



Safety Data Sheet

Phenylhydrazinium chloride

Section 1: Chemical Product and Company Identification

Product Name: Phenylhydrazinium chloride

Contact Information:

Catalog Codes:

CAS#: 59-88-1

Email: info@drm-chem.com

RTECS: -

Address: #7, Afshar javan Alley, Sohrevardi St, Tehran, Iran

TSCA: -

post code: 1551818111

Synonym: Phenylhydrazine hydrochloride

Tehran Sales: +98 21 88177760

Chemical Name: Phenylhydrazinium chloride

Order Online: Drm-chem.com

Chemical Formula: $C_6H_9ClN_2$

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Phenylhydrazinium chloride	59-88-1	100 %

Toxicological Data on Ingredients:

Section 3: Hazards Identification

3.1 Classification of the substance or mixture

Acute toxicity, Category 3	H301: Toxic if swallowed.
Acute toxicity, Category 3	H331: Toxic if inhaled.
Acute toxicity, Category 3	H311: Toxic in contact with skin.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341: Suspected of causing genetic defects.
Carcinogenicity, category 1B	H350: May cause cancer.
Specific target organ toxicity - repeated exposure, Category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word

Danger

Hazard Statements

H301 + H311 + H331

Toxic if swallowed, in contact with skin or if inhaled.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H341

Suspected of causing genetic defects.

H350

May cause cancer.

H372

Causes damage to organs through prolonged or repeated exposure.

H400

Very toxic to aquatic life.

Precautionary Statements

P273

Avoid release to the environment.

P280

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

Response:

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER/ doctor

P302 + P352 + P312

IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell

P304 + P340 + P311	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Additional Labelling	Restricted to professional users.
Reduced Labelling (<= 125 ml)	
Pictogram	
Signal Word	danger
Hazard Statements	none
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled.
Precautionary Statements	none
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
P304 + P340 + P311	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
Supplemental Hazard Statements	none
3.3 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 4: First Aid Measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

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

In case of eye contact

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

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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 3.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire and Explosion Data

5.1 Extinguishing media

Suitable extinguishing media

Water

Foam

Carbon dioxide (CO₂)

Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting:

Combustible.

Fire may cause evolution of:

nitrogen oxides

nitrous gases

Hydrogen chloride gas

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Special protective equipment 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.

Further information

Suppress (knock down) gases/vapours/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

Personal precautions

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. 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

Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).

Take up carefully. 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.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protected from light.

Tightly closed. Dry. Keep in a well-ventilated place.

Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class

Storage class (TRGS 510): 6.1A, Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

Further information on storage stability

Recommended storage temperature see product label.

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

Occupational Exposure Limits

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

Full contact

Material: Nitrile rubber

Glove thickness: 0,11 mm

Break through time: 480 min

Protective index: Full contact

Material tested: KCL 741 Dermatril® L

Material: Nitrile rubber

Glove thickness: 0,11 mm

Break through time: 480 min

Protective index: Splash contact

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 P3

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

Physical state

solid

Color

white

Odor	No data available
pH	No data available
Melting point/freezing point	250 - 254 °C (decomposition)
Initial boiling point and boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapor pressure	No data available
Density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Relative vapor density	No data available
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Other safety information	
Bulk density	ca. 330 kg/m ³
Particle size	No data available

Section 10: Stability and Reactivity Data

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Risk of explosion with:

Halogenated hydrocarbon

perchloryl fluoride

sodium hydrogensulfite

methyl iodine

metallic oxides

with

Air

Risk of explosion/exothermic reaction with:

strong oxidising agents

Lead oxides

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

Organic Substances

surface-active substances

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

Section 11: Toxicological Information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - 100,1 mg/kg

(Expert judgement)

Acute toxicity estimate Inhalation - 4 h - 0,51 mg/l - dust/mist

(Expert judgement)

Acute toxicity estimate Dermal - 300,1 mg/kg

(Expert judgement)

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

11.2 Additional Information

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.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Section 12: Ecological Information

12.1 Toxicity

Mixture

Toxicity to fish	Remarks: No data available
	LC50 : 0,1 mg/l Exposure time: 96,0 h
M-Factor (Acute aquatic toxicity)	10
Acute aquatic toxicity	Very toxic to aquatic life.

12.2 Persistence and degradability

Components:

phenylhydrazinium chloride:

Biodegradability:	Result: Readily biodegradable. Remarks: No data available
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12.3 Bioaccumulative potential

Components:

phenylhydrazinium chloride:

Bioaccumulation:	Remarks: No data available
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12.4 Mobility in soil

Components:

phenylhydrazinium chloride:

Stability in soil:	Remarks: No data available
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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

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Section 14: Transport Information

14.1 UN number

ADR/RID: UN 2811

IMDG: UN 2811

IATA: UN 2811

14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (phenylhydrazinium chloride)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. (phenylhydrazinium chloride)

IATA: Toxic solid, organic, n.o.s. (phenylhydrazinium chloride)

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

14.4 Packaging group

ADR

Packing group:	II
Classification Code	T2
Hazard Identification Number	60
Labels	6.1
Tunnel restriction code	(D/E)

IMDG

Packing group	II
Labels	6.1
EmS Code	F-A, S-A

IATA (Cargo)

Packing instruction (cargo aircraft)	676
Packing instruction (LQ)	Y644
Packing group	II
Labels	Division 6.1 - Toxic substances

IATA_P (Passenger)

Packing instruction (passenger aircraft)	669
Packing instruction (LQ)	Y644
Packing group	II
Labels	Division 6.1 - Toxic substances

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Section 15: Other 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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered:
Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor. Banned and/or restricted

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Not applicable

Regulation (EU) No 2024/590 on substances that deplete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

: Not applicable

REACH - List of substances

Not applicable

subject to authorisation (Annex XIV)

Seveso III: Directive 2012/18/EU H2 ACUTE TOXIC
of the European Parliament and
of the Council on the control of
major-accident hazards involving
dangerous substances.

E1 ENVIRONMENTAL HAZARDS

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

References: Not available

Other Special Considerations: Not available

Created: /11/2025

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the

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