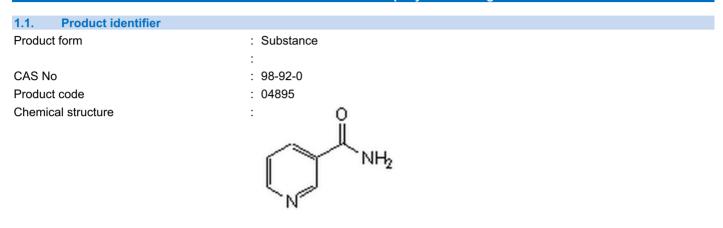


CAS No: 98-92-0 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking



1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture

: Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SPAN LAB UNIT NO. 14,SKY INDUSTRIAL ESTATE,WALIV, VASAI (E) 401208 Mumbai - INDIA PH: +91 9820509929 info@spanlab.in www.spanlab.in

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye H319 irritation, Category 2 Skin corrosion/irritation, H315 Category 2 Specific target organ H335 toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of classification categories and H statements : see section 16

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Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36/37/38 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements	
Labelling according to Regulation (E	C) No. 1272/2008 [CLP]
Hazard pictograms (CLP)	: GHS07
Signal word (CLP)	: Warning
Hazard statements (CLP)	 H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

No additional information available

SECTION 3: Composition/informati	on on ingredients	
3.1.SubstanceNameCAS No	: NICOTINAMIDE FOR BIOCHEMISTRY : 98-92-0	
Full text of R- and H-phrases: see see	tion 16	
3.2. Mixture		
Not applicable		
SECTION 4: First aid measures		

4.1.	Description of first aid measures	
		: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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First-aid	l measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see on this label).
First-aid	d measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid	d measures after ingestion	: Rinse mouth out with water. If you feel unwell, seek medical advice.
4.2.	Most important symptoms and e	ffects, both acute and delayed
Sympto	ms/injuries after inhalation	: May cause respiratory irritation.
Sympto	ms/injuries after skin contact	: Causes skin irritation.
Sympto	ms/injuries after eye contact	: Causes serious eye irritation.
4.3.		ical attention and special treatment needed
	/mptomatically.	
SECTIO	ON 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable	e extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuita	ble extinguishing media	: Do not use a heavy water stream.
5.2.	Special hazards arising from the	substance or mixture
No add	itional information available	
5.3.	Advice for firefighters	
	on during firefighting	: Do not attempt to take action without suitable protective equipment.
SECTIO	ON 6: Accidental release measures	3
0.4		
6.1.		equipment and emergency procedures
6.1.1.	Personal precautions, protective For non-emergency personnel ency procedures	equipment and emergency procedures : Evacuate unnecessary personnel.
6.1.1.	For non-emergency personnel	
6.1.1. Emerge 6.1.2.	For non-emergency personnel ency procedures	
6.1.1. Emerge 6.1.2. Protecti	For non-emergency personnel ency procedures For emergency responders	: Evacuate unnecessary personnel.
6.1.1. Emerge 6.1.2. Protecti	For non-emergency personnel ency procedures For emergency responders ve equipment	Evacuate unnecessary personnel.Use personal protective equipment as required.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2.	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures	Evacuate unnecessary personnel.Use personal protective equipment as required.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2.	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
 6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. 	For non-emergency personnel ency procedures For emergency responders ve equipment ency procedures Environmental precautions elease to the environment.	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
 6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. 	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
 6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. 	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add	For non-emergency personnel ency procedures For emergency responders ve equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add SECTIO 7.1.	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available DN 7: Handling and storage	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add SECTIO 7.1. Precaut	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available DN 7: Handling and storage Precautions for safe handling	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release. ment and cleaning up Clean up immediately by sweeping or vacuum. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add SECTIO 7.1. Precaut	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available DN 7: Handling and storage Precautions for safe handling tions for safe handling	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release. Imment and cleaning up Clean up immediately by sweeping or vacuum. I clean up immediately by sweeping or vacuum.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add SECTIO 7.1. Precaut Hygiene 7.2.	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available DN 7: Handling and storage Precautions for safe handling tions for safe handling e measures	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release. Imment and cleaning up Clean up immediately by sweeping or vacuum. I clean up immediately by sweeping or vacuum.
6.1.1. Emerge 6.1.2. Protecti Emerge 6.2. Avoid re 6.3. Method 6.4. No add SECTIO 7.1. Precaut Hygiene 7.2.	For non-emergency personnel ency procedures For emergency responders we equipment ency procedures Environmental precautions elease to the environment. Methods and material for contain s for cleaning up Reference to other sections itional information available DN 7: Handling and storage Precautions for safe handling tions for safe handling e measures Conditions for safe storage, incl	 Evacuate unnecessary personnel. Use personal protective equipment as required. Stop release. ment and cleaning up Clean up immediately by sweeping or vacuum. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. uding any incompatibilities

