

Sodium dichromate dihydrate**12266-5KG**

Version 1.2

Revision Date 08/24/2023

Print Date 08/25/2023

SECTION 1. IDENTIFICATION

Product name : Sodium dichromate dihydrate

Number : 000000021143

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : Crystals

Color : orange

Odor : odourless

Classification of the substance or mixture

Classification of the substance or mixture : Oxidizing solids, Category 2
Acute toxicity, Category 3, Oral
Acute toxicity, Category 2, Inhalation
Acute toxicity, Category 4, Dermal
Skin corrosion, Category 1B
Serious eye damage, Category 1
Respiratory sensitisation, Category 1

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Skin sensitisation, Category 1
Germ cell mutagenicity, Category 1B
Carcinogenicity, Category 1B
Reproductive toxicity, Category 1B
Specific target organ toxicity - repeated exposure, Category 1,
Blood, Cardio-vascular system

GHS Label elements, including precautionary statements

Symbol(s)

:



Signal word

: Danger

Hazard statements

: May intensify fire; oxidizer.
Toxic if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Fatal if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat.
Keep/ Store away from clothing/ combustible materials.
Take any precaution to avoid mixing with combustibles.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face

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protection.
Wear respiratory protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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/ doctor.

If skin irritation or rash occurs: Get medical advice/ attention.

Wash contaminated clothing before reuse.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

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

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity

NTP:	Sodium dichromate, dihydrate Known carcinogen	7789-12-0
IARC:	Sodium dichromate, dihydrate Group 1: Carcinogenic to humans	7789-12-0
ACGIH:	Sodium dichromate, dihydrate A1: Confirmed human carcinogen A1: Confirmed human carcinogen	7789-12-0

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : $\text{Cr}_2\text{Na}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Sodium dichromate, dihydrate	7789-12-0	$\geq 90.00 - \leq 100.00 \%$

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Show this safety data sheet to the doctor in attendance.

Inhalation : If inhaled, remove to fresh air. Call a physician immediately.

Skin contact : Then wash with lots of water and soap. Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.

Eye contact : Protect unharmed eye. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.

Ingestion : A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor immediately together with this card

Notes to physician

Indication of immediate medical attention and special treatment needed, if necessary : If dermatitis develops, avoid contact with the product in the future (contact avoidance can be achieved by the use of proper protective clothing and equipment).

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

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	Foam Carbon dioxide (CO2) Dry powder
Specific hazards during firefighting	: Oxidizer. Contact with other material may cause fire. The product is not flammable. Hazardous decomposition products formed under fire conditions. Chromium oxides
Special protective equipment for firefighters	: Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas.
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Wear personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing.
Environmental precautions	: Prevent further leakage or spillage if safe to do so. Do not flush into surface water. If the product contaminates rivers and lakes or drains inform respective authorities. Try to prevent the material from entering drains or water courses.
Methods and materials for containment and cleaning up	: Ventilate the area. Avoid dust formation. Sweep up and shovel into suitable containers for disposal. Surfaces contaminated with Hexavalent Chromium must be cleaned by methods that minimize exposure (see 29 CFR 1910.1026).

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SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Wear personal protective equipment.
Keep container tightly closed.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Avoid dust formation.
Use only in well-ventilated areas.
Wash thoroughly after handling.
Do not breathe dust or spray mist.
Do not get in eyes, on skin, or on clothing.

Advice on protection against fire and explosion : Keep away from easily oxidizable materials.
Keep away from combustible material.

Storage

Conditions for safe storage, including any incompatibilities : Keep containers tightly closed in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep away from heat and sources of ignition.
Do not store near combustible materials.
Do not store on wooden pallets.
Protect from physical damage.
Store away from incompatible substances.

Advice on common storage : Keep away from reducing agents.
Do not store together with:
Flammable liquids
Flammable solids

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.

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Avoid exposure - obtain special instructions before use.

