

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No.: R 33809 Product Name: RIBOFLAVINE 99 – 101 % (VITAMINE – B₂)

Manufacturer / supplier identification

Company	:	NICE CHEMICALS PVT.LTD. , Cochin , India Tel - 0484 2800212 , 2802755
Contact for Information	:	Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No.	:	0484 2801583 Tele fax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No	:	83-88-5	EC –No.	201-507-1
Molar mass	:	376.37 g/mol		
Molecular formula	:	$C_{17}H_{20}N_4O_6$		

3. HAZARDS IDENTIFICATION

No hazardous product as specified in Directive 67/548/EEC.

4. FIRST AID MEASURES

After inhalation : Fresh air. After skin contact : wash off with plenty of water. Remove contaminated clothing. After eye contact : Rinse out with plenty of water. After swallowing (large amounts) : Consult doctor if feeling unwell.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media : Water, Powder, CO₂, foam.

Special risks : Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting : Do not stay in dangerous zone without self-contained breathing apparatus.

Other information : Prevent fire-fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning/absorption : Take up dry. Forward for disposal. Clean up affected area.



Catalogue No.:R 33809Product Name:RIBOFLAVINE 99 - 101%

7. HANDLING AND STORAGE

Handling : Protect from light.

Storage : Tightly closed. Dry. Protected from light. At $+15^{\circ}$ C to $+25^{\circ}$ C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment :

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection :	required when dust are generated.
Eye protection	required
Hand protection	required
Industrial hygiene	Change contaminated clothing. Wash hands after working
	with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form		:	solid
Colour		:	yellow
Odour		:	weak characteristic odour.
PH value at 0.	1 g/l H ₂ O (2	20^{0} C):	5.5 - 7.2
Melting point		:	$\sim 280 {}^{0}\mathrm{C}$ (decomposition)
Boiling point		:	Not available
Ignition temper	rature	:	Not available
Flash point		:	Not available
Explosion limit	ts Lo	wer :	Not available
	Upper :	Not	available
Density	$60^{\circ}C$:	Not available
Bulk density		:	$\sim 100 \text{ Kg/m}^3$
Solubility in w	ater(20°C)	:	0.065 g/l
Thermal decon	nposition	:	278 - 282 ^o C
Log P(oct)		:	- 1.46

10. STABILITY AND REACTIVITY

Conditions to be avoided	: No information available.
Substance to be avoided	: No information available
Hazardous decomposition products	: No information available.



Catalogue No.:R 33809Product Name:RIBOFLAVINE 99 - 101%

11. TOXICOLOGICAL INFORMATION:

Acute toxicity: LD_{50} (oral, rat): > 10000 mg/Kg. LC_{50} (inhalation, rat) : > 5.4 mg/l/4 h; LD_{50} (dermal, rat) : > 5000 mg/kg. Skin Irritation test (rabbit) : No irritation. Eye Irritation test (rabbit) : No irritation.

Subacute to chronic toxicity : Bacterial mutagenicity : Salmonella typhimurium : Negative. Ames test : Negative.

Further toxicological information : Naturally occurring substance.

Further data : No toxic effects are to be expected when the product is handled appropriately.

12. ECOLOGICAL INFORMATION:

Biologic degradation : Biodegradation : 100 % / 28 d. Readily biodegradable.

Behavior in environmental compartments : No bioaccumulation is to be expected (logP(o/w<1). Ecotoxic effects : Biological effects: Fish toxicity : Br.rerio LC_{50} :>10000 mg/l/96h; Daphnia toxicity : Daphnia magna EC_{50} :> 47.4 mg/l/48 h; Bacterial toxicity : Ps.putida EC_{50} :> 10000 mg/l/0.5 h;

Further ecologic data : No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL METHOD

Product

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC Member countries through that you corresponding laws and regulations. We recommend contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, noncontaminated packaging may be treated like household waste or recycled.



Catalogue No.:R 33809Product Name:RIBOFLAVINE 99 - 101%

14. TRANSPORT INFORMATION

No subject to transport regulations.

15. REGULATORY INFORMATION

Labelling according	ng to EC Directives
Symbol:	
R-phrases:	
S-phrases:	

16. OTHER INFORMATION

Reason for alteration : Change/addition in the chapter 5. Change/addition in the chapter 8 Change in the chapter on toxicology. Change in the chapter on ecology.

General update.

Change in product name.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product