

SAFETY DATA SHEET

Preparation Date: 5/16/2017

Revision date 5/17/2019

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: S2045
Product Name: 2-(4-SULFOPHENYLAZO)-1,8-DIHYDROXY-3,6-NAPHTHALENEDISULFONIC ACID TRISODIUM SALT

Other means of identification

Synonyms: 2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-3-((4-sulfophenyl)azo)-, trisodium salt; 2,7-Naphthalenedisulfonic acid, 4,5-dihydroxy-3-(2-(4-sulfophenyl)diazenyl)-, sodium salt (1:3); Trisodium 4,5-dihydroxy-3-(4-sulphonatophenylazo)naphthalene-2,7-disulphonate; 4,5-Dihydroxy-3-[2-(4-sulfophenyl)diazenyl]-2,7-naphthalenedisulfonic acid sodium salt (1:3); 4,5-Dihydroxy-3-[(4-sulfophenyl)azo]-2,7-naphthalenedisulfonic acid trisodium salt; 2-(4-Sulfophenylazo)-1,8-dihydroxy-3,6-naphthalenedisulfonic acid trisodium salt; Trisodium 2-(p-sulfophenylazo)-1,8-dihydroxynaphthalene-3,6-disulfonate; 1,8-Dihydroxy-2-(4-sulfophenylazo)naphthalene-3,6-disulfonic acid trisodium salt; 2-(4-Sulfophenylazo)chromotropic acid trisodium salt

CAS #: 23647-14-5
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

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

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
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 OXY-3,6-NAPHTHALENEDISULFONIC
 ACID TRISODIUM SALT

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Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

Label elements

Warning

Hazard statements
 Causes skin irritation
 Causes serious eye irritation
 May cause respiratory irritation



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear protective gloves
 Wear eye/face protection

Precautionary Statements - Response

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 attention.
 IF ON SKIN: Wash with plenty of water
 If skin irritation occurs: Get medical attention
 Take off contaminated clothing and wash it before reuse
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphtalenedisulfonic Acid Trisodium Salt	23647-14-5	100

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 2-(4-SULFOPHENYLAZO-1,8-DIHYDR
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4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes eye irritation Eye contact may result in redness or pain Causes skin irritation Skin contact may result in redness, pain, inflammation, itching, scaling Irritating to respiratory system
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Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NO_x). Sulfur oxides. Sodium oxides.

Specific hazards May be combustible at high temperatures.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

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and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not breathe dust. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	None	None	None	None

Canada

Product code: S2045

Product name:
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Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:

Safety glasses with side-shields. or Goggles

Skin and body protection:

Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection:

Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Crystalline powder. Powder.

Color:

Dark red. Red-brown.

Odor:

Odorless.

Taste

No information available.

Formula

C₁₆H₉N₂O₁₁S₃Na₃

Molecular/Formula weight (g/mole):

570.40

Flammability (solid, gas)

no data available

Flashpoint (°C/°F):

No information available

Flash Point Tested according to:

Not available

Autoignition Temperature (°C/°F):

No information available

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

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OXY-3,6-NAPHTHALENEDISULFONIC
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No information available

Melting point/range(°C/°F):

No information available

Decomposition temperature(°C/°F):

No information available

Boiling point/range(°C/°F):

No information available

Bulk density:

No information available

Density (g/cm3):

No information available

Specific gravity:

No information available

pH

No information available

Vapor pressure @ 20°C (kPa):

No information available

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

Partition coefficient

(n-octanol/water):

No information available

Viscosity:

No information available

Miscibility:

No information available

Solubility:

Soluble in Water

10. STABILITY AND REACTIVITY

Reactivity

May react with strong oxidizers

Chemical stability

Stability:

Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid:

Heat. Avoid dust formation. Incompatible materials.

Incompatible Materials:

Strong oxidizing agents

Hazardous decomposition products:

Carbon monoxide. Carbon dioxide. Sulfur oxides. Nitrogen oxides (NOx).

Other Information

Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

2-(4-Sulfophenylazo)-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt

CAS No

23647-14-5

Product code: S2045

Product name:

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LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
Value - Acute Tox = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
Value - Acute Tox = No information available

LD50/dermal/rat
VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	Causes skin irritation.
Eye Contact:	Causes serious eye irritation.
Inhalation	Irritating to respiratory system.
Ingestion	Health injuries are not known or expected under normal use.
Aspiration hazard	No information available.

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

Chronic Toxicity	No information available.
Sensitization:	No information available.
Mutagenic Effects:	No information available
Carcinogenic effects:	No information available.

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Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.
Persistence and degradability: No information available
Bioaccumulative potential: No information available.
Mobility in soil No information available
Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic acid trisodium salt	23647-14-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide Number	No information available
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available

TDG (Canada)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available

ADR

UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Packing group	No information available
Subsidiary Risk:	No information available

IMDG

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No information available

RID

UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available

ICAO (air)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available

Product code: S2045

Product name:
 2-(4-SULFOPHENYL)AZO-1,8-DIHYDR
 OXY-3,6-NAPHTHALENEDISULFONIC
 ACID TRISODIUM SALT

IATA

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	PresentACTIVE	Not present	Present	Not present	Present	Present	Present 245-803-9

U.S. Regulations**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	None	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid	23647-14-5	Not Applicable	Not Applicable

Product code: S2045

Product name:
 2-(4-SULFOPHENYLAZO-1,8-DIHYDROXY-3,6-NAPHTHALENEDISULFONIC ACID TRISODIUM SALT

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Trisodium Salt			
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Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component 2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt 23647-14-5 (100)	WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria
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Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5	Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); STOT SE 3 (H335)

EU - CLP (1272/2008)

R-phrase(s)

R36/37/38 - Irritating to eyes, respiratory system and skin

S-phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37 - Wear suitable gloves

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
2-(4-Sulfophenylazo-1,8-dihydroxy-3,6-naphthalenedisulfonic Acid Trisodium Salt	23647-14-5		No information	

Product code: S2045

Product name:
2-(4-SULFOPHENYLAZO-1,8-DIHYDROXY-3,6-NAPHTHALENEDISULFONIC ACID TRISODIUM SALT

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The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant

16. OTHER INFORMATION

Preparation Date: 5/16/2017
Revision date 5/17/2019
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet