#### May cause respiratory irritation



Appearance Crystalline powder or Physical state Solid Odor No information available

Lumps

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

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

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

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

If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

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

Dispose of contents/container to an approved waste disposal plant

#### Other information

No information available.

# 3. Composition/information on ingredients

## Substance

Chemical name	CAS No	Weight-%	Trade secret
Vanadyl Sulfate, hydrate	123334-20-3	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.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

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

eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue

rinsing. Get medical attention if irritation develops and persists.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

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

Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

# 5. Fire-fighting measures

surrounding environment.

Large Fire 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

No information available.

**Explosion data** 

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

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 Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

# 7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

# 8. Exposure controls/personal protection

#### Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Vanadyl Sulfate, hydrate	No data available	0.5 mg/m³ (as Vanadium dust)	-
123334-20-3		Ceiling	
		0.1 mg/m <sup>3</sup> (as Vanadium fume)	
		Ceiling	
		0.05 mg/m³ (as Vanadium dust)	
		TWA	

#### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

## Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields. None required for

consumer use.

**Hand protection** Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

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

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Avoid contact with skin, eyes or clothing.

# 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Crystalline powder or Lumps

**Color** blue

OdorNo information availableOdor thresholdNo information available

PropertyValuesRemarks • MethodpHno data availableNone known

Melting point / freezing point 105 °C / 221 °F None known Boiling point / boiling range no data available None known Flash point no data available 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 No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableNone knownVapor densityno data availableNone knownRelative density2.5None known

Soluble in water Water solubility None known Solubility(ies) no data available None known **Partition coefficient** No data available None known no data available **Autoignition temperature** None known None known **Decomposition temperature** no data available None known Kinematic viscosity

**Dynamic viscosity**no data available

None known

None known

None known

Other information

Explosive properties

Oxidizing properties

Softening point

Molecular weight

VOC Content (%)

Liquid Density

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**None known based on information supplied.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

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. May cause irritation of

respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Irritating to eyes. (based on

components). Causes eye irritation.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Acute toxicity** 

**Numerical measures of toxicity** 

No information available

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

Skin corrosion/irritation

Serious eye damage/eye irritation Respiratory or skin sensitization

Germ cell mutagenicity

Classification based on data available for ingredients. Irritating to skin. Classification based on data available for ingredients. Irritating to eyes.

No information available. No information available.

Reproductive toxicity No information available.

STOT - single exposure STOT - repeated exposure Aspiration hazard No information available. No information available. No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Persistence and degradability

**Bioaccumulation** 

No information available. Inherently biodegradable.

Other adverse effects No information available.

# 13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# 14. Transport information

DOT

UN/ID no UN2931

Proper Shipping Name: Vanadyl sulfate

Hazard class 6.1 Packing group:

Special ProvisionsIB8, IP2, IP4, T3, TP33Marine PollutantSevere Marine Pollutant

**Description:** UN2931, Vanadyl sulfate, 6.1, II

**TDG** 

**UN-No:** UN2931

Proper Shipping Name: Vanadyl sulfate

Hazard class 6.1 Packing Group:

**Description:** UN2931, Vanadyl sulfate, 6.1, II

**MEX** 

UN-No UN2931

Proper Shipping Name Vanadyl sulphate

Hazard class 6.1 Packing Group II

**Description** UN2931, Vanadyl sulphate, 6.1, II

ICAO (air)

**UN-No:** UN2931

Proper Shipping Name: Vanadyl sulphate

Hazard class 6.1 Packing Group:

**Description:** UN2931, Vanadyl sulphate, 6.1, II

**IATA** 

UN number UN2931

Proper Shipping Name: Vanadyl sulphate

Transport hazard class(es) 6.1
Packing group II
ERG Code 6L

**Description:** UN2931, Vanadyl sulphate, 6.1, II

**IMDG** 

UN number UN2931

Proper shipping name Vanadyl sulphate

Transport hazard class(es) 6.1
Packing group II
EmS-No F-A, S-A
Marine pollutant NP1

**Description** UN2931, Vanadyl sulphate, 6.1, II

RID

UN number UN2931

Proper Shipping Name: VANADYL SULPHATE

Transport hazard class(es) 6.1
Packing group II
Classification code T5

Description: UN2931, VANADYL SULPHATE, 6.1, II

Labels 6.1

<u>ADR</u>

UN number UN2931

Proper Shipping Name: Vanadyl sulphate

Transport hazard class(es) 6.1
Packing group II
Classification code T5
Tunnel restriction code (D/E)

**Description:** UN2931, Vanadyl sulphate, 6.1, II, (D/E)

Labels 6.1

<u>ADN</u>

UN/ID No UN2931

Proper shipping name Vanadyl sulphate

Transport hazard class(es) 6.1
Packing Group II
Classification code T5
Special Provisions 802

**Description** UN2931, Vanadyl sulphate, 6.1, II

Hazard label(s) 6.1 Equipment Requirements PP, EP

# 15. Regulatory information

## International Inventories

TSCA Not listed

Note \*Contact supplier for details. One or more substances in this product are either not listed

on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise

exempted from inventory listing requirements

DSL/NDSL Does not Comply EINECS/ELINCS Does not Comply

**ENCS This product complies with ENCS: IECSC This product does not comply with china:** 

KECL Does not Comply PICCS Does not Comply

AICS This product does not comply with 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Vanadyl Sulfate, hydrate - 123334-20-3	1.0

# 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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## **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
Vanadyl Sulfate, hydrate	Present	-	-
123334-20-3			

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

# 16. Other information

#### NFPA

Health hazards 2 Flammability 0 Instability 0

Physical and chemical properties -

**HMIS** 

Health hazards 2
Flammability 0
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** 05-August-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**