

Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)
Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Chromium nitrate, nonahydrate, 99.99%
Product Code : C 2251
CAS No: 7789-02-8

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification
OTTO CHEMIE PVT LTD
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Oxidizing solids, (Category 3)	H272: May intensify fire; oxidizer.
Skin irritation, (Category 2)	H315: Causes skin irritation.
Eye irritation, (Category 2)	H319: Causes serious eye irritation.
Skin sensitization, (Sub-category 1B)	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, (Category 3)	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H272 May intensify fire; oxidizer.

H315

H317

H319

H412

Precautionary Statements

P210

P220

P273

P280

P302 + P352

P305 + P351 + P338

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H317

H412

Precautionary Statements

P302 + P352

Warning

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from clothing and other combustible materials.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

none

Warning

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

IF ON SKIN: Wash with plenty of water.

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Supplemental Hazard Statements none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : CrN3O9 · 9H2O
Molecular weight : 400,15 g/mol
CAS-No. : 7789-02-8
EC-No. : 236-921-1

Component	Classification	Concentration
Chromium trinitrate		
CAS-No. 7789-02-8 EC-No. 236-921-1	Ox. Sol. 3; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B; Aquatic Chronic 3; H272, H315, H319, H317, H412	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

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Nitrogen oxides (NOx)

Chromium oxides

Not combustible.

Has a fire-promoting effect due to release of oxygen.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Do not store near combustible materials.

Storage class

Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

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Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

solid

b) Color

No data available

c) Odor

of nitric acid

d) Melting

Melting point/range: 60 °C - lit.

point/freezing point

e) Initial boiling point

No data available

and boiling range

f) Flammability (solid,

The product is not flammable.

gas)

g) Upper/lower

No data available

flammability or

explosive limits

h) Flash point

Not applicable

i) Autoignition

No data available

temperature

j) Decomposition

> 100 °C

Elimination of water of crystallization

temperature

k) pH

2 - 3 at 50 g/l at 20 °C

l) Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

810 g/l at 20 °C - soluble

Not applicable for inorganic substances

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

No data available

p) Density

No data available

Relative density

No data available

q) Relative vapor

No data available

density

r) Particle

No data available

characteristics

s) Explosive properties

No data available

t) Oxidizing properties

The substance or mixture is classified as oxidizing with the

category 3.

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9.2 Other safety information

Solubility in other
solvents
Ethanol at 20 °C
- soluble

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

combustible substances

Violent reactions possible with:

strong reducing agents

10.4 Conditions to avoid

Heat.

no information available

10.5 Incompatible materials

Metals

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Trout - 20,1 mg/l - 96 h

(OECD Test Guideline 203)

flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 24,1

mg/l - 96 h

(OECD Test Guideline 203)

Remarks: The value is given in analogy to the following substances:

Chromium(III) nitrateThe value is given in analogy to the following

substances: Chromium trinitrate

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 76,9 - 268,6 mg/l - 48 h

Remarks: The value is given in analogy to the following substances:

Chromium(III) nitrate

Toxicity to

fish(Chronic toxicity)

NOEC - Fish - 0,22 mg/l - 72 d

(OECD Test Guideline 210)

Remarks: The value is given in analogy to the following substances:

Chromium(III) nitrate

Toxicity to daphnia

and other aquatic

invertebrates(Chronic

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toxicity)

NOEC - Daphnia magna (Water flea) - 0,303 - 0,886 mg/l - 21 d
(US-EPA)

Remarks: The value is given in analogy to the following substances:

Chromium(III) nitrate

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2720

IMDG: 2720

IATA: 2720

14.2 UN proper shipping name

ADR/RID:

CHROMIUM NITRATE

IMDG:

CHROMIUM NITRATE

IATA:

Chromium nitrate

14.3 Transport hazard class(es)

ADR/RID: 5.1

IMDG: 5.1

IATA: 5.1

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Tunnel restriction code : (E)

Further information : No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P8 OXIDISING LIQUIDS AND SOLIDS

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Other regulations

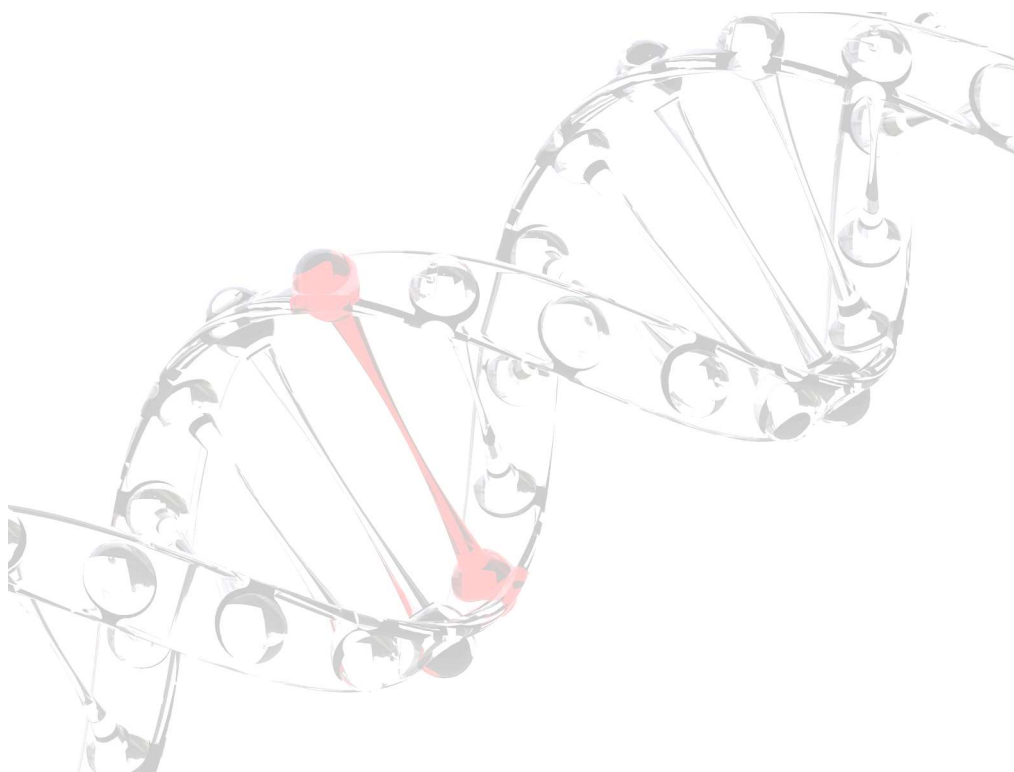
Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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