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls	
Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection
SECTION 9: Physical and chemical prop	erties
9.1. Information on basic physical a Physical state	nd chemical properties : Solid
-	
Colour	: White crystalline.
Odour	: odourless.
Odour threshold	: No data available
pH	: 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 128 - 131
Freezing point	: No data available
Boiling point	: 150 - 160
Flash point	: 150 °C
Auto-ignition temperature	: 480 °C
Decomposition temperature	: >= 200 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 4.22
Relative density	: No data available
Density Solubility	: 1.4 g/cm³ : Water: 691 g/l at 20 °C
Log Pow	: -0.38
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available

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Salety Data Sheet	
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable under normal conditions.	
40.2 Descibility of berendeve receti	
10.3. Possibility of hazardous reacti No additional information available	ons
No additional mormation available	
10.4. Conditions to avoid	
Direct sunlight. Air contact. Moisture.	
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition provide the second	ducts
INO additional information available	
SECTION 11: Toxicological information	
SECTION 11: Toxicological information 11.1. Information on toxicological ef	fects
SECTION 11: Toxicological information	
SECTION 11: Toxicological information 11.1. Information on toxicological ef	fects
SECTION 11: Toxicological information 11.1. Information on toxicological ef	fects
SECTION 11: Toxicological information 11.1. Information on toxicological ef Acute toxicity	fects : Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological ef Acute toxicity	fects : Not classified : Causes skin irritation.
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation	fects : Not classified : Causes skin irritation. pH: 9
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation	fects : Not classified : Causes skin irritation. pH: 9 : Causes serious eye irritation.
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 ifects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 ifects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity	 ifects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single	 i Not classified : Causes skin irritation. pH: 9 : Causes serious eye irritation. pH: 9 : Not classified : Not classified : Not classified : Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Yot classified Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure)	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation.
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Yot classified Not classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure)	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation.
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure)	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Not classified May cause respiratory irritation. Not classified Mot classified
SECTION 11: Toxicological information 11.1. Information on toxicological eff Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated	 fects Not classified Causes skin irritation. pH: 9 Causes serious eye irritation. pH: 9 Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation.

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SECTION 12: Ecological information			
12.1. Toxicity			
No additional information available			
12.2. Persistence and degradability	tv		
No additional information available			
12.3. Bioaccumulative potential			
NICOTINAMIDE FOR BIOCHEMISTI	RY (98-92-0)		
Log Pow	-0.38		
-			
12.4. Mobility in soil			
No additional information available			
12.5. Results of PBT and vPvB as	sessment		
No additional information available			
12.6. Other adverse effects			
No additional information available			
SECTION 13: Disposal consideration	ıs		
13.1. Waste treatment methods			
No additional information available			
SECTION 14: Transport information			
In accordance with ADR / RID / IMDG /	IATA / ADN		
14.1. UN number			
UN-No. (ADR)	: Not applicable		
UN-No. (IMDG)	: Not applicable		
UN-No.(IATA) UN-No.(ADN)	: Not applicable : Not applicable		
UN-No. (RID)	: Not applicable		
14.2. UN proper shipping name			
Proper Shipping Name (ADR)	: Not applicable		
Proper Shipping Name (IMDG)	: Not applicable		
Proper Shipping Name (IATA)	: Not applicable		
Proper Shipping Name (ADN) Proper Shipping Name (RID)	: Not applicable : Not applicable		
14.3. Transport hazard class(es)			
ADR			
Transport hazard class(es) (ADR)	: Not applicable		
	. No		
Transport hazard class(es) (IMDG)	: Not applicable	00/04/0045	
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ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
- Overland transport	
No data available	
- Transport by sea	
No data available	
- Air transport	
No data available	
- Inland waterway transport	
No data available	
- Rail transport	
No data available	
14.7. Transport in bulk according t	to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions NICOTINAMIDE FOR BIOCHEMISTRY is not on the REACH Candidate List NICOTINAMIDE FOR BIOCHEMISTRY is not on the REACH Annex XIV List

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15.1.2. National regulations

Gormany

Germany	
AwSV/VwVwS Annex reference	: Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 3; WGK No 2244)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Denmark Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product

15.2. **Chemical safety assessment** No additional information available

SECTION 16: Other information

Full text of R-. H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product