- Engineering measures : Use with local exhaust ventilation.
- Eye protection : Safety goggles
Face-shield
- Hand protection : Protective gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Wear suitable protective equipment.
Protective suit
Lab coat
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures : When using, do not eat, drink or smoke.
Separate rooms are required for washing, showering and changing clothes.
Keep working clothes separately.
Regular cleaning of equipment, work area and clothing.
Contaminated work clothing should not be allowed out of the workplace.
Usual hygienic precautions must be taken when working with dangerous cancer causing substances.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Sodium dichromate, dihydrate	7789-12-0	REF : Reference:	29 CFR 1910.1026	03 2012	OSHASP:US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

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Sodium dichromate, dihydrate	7789-12-0	TWA : Time weighted average	0.005 mg/m3	02 2006	OSHA:US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
Sodium dichromate, dihydrate	7789-12-0	OSHA_A CT : OSHA Action level:	0.0025 mg/m3	02 2006	OSHA:US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
Sodium dichromate, dihydrate	7789-12-0	Ceiling : Ceiling Limit Value:	0.1 mg/m3	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Further information	:	Expressed as : as CrO3			
Sodium dichromate, dihydrate	7789-12-0	Ceiling : Ceiling Limit Value:	0.1 mg/m3	02 2006	OSHA/Z2:US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
Sodium dichromate, dihydrate	7789-12-0	TWA : Time weighted average	0.0002 mg/m3	03 2018	ACGIH:US. ACGIH Threshold Limit Values, as amended
Further information	:	Form of exposure : Inhalable fraction. Expressed as : as Cr(VI)			

SAFETY DATA SHEET



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Sodium dichromate, dihydrate	7789-12-0	SKIN_DES : Skin designation:	Can be absorbed through the skin.	03 2018	ACGIH:US. ACGIH Threshold Limit Values, as amended
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Further information	:	Form of exposure : Inhalable fraction. Expressed as : as Cr(VI)			
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Sodium dichromate, dihydrate	7789-12-0	STEL : Short term exposure limit	0.0005 mg/m3	03 2018	ACGIH:US. ACGIH Threshold Limit Values, as amended
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Further information	:	Form of exposure : Inhalable fraction. Expressed as : as Cr(VI)			
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Sodium dichromate, dihydrate	7789-12-0	STEL : Short term exposure limit	0.0005 mg/m3	03 2018	ACGIH:US. ACGIH Threshold Limit Values, as amended
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Further information	:	Form of exposure : Inhalable fraction. Expressed as : as Cr(VI)			
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Sodium dichromate, dihydrate	7789-12-0	TWA : Time weighted average	0.0002 mg/m3	03 2018	ACGIH:US. ACGIH Threshold Limit Values, as amended
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Further information	:	Form of exposure : Inhalable fraction. Expressed as : as Cr(VI)			
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Sodium dichromate, dihydrate	7789-12-0	REL : Recommended exposure limit (REL):	0.0002 mg/m3	2016	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
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Further information	:	Expressed as : as Cr(VI)			
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Crystals
Color	: orange
Odor	: odourless
pH	: Note: No data available
Melting point/range	: ca. 357 °C Note: anhydrous substance
Boiling point/boiling range	: Note: Decomposes on heating.
Flash point	: Note: Not applicable
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: negligible
Density	: 2.52 g/cm ³ at 13 °C
Water solubility	: ca. 2,355 g/l at 20 °C
Partition coefficient:	: Note: No data available

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n-octanol/water

Ignition temperature : Note: Not applicable

Auto-ignition temperature : Note: not auto-flammable

Decomposition temperature : 100 °C
Note: Loss of water of crystallization on heating.400 °C
Note: Decomposition temperature

Viscosity, dynamic : Note: Not applicable

Viscosity, kinematic : Note: Not applicable

Oxidizing properties : The substance or mixture is classified as oxidizing with the category 2.

