An ISO 9001: 2015 & GMP Certified Company

101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

Creation Date :- 05-04-2025 Rivision Date :-18-07-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Phenyl hydrazine, GR 99%+

Product Code: P 1672 CAS No: 100-63-0

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

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 3) Acute toxicity, (Category 3) Acute toxicity, (Category 3) Skin irritation, (Category 2) Eye irritation, (Category 2) Skin sensitization, (Category 1)

Germ cell mutagenicity.

(Category 2)

Carcinogenicity, (Category 1B) Specific target organ toxicity repeated exposure, (Category 1)

Short-term (acute) aquatic hazard, (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Hazard Statements H301 + H311 + H331

H315 H317 H319 H341 H350 H372

H400

Precautionary Statements

P273 P280

P301 + P310 P302 + P352 + P312

P304 + P340 + P311

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H311: Toxic in contact with skin. H315: Causes skin irritation. H319: Causes serious eye irritation.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic

H350: May cause cancer.

H372: Causes damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life.

Danger

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

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing genetic defects.

May cause cancer.

Causes damage to organs through prolonged or repeated

exposure.

Very toxic to aquatic life.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable

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for breathing. Call a POISON CENTER/ doctor.

May cause cancer.

doctor if you feel unwell.

May cause an allergic skin reaction. Suspected of causing genetic defects.

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

Causes damage to organs through prolonged or repeated

Wear protective gloves/ protective clothing/ eye protection/ face

IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/

IF INHALED: Remove person to fresh air and keep comfortable

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

for breathing. Call a POISON CENTER/ doctor.

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

rinsina. none

Danger

none

Supplemental Hazard

P305 + P351 + P338

Statements

Restricted to professional users. Reduced Labeling (<= 125 ml)

Pictogram Signal Word

Hazard Statements

H317

H341 H350 H372

H301 + H311 + H331 **Precautionary Statements**

P280

P301 + P310 P302 + P352 + P312

P304 + P340 + P311

Supplemental Hazard

Statements 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 : C6H8N2 : 108,14 g/mol Molecular weight CAS-No. : 100-63-0 FC-No 202-873-5

Component		Classification	Concentration	
phenylhydrazine				
CAS-No. EC-No.	100-63-0 202-873-5	Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1;	<= 100 %	
LO-NO.	202-075-5	Muta. 2; Carc. 1B; STOT		
		RE 1; Aquatic Acute 1;		
		H301, H331, H311, H315,		
		H319, H317, H341, H350,		ŀ
		H372, H400		

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

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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. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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. 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

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

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

Carbon oxides

Nitrogen oxides (NOx)

Carbon oxides

Nitrogen oxides (NOx)

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

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

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

Remove container from danger zone and cool with water. 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: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. 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 carefully with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

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For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

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

measures against static discharge.

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. Keep in a well-ventilated place. Keep locked up or in an area accessible only

to qualified or authorized persons.

Light sensitive. Store under inert gas. Air sensitive.

Storage class

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

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: butyl-rubber

Minimum layer thickness: 0,7 mm Break through time: 480 min

Material tested:Butoject® (KCL 898)

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: Chloroprene

Minimum layer thickness: 0,65 mm

Break through time: 120 min

Material tested: KCL 720 Camapren®

Body Protection protective clothing

Respiratory protection

Recommended Filter type: Filter A-(P3)

The entrepeneur 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

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Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor

d) Melting

point/freezing point

e) Initial boiling point and boiling range

f) Flammability (solid,

gas)

g) Úpper/lower

flammability or

explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition

temperature

k) pH I) Viscosity

m) Water solubility n) Partition coefficient:

n) Partition coefficien

o) Vapor pressure

p) Density

Relative density

q) Relative vapor

density

r) Particle characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

Surface tension

Relative vapor

density

liquid

No data available

No data available

Melting point/range: 18 - 21 °C

238 - 241 °C

No data available

Lower explosion limit: 1,1 %(V)

89 °C - closed cup No data available

No data available

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: 0,017 Pas at 20 °C

No data available

log Pow: 1,25 - Bioaccumulation is not expected.

1,35 hPa at 60 °C

1,098 g/mL

No data available

No data available

No data available

No data available

none

46,1 mN/m at 20 °C

4,33

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Exothermic reaction with:

Strong oxidizing agents

Sulfides

metallic oxides

Risk of explosion with:

metallic oxides

Halogenated hydrocarbon

organic halides

perchloryl fluoride

surface-active substances

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

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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

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 LC50 - Danio rerio (zebra fish) - 0,16 - 0,25 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 2 - 5 mg/l - 48 h

Remarks: (External MSDS)

Toxicity to bacteria EC50 - Photobacterium phosphoreum - 175,2 mg/l - 1 h

Remarks: (IUCLID)

12.2 Persistence and degradability

Biodegradability Result: 97 % - Readily biodegradable.

(OECD Test Guideline 301E)

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

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2572 IMDG: 2572 IATA: 2572

14.2 UN proper shipping name

ADR/RID: PHENYLHYDRAZINE IMDG: PHENYLHYDRAZINE IATA: Phenylhydrazine

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

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14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/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.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture,

placing on the market and use of certain

dangerous substances, mixtures and articles

(Annex XVII)

phenylhydrazine

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.

H2 ACUTE TOXIC E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or

stricter national regulations where applicable.

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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