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, 98% Product Code: P 1671 CAS No : 100-63-0

 1.2. Relevant identified uses of the substance or mixture and 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 Narayar 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)	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 sensitization, (Category 1)	H317: May cause an allergic skin reaction.
Germ cell mutagenicity,	H341: Suspected of causing genetic
(Category 2)	defects.
Carcinogenicity, (Category 1B)	H350: May cause cancer.
Specific target organ toxicity -	H372: Causes damage to organs through
repeated exposure, (Category 1)	prolonged or repeated exposure. H400: Very toxic to aquatic life.
Short-term (acute) aquatic hazard, (Category 1	H400. Very loxic to aqualic life.
2.2 Label elements	
Labelling according Regulation (EC) No 1272/2008	
Pictogram	
Signal Word	Danger
Hazard Statements	
H301 + H311 + H31	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
11400	exposure.
H400	Very toxic to aquatic life.
Precautionary Statement P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face
1 200	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.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
	-

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

otto chemie pvt ltd

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

		Remove contact lenses,	if present and easy to do. Continue		
rinsing.					
Supplemental Hazar Statements		none			
Restricted to profession	al users.				
Reduced Labeling (<= 1					
Pictogram	,				
Signal Word		Danger			
Hazard Statements					
H317		May cause an allergic sk			
H341 H350		Suspected of causing ge May cause cancer.	netic defects.		
H350 H372			ns through prolonged or repeated		
11072		exposure.	is through protonged of repeated		
H301 + H311 + H331		· · · · · · · · · · · · · · · · · · ·	ntact with skin or if inhaled.		
Precautionary Statemer	nts	,			
P280			protective clothing/ eye protection/ face		
		protection.			
P301 + P310		IF SWALLOWED: Imme	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.		
P302 + P352 + P312			plenty of water.Call a POISON CENTER/		
P304 + P340 + P311		doctor if you feel unwell.			
F304 + F340 + F311			IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.		
Supplemental Hazard		none			
Statements					
2.3 Other hazards					
		nents considered to be either persistent,			
		ersistent and very bioaccumulative (vPvB)	at		
levels of 0.1% or higher	· In · ·				
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: Composit	tion/information or	i ingredients			
3.1 Substances		C6H8N2			
Molecular weight		08,14 g/mol			
CAS-No.		00-63-0			
EC-No.		02-873-5			
R	m II				
Component		Classification	Concentration		
phenylhydrazine					
CAS-No.	100-63-0	Acute Tox. 3; Skin Irrit. 2;	<= 100 %		
EC-No.	202-873-5	Eye Irrit. 2; Skin Sens. 1;			
		Muta. 2; Carc. 1B; STOT			

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

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

DISCLAIMER

RE 1; Aquatic Acute 1; H301, H331, H311, H315, H319, H317, H341, H350,

H372, H400

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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

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

For disposal see section 13.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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

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 eve 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 Do not let product enter drains.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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

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-octanol/water o) Vapor pressure p) Density 1,098 g/mL 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

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 No data available

10.6 Hazardous decomposition products

DISCLAIMER

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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

No data available No data available

No data available

No data available none

46,1 mN/m at 20 °C 4.33

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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

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 other Toxic 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 (zebr	a 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 - Photobacter	ium 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 assessm	nent	
This substance/mixture contains no cor	ponents considered to be either persistent.	
	y persistent and very bioaccumulative (vPvB) at	
levels of 0.1% or higher.		
12.6 Endocrine disrupting properties		
Product:		
	tance/mixture does not contain components	
	ed to have endocrine disrupting properties	
	to REACH Article 57(f) or Commission	
	d regulation (EU) 2017/2100 or Commission	
	on (EU) 2018/605 at levels of 0.1% or higher.	
12.7 Other adverse effects		
No data available		
SECTION 13: Disposal consideration	6	
13.1 Waste treatment methods	5	
No data available		
SECTION 14: Transport information		
14.1 UN number		
ADR/RID: 2572	IMDG: 2572	IATA: 2572
14.2 UN proper shipping name	1000.2012	IATA. 2012
ADR/RID:		
ADR/RID: IMDG:	PHENYLHYDRAZINE	
ADR/RID: IMDG: IATA:		
ADR/RID: IMDG: IATA: 14.3 Transport hazard class(es)	PHENYLHYDRAZINE Phenylhydrazine	1474.64
ADR/RID: IMDG: IATA: 14.3 Transport hazard class(es) ADR/RID: 6.1	PHENYLHYDRAZINE	IATA: 6.1
ADR/RID: IMDG: IATA: 14.3 Transport hazard class(es)	PHENYLHYDRAZINE Phenylhydrazine	IATA: 6.1 IATA: II

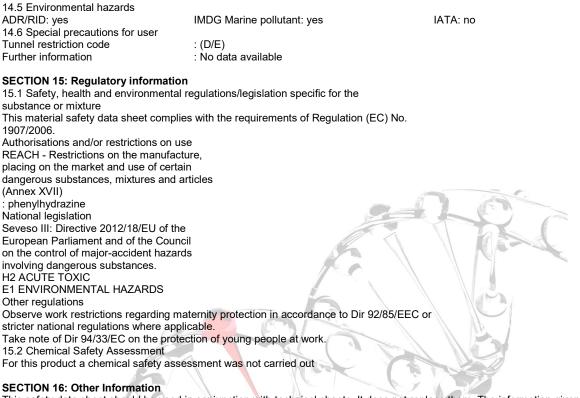
DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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



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.

Creation Date :- 05-04-2025

Rivision Date :-18-07-2030

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product