

SAFETY DATA SHEET

spectrum®



Revision date 15-July-2022

Revision Number 2

1. Identification

Product identifier

Product Name URANYL ACETATE, DIHYDRATE, REAGENT

Other means of identification

Product Code(s) U1006

UN/ID no UN3288

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 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Toxic if swallowed
Toxic if inhaled
May cause damage to organs through prolonged or repeated exposure



Appearance Crystalline powder or Powder

Physical state Solid

Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Specific treatment (see .? on this label)
Get medical advice/attention if you feel unwell
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Rinse mouth

Precautionary Statements - Storage

Store locked up.
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

Other information

Toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Chemical name	CAS No	Weight-%	Trade secret
Uranyl Acetate, Dihydrate	6159-44-0	100	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice

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

Inhalation

If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not breathe dust. 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.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact

Wash skin with soap and water.

Ingestion

Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. 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. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms

Coughing and/ or wheezing. Difficulty in breathing. May cause redness and tearing of the eyes. Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the 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.

Hazardous combustion products

Carbon dioxide (CO₂). Cobalt oxides. Sodium sulfate.

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

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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 breathe dust. Avoid generation of dust. 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. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Store locked up. 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
Uranyl Acetate, Dihydrate 6159-44-0	No data available	0.05 mg/m ³ TWA (as U) for uranium soluble compounds	-

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.

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and eye/face protection. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline powder or Powder
Color	Yellow
Odor	No information available
Odor threshold	No information available

Property pH

Values
no data available

Remarks • Method
None known

Melting point / freezing point	no data available	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 limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	no data available	None known
Relative density	2.9	None known
Water solubility	Soluble in water	None known
Solubility(ies)	Slightly soluble in alcohol	None known
Partition coefficient	No data available	None known
Autoignition temperature	no data available	None known
Decomposition temperature	275 - °C 527 °F	None known
Kinematic viscosity	no data available	None known
Dynamic viscosity	No data available	None known
 <u>Other information</u>		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
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	Excessive heat.
Incompatible materials	None known based on information supplied.
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. Fatal if inhaled. (based on components). May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Fatal if swallowed. (based on components). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Coughing and/ or wheezing. Difficulty in breathing. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Uranyl Acetate, Dihydrate 6159-44-0	= 204 mg/kg (Rat)	-	-

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

Skin corrosion/irritation May cause skin irritation.
Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization No information available.
Germ cell mutagenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Target organ effects liver, kidney, respiratory system, Skin, blood, bone marrow, lungs, Lymphatic System.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Persistence and degradability No information available.
Bioaccumulation 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 UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s.

Hazard class 6.1
Subsidiary Class 7 (Limited quantity radioactive material)
Packing group: II
Special Provisions IB8, IP2, IP4, T3, TP33
Marine pollutant Uranyl Acetate, Dihydrate, Uranyl Acetate, Dihydrate
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II, Marine pollutant (Uranyl Acetate, Dihydrate, Uranyl Acetate, Dihydrate)
Emergency Response Guide Number 151

TDG

UN-No: UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s.
Hazard class 6.1
Subsidiary Class 7 (Limited quantity radioactive material)
Packing Group: II
Special Provisions 16
Marine pollutant Uranyl Acetate, Dihydrate, Uranyl Acetate, Dihydrate.
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II

MEX

UN-No UN3288
Proper Shipping Name Toxic solid, inorganic, n.o.s.
Hazard class 6.1
Subsidiary Class 7 (Limited quantity radioactive)
Special Provisions 274
Packing Group II
Description UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II

ICAO (air)

UN-No: UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s.
Hazard class 6.1
Packing Group: II
Special Provisions A3, A5
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II

IATA

UN number UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s.
Transport hazard class(es) 6.1
Subsidiary hazard class 7 (Limited quantity radioactive material)
Packing group II
ERG Code 6L
Special Provisions A3, A5
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II

IMDG

UN number UN3288
Proper shipping name Toxic solid, inorganic, n.o.s.
Transport hazard class(es) 6.1
Subsidiary hazard class 7 (Limited quantity radioactive material)
Packing group II
EmS-No F-A, S-A
Special Provisions 274
Marine pollutant P
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II, Marine pollutant

RID

UN number UN3288
Proper Shipping Name: TOXIC SOLID, INORGANIC, N.O.S.
Transport hazard class(es) 6.1
Packing group II
Classification code T5
Special Provisions 274
Description: UN3288, TOXIC SOLID, INORGANIC, N.O.S. (Uranyl Acetate, Dihydrate), 6.1, II,

Labels ENVIRONMENTALLY HAZARDOUS
6.1

ADR

UN number UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s.
Transport hazard class(es) 6.1
Subsidiary hazard class 7 (Limited quantity radioactive material)
Packing group II
Classification code T5
Tunnel restriction code (D/E)
Special Provisions 274
Description: UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Labels 6.1

ADN

UN/ID No UN3288
Proper shipping name Toxic solid, inorganic, n.o.s.
Transport hazard class(es) 6.1
Packing Group II
Classification code T5
Special Provisions 274, 802
Description UN3288, Toxic solid, inorganic, n.o.s. (Uranyl Acetate, Dihydrate), 6.1, II, ENVIRONMENTALLY HAZARDOUS
Hazard label(s) 6.1
Limited quantity (LQ) 500 g
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 complies with China:
KECL Does not Comply
PICCS Does not Comply
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, 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

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 4

Flammability 0

Instability 0

Physical and chemical properties -

HMIS

Health hazards 4 *

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 15-July-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