

# MATERIAL SAFETY DATA SHEET (MSDS)

# PHENYL HYDRAZINE AR (FOR SYNTHESIS)

## 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : PHENYL HYDRAZINE AR (FOR SYNTHESIS)

Product code : SS0120800100
Identification of the product : Phenylhydrazine CAS No: 100-63-0

EC No :202-873-5 Annex No :612-023-00-9

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 SUVCHEM
Chaitanya Tower 2

pany Identification Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

**Phone no.** : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

#### 2.1. Classification of the substance or mixture

### Classification EC 67/548 or EC 1999/45

Classification : Carc. Cat. 2; R45

Muta. Cat. 3; R68

T; R23/24/25-R48/23/24/25

Xi; R36/38 R43 N: R50

## Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Germ cell mutagenicity - Category 2 - Warning (CLP : Muta. 2) H341

Carcinogenicity - Category 1B - Danger (CLP : Carc. 1B) H350

Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -

Category 3 - Warning (CLP : STOT SE 3) H335

Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP :

STOT RE 1) H372



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## 2. Hazards identification -DSD (continued)

Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311 Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1) H317 Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Acute toxicity, Inhalation - Category 3 - Danger (CLP: Acute Tox. 3) H331

Eye irritation - Category 2A - Warning (CLP: Eye Irrit. 2) H319

Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP

: Aquatic Acute 1) H400

#### 2.2. Label elements

#### Labelling EC 67/548 or EC 1999/45

Symbol(s)





Symbol(s) : T : Toxic

N : Dangerous for the environment

R Phrase(s) : R45 : May cause cancer.

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R36/38: Irritating to eyes and skin.

R43: May cause sensitization by skin contact.

R48/23/24/25: Toxic: danger of serious damage to health by prolonged exposure

through inhalation, in contact with skin and if swallowed.

R68 : Possible risks of irreversible effects. R50 : Very toxic to aquatic organisms.

S Phrase(s) : S53 : Avoid exposure - obtain special instructions before use.

S45: In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

S61: Avoid release to the environment. Refer to special instructions/Safety data

sheets.

Contains : Phenylhydrazine

#### Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms







Signal words : Danger

Hazard statements : H301 : Toxic if swallowed.

H311: Toxic in contact with skin.

H331 : Toxic if inhaled. H350 : May cause cancer.

H341 : Suspected of causing genetic defects.

H319: Causes serious eye irritation.



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## 2. Hazards identification -DSD (continued)

H315: Causes skin irritation.

H317: May cause an allergic skin reaction. H335: May cause respiratory irritation.

H372: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

**Precautionary statements** 

• General : P201: Obtain special instructions before use.

• Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area. P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment. P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

• Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of soap and water. P308+P313: If exposed or concerned: get medical advice.

P391: Collect spillage.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

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

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position

comfortable for breathing.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P363: Wash contaminated clothing before reuse. P314: Get medical advice if you feel unwell.

P361: Remove immediately all contaminated clothing.

• Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international

regulation.

Special labelling : Restricted to professional users. (Substances which appear in Part 3 of Annex VI to

Regulation (EC) No 1272/2008)

Contains : Phenylhydrazine

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.



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## 3. Composition/information on ingredients

**Substance / Preparation** : Phenylhydrazine

> EC No: 202-873-5 Annex No :612-023-00-9

Substance.

Substance name Phenylhydrazine Contents 100 %

CAS No 100-63-0

EC No 202-873-5

Annex No 612-023-00-9 REACH Ref.

Classification Carc. Cat. 2: R45 Muta. Cat. 3; R68 T; R23/24/25-48/23/24/25

Xi; R36/38 R43 N; R50

Carc. 1B \_ H350
Acute Tox. 3 (skin) \_ H311
Acute Tox. 3 (sinhal) \_ H331
Acute Tox. 3 (oral) \_ H301
STOT RE 1 \_ H372
Muta. 2 \_ H341
Eye irrit 2 \_ H319
Skin Irrit. 2 \_ H315
STOT SE 3 \_ H335
Skin Sens. 1 \_ H317
Aquatic Acute 1 \_ H400

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

#### 4.1. Description of first aid measures

Inhalation : Call a POISON CENTER or doctor if you feel unwell. Immediately call a POISON

CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and

keep at rest in a position comfortable for breathing.

: Wash with plenty of soap and water. Immediately call a POISON CENTER or Skin contact

doctor. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice. Wash contaminated clothing before reuse.

Specific treatment (see on this label).

: Get medical advice. If eve irritation persists : Remove contact lenses, if present and Eye contact

easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

: Specific treatment (see on this label). Immediately call a POISON CENTER or Ingestion

doctor. Do NOT induce vomiting. Rinse mouth.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : May cause cancer.

Suspected of causing genetic defects.

Causes damage to organs through prolonged or repeated exposure.

Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction. May cause respiratory irritation.

Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.