Molecular weight : 298.00 g/mol

Bulk density : Note: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : May intensify fire; oxidizer.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Protect from contamination.

Incompatible materials : Reducing agents
Hydrazine
Combustible material
Organic materials
Corrosive in contact with metals

Hazardous decomposition : In case of fire hazardous decomposition products may be

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products

produced such as:
Chromium oxides
Sodium oxides**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: LD50: 86.5 mg/kg Species: Rat, female Test substance: anhydrous substance
	: LD50: 123.5 mg/kg Species: Rat, male Test substance: anhydrous substance
Acute inhalation toxicity	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Acute dermal toxicity	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Skin irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Eye irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Sensitisation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Sodium dichromate, dihydrate	: Note: In vitro tests showed mutagenic effects
Aspiration toxicity	: Not applicable

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Further information : Note: Cancer hazard. Contains material which can cause cancer. May cause harm to the unborn child. May impair fertility.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Toxicity to daphnia and other aquatic invertebrates : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Toxicity to algae : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology

Additional ecological information : The methods for determining biodegradability are not applicable to inorganic substances.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT UN/ID No. : UN 3086

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Proper shipping name : TOXIC SOLID, OXIDIZING, N.O.S.
(Sodium dichromate, dihydrate)
Class : 6.1
Packing group : II
Hazard Labels : 6.1 (5.1)

IATA UN/ID No. : UN 3086
Description of the goods : TOXIC SOLID, OXIDIZING, N.O.S.
(Sodium dichromate, dihydrate)
Class : 6.1
Packaging group : II
Hazard Labels : 6.1 (5.1)
Packing instruction (cargo aircraft) : 674
Packing instruction (passenger aircraft) : 667
Packing instruction (passenger aircraft) : Y644

IMDG UN/ID No. : UN 3086
Description of the goods : TOXIC SOLID, OXIDIZING, N.O.S.
(SODIUM DICHROMATE, DIHYDRATE)
Class : 6.1
Packaging group : II
Hazard Labels : 6.1 (5.1)
EmS Number : F-A, S-Q
Marine pollutant : yes
IMDG Code segregation group according chapter 3.1.4.4 : NONE,

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances : On TSCA Inventory
Control Act

Australia. Inventory of : On the inventory, or in compliance with the inventory
Industrial Chemicals (AIIC),
as amended

Canada. Canadian : All components of this product are on the Canadian DSL
Environmental Protection

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Act (CEPA). Domestic
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory
Inventory (KECI)

Philippines. Inventory of : On the inventory, or in compliance with the inventory
Chemicals and Chemical
Substances (PICCS)

China. Inventory of Existing : On the inventory, or in compliance with the inventory
Chemical Substances
(IECSC)

New Zealand. Inventory of : On the inventory, or in compliance with the inventory
Chemicals (NZIoC), as
published by ERMA New
Zealand

Taiwan Chemical : On the inventory, or in compliance with the inventory
Substance Inventory (TCSI)

TSCA 12B : US. Toxic Substances Control Act (TSCA) Section 12(b) Export
Notification (40 CFR 707, Subpt D)

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National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting
requirements of SARA Title III, Section 302.

SARA 313 Components : The following components are subject to reporting levels
established by SARA Title III, Section 313:
: Sodium dichromate, dihydrate 7789-12-0

SARA 311/312 Hazards : Reactivity Hazard
Acute Health Hazard
Chronic Health Hazard

**CERCLA Reportable
Quantity** : 10 lbs

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California Prop. 65

:



WARNING: This product can expose you to chemicals, listed below, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Sodium dichromate, dihydrate

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Massachusetts RTK

:

Sodium dichromate, dihydrate

7789-12-0

New Jersey RTK

:

Sodium dichromate, dihydrate

7789-12-0

Pennsylvania RTK

:

Sodium dichromate, dihydrate

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SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 0	0
Physical Hazard	: 2	
Instability	:	2
Special hazard	:	OX

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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