Sodium Dichromate, Lab Grade

SECTION 1: Identification

Product identifier

Product name: Sodium Dichromate, Lab Grade
Product code: S25546

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:	**Supplier:**
AquaPhoenix Scientific	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard identification

GHS classification:

Oxidizing solids, category 2
Acute toxicity (oral), category 2
Acute toxicity (dermal), category 4
Acute toxicity (inhalation), category 4
Skin corrosion, category 1B
Skin sensitization, category 1
Serious eye damage, category 1
Respiratory sensitization, category 1
Germ cell mutagenicity, category 1B
Carcinogenicity, category 1B
Reproductive toxicity, category 1B
Specific target organ toxicity - repeated exposure, category 1
Acute aquatic hazard, category 1
Chronic aquatic hazard, category 1

Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

H272 May intensify fire; oxidizer
H300 Fatal if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340 May cause genetic defects
H350 May cause cancer
H360 May damage fertility or the unborn child
H372 Causes damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

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
P280 Wear protective gloves/protective clothing/eye protection/face protection
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing should not be allowed out of the workplace
P285 In case of inadequate ventilation wear respiratory protection
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P273 Avoid release to the environment
P370+P378 In case of fire: Use agents recommended in section 5 for extinction
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse
P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell
P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338+P310 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/physician.
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P308+P313 If exposed or concerned: Get medical advice/attention
P391 Collect spillage
P405 Store locked up
P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

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SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7789-12-0	Sodium dichromate dihydrate	100

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:
Not determined or not available.

After inhalation:
Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell
Move to fresh air
Call a POISON CONTROL CENTER or seek medical attention if you feel unwell
Move exposed individual to fresh air
Immediately call a POISON CONTROL CENTER or seek medical attention

After skin contact:
Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention
Wash affected area with soap and water
Seek medical attention if symptoms develop or persist
Immediately remove all contaminated clothing
Immediately call a POISON CONTROL CENTER or seek medical attention

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention
Remove contact lens(es) if able to do so during rinsing
Immediately call a POISON CONTROL CENTER or seek medical attention

After ingestion:
Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists
Immediately call a POISON CONTROL CENTER or seek medical attention
Do not induce vomiting
Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:
Not determined or not available.

Delayed symptoms and effects:
Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:
Not determined or not available.

Notes for the doctor:
Not determined or not available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:
Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:
Not determined or not applicable.

Specific hazards during fire-fighting:
Thermal decomposition can lead to release of irritating gases and vapors
Will release oxygen when heated, intensifying a fire

Special protective equipment for firefighters:
Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:
Carbon monoxide and carbon dioxide may form upon combustion
Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:
Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:
Wear protective eye wear, gloves and clothing
Sweep or scoop up solid material while minimizing dust generation
Dispose of contents / container in accordance with local regulations

Reference to other sections:
Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:
Use only with adequate ventilation.
Avoid breathing dust.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:
Keep container tightly sealed.
Keep container dry.
Store in a cool, well-ventilated area.
Store away from flammable and combustible materials (paper, wood).
Store away from reducing agents (zinc, alkaline metals, formic acid).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Sodium dichromate dihydrate	7789-12-0	ACGIH TLV 0.05 mg/m³, as Cr
United States (OSHA)	Sodium dichromate dihydrate	7789-12-0	OSHA PEL 0.005 mg/m³, as Cr(VI)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.
Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Orange - red crystals
Odor:	Odorless
Odor threshold:	Not determined or not available.
pH-value:	3.5 - 3.9 (5% aq. sol.)
Melting/Freezing point:	357°C
Boiling point/range:	400°C
Flash point:	Not determined or not available.

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Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	2.350 g/cm³
Solubilities:	Partially soluble.; 2.355 g/l in water
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	400°C
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Classified as an Oxidizing solid category 2.

Other information

SECTION 10: Stability and reactivity

Reactivity:
Does not react under normal conditions of use and storage.

Chemical stability:
Stable under normal conditions of use and storage.

Possibility of hazardous reactions:
None under normal conditions of use and storage.

Conditions to avoid:
Incompatible Materials. Dust generation. combustible materials. organic materials.

Incompatible materials:
Water, oxidizing agents, reducing agents, acids, strong bases, acetic anhydride, hydrazine, hydroxylamine, iron, magnesium, nitric acid, oils, sulfuric acid, boron, hydrochloric acid, glycerol, metal powders, silicon, ethanol, 2-propanol.

Hazardous decomposition products:
Oxygen, sodium oxide, toxic chromium oxide fumes.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Fatal if swallowed Harmful in contact with skin Harmful if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Sodium dichromate dihydrate	oral	LD50 - Rat - 67 mg/kg

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carcinogenicity

Assessment: May cause cancer

Product data: No data available.

Substance data:

Name	Species	Result
Sodium dichromate dihydrate	Sodium Dichromate Dihydrate	May cause cancer through inhalation.

International Agency for Research on Cancer (IARC):

Name	Classification
Sodium dichromate dihydrate	Group 1 - Carcinogenic to humans

National Toxicology Program (NTP):

Name	Classification
Sodium dichromate dihydrate	Known to be human carcinogens

Germ cell mutagenicity

Assessment: May cause genetic defects

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	May cause genetic defects.

Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	May damage fertility or the unborn child.

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Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	Specific Target Organ Toxicity, Repeated Exposure - Causes damage to cardiovascular/hematological organs through prolonged or repeated inhalation exposure.

Specific target organ toxicity (repeated exposure)

Assessment: Causes damage to organs through prolonged or repeated exposure

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life

Product data: No data available.

Substance data:

Name	Result
Sodium dichromate dihydrate	EC50 - Daphnia magna - 0.035 mg/L - 48 h
	EC50 - Scenedesmus subspicatus - 0.13 mg/L - 72 h
	NOEC - Oncorhynchus mykiss - 0.051 mg/L - 60 d

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	UN3086
UN proper shipping name	Toxic solids, oxidizing, n.o.s. (Sodium dichromate dihydrate).
UN transport hazard class(es)	5.1 (6) 
Packing group	I
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN3086
UN proper shipping name	Toxic solids, oxidizing, n.o.s. (Sodium dichromate dihydrate).
UN transport hazard class(es)	5.1 (6) 
Packing group	I
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN3086
UN proper shipping name	Toxic solids, oxidizing, n.o.s. (Sodium dichromate dihydrate).
UN transport hazard class(es)	5.1 (6) 
Packing group	I
Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

7789-12-0	Sodium dichromate dihydrate	Not Listed

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-3-ox

HMIS: 3-0-3-X

Initial preparation date: 02.01.2018

End of Safety Data Sheet