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## 4. First aid measures (continued)

#### 4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

## 5. Fire-fighting measures

## 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media**: Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

## 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

## 6. Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Collect spillage. Store away from other materials.



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## 6. Accidental release measures (continued)

#### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

## 7. Handling and storage

## 7.1. Precautions for safe handling

**Handling** : Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a

well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray. Use personal protective equipment as required. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Technical protective measures** 

: Provide good ventilation in process area to prevent formation of vapour.

Special precautions

: Avoid breathing dust, fume, gas, mist, vapours, spray.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

tightly closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

## 8. Exposure controls/personal protection

## 8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

• Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Chemical goggles or safety glasses.
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.



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## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

Colour : Pale yellow

Odour : Faint aromatic odor
Odour threshold : No data available.
pH value : No data available.

Melting point [°C] : 18 - 21 °C

: N/A Decomposition point [°C] Critical temperature [°C] : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) : N/A : 89 °C Flash point [°C] : 238 - 241 °C Boiling point [°C] : 238°C Initial boiling point [°C] : 241 °C Final boiling point [°C] : N/A **Evaporation rate** : N/A Vapour pressure [20°C]

Vapour pressure mm/Hg : 1 mm Hg @ 71.80C

Vapour density : 3,7

Density [g/cm3] : 1,098

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Slightly soluble in

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A Viscosity at 40°C [mm2/s] : N/A

## 9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : 1,10%

Oxidising properties : No data available.

# 10. Stability and reactivity

### 10.1. Reactivity



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## 10. Stability and reactivity (continued)

**Reactivity** : Not established.

10.2. Chemical stability

**Chemical stability** : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

**Hazardous reactions** : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

### 11. Toxicological information

## 11.1. Information on toxicological effects

**Acute toxicity** 

Sensitization Mutagenicity

• Inhalation : Toxic if inhaled.

Dermal : Toxic in contact with skin.Ingestion : Toxic if swallowed.

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

**Irritation** : Causes serious eye irritation.

Causes skin irritation.

May cause respiratory irritation.

: May cause an allergic skin reaction.

: Suspected of causing genetic defects.

Carcinogenicity : May cause cancer.

Toxic for reproduction: Based on available data, the classification criteria are not met.STOT-single exposure: Based on available data, the classification criteria are not met.STOT-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

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



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## 12. Ecological information

12.1. Toxicity

**Toxicity information** : Very toxic to aquatic life.

12.2. Persistence - degradability

**Persistence - degradability** : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

## 13. Disposal considerations

## 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Hazardous waste due to toxicity.

### 14. Transport information

### 14.1. Land transport (ADR-RID)

Proper shipping name : PHENYLHYDRAZINE

UN N° : 2572 H.I. nr : 60



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# 14. Transport information (continued)

ADR - Class : 6.1

**Labelling - Transport** : 6.1 : Toxic substances.



ADR - Classification code : T1
ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 100 ML



: D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

#### 14.2. Sea transport (IMDG) [English only]

**ADR** - Tunnel code

Proper shipping name : PHENYLHYDRAZINE

UN N° : 2572

**IMO-IMDG - Class or division** : 6.1 : Toxic substances.

IMO-IMDG - Packing group : II

IMO- IMDG - Packing instructions : P001

IMO-IMDG - Limited quantities : 100 ml

IMO-IMDG - Marine pollution : Yes

EMS-Nr : F-A S-A

## 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : PHENYLHYDRAZINE

UN N° : 2572

IATA - Class or division : 6.1 : Toxic substances.

IATA - Packing group : ||

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 654

instruction

- Passenger and Cargo - Maximum : 5 L

Quantity/Packing

IATA - Cargo only : ALLOWED - Cargo only - Packing instruction : 662



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## 14. Transport information (continued)

- Cargo only - Maximum Quantity/ : 60 L

**Packing** 

IATA - Limited Quantites : 1 L ERG-Nr : 6L

## 15. Regulatory information

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

Safety, health and environmental

**REACH Restrictions - Annex XVII** 

regulations/legislation specific for the

substance or mixture

 $: \ \, \text{Ensure all national/local regulations are observed}.$ 

: With the exception of those listed below:

The components of this product are not subject to restrictions.

Annex XVII

**REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

#### 16. Other information

Revision - See : \*

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF

THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and

1999/45/EC, and amending Regulation (EC) No 1907/2006

List of relevant R phrases (heading 3): R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R36/38 : Irritating to eyes and skin.

R43: May cause sensitization by skin contact.

R45 : May cause cancer.

R48/23/24/25: Toxic: danger of serious damage to health by prolonged exposure

through inhalation, in contact with skin and if swallowed.

R50: Very toxic to aquatic organisms. R68: Possible risks of irreversible effects.

List of full text of H-statements in

section 3

: H301 : Toxic if swallowed.

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H335: May cause respiratory irritation. H341: Suspected of causing genetic defects.



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# PHENYL HYDRAZINE AR (FOR SYNTHESIS)

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

## **DISCLAIMER:**

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**End of document**