




DR. J. PHARMACHEM (INDIA)

MATERIAL SAFETY DATA SHEET	
1	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifiers
	Product Name LUMINOL
	CAS NO. 521-31-3
1.2	Relevant identified uses of the substance or mixture and uses advised against
	Identified uses Laboratory chemicals, Manufacture of substances
1.3	Details of the supplier of the safety data sheet
	COMPANY DR. J. PHARMACHEM (INDIA)
	722/AB/15 'NIRMAL' ,LAXMI PARK COLONY,
	NAVI PETH , PUNE- 411 030.INDIA
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2	HAZARDS IDENTIFICATION
2.1	Classification of the substance or mixture
	Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
	Skin irritation (Category 2) Eye irritation (Category 2) Specific target organ toxicity - single exposure (Category 3)
	Classification according to EU Directives 67/548/EEC or 1999/45/EC
	Irritating to eyes, respiratory system and skin.
2.2	Label elements
	Labelling according Regulation (EC) No 1272/2008 [CLP]
	Pictogram 
	Signal word Warning
	Hazard statement(s)
	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
	Precautionary statement(s)
	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



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		present and easy to do. Continue rinsing.
	Supplemental Hazard Statements	none
According to European Directive 67/548/EEC as amended		
	Hazard symbol(s)	X
	R-phrase(s)	
	R36/37/38	Irritating to eyes, respiratory system and skin.
	S-phrase(s)	
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S36/37	Wear suitable protective clothing and gloves.
2.3	Other hazards	none
3	COMPOSITION/INFORMATION ON INGREDIENTS	
3.1	Substances	
	Synonyms	3-Aminophthalhydrazide 5-Amino-2,3-dihydro-1,4-phthalazinedione
	Formula	C8H7N3O2
	Molecular Weight	177.16 g/mol
	Component	Concentration
	Luminol	Min 98%
	Other Unknow impurities	Up to 2%
4	FIRST AID MEASURES	
4.1	Description of first aid measures	
	General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
	If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
	In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
	In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
	If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2	Most important symptoms and effects, both acute and delayed	
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
4.3	Indication of any immediate medical attention and special treatment needed	
	No data available	
5	FIREFIGHTING MEASURES	
5.1	Extinguishing media	
	Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	Special hazards arising from the substance	Carbon oxides, nitrogen oxides (NOx)



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	or mixture	
5.3	Advice for firefighters	Wear self contained breathing apparatus for firefighting if necessary.
5.4	Further information	No data available
6	ACCIDENTAL RELEASE MEASURES	
6.1	Personal precautions, protective equipment and emergency procedures	
	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.	
6.2	Environmental precautions	
	Do not let product enter drains	
6.3	Methods and materials for containment and cleaning up	
	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.	
6.4	Reference to other sections	
	For disposal see section 13.	
7	HANDLING AND STORAGE	
7.1	Precautions for safe handling	
	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.	
7.2	Conditions for safe storage, including any incompatibilities	
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.	
7.3	Specific end uses	
	no data available	
8	EXPOSURE CONTROLS/PERSONAL PROTECTION	
8.1	Control parameters	
	Components with workplace control parameters	
8.2	Exposure controls	
	Appropriate engineering controls	
	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
	Personal protective equipment	
	Eye/face protection	
	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
	Skin protection	
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.	
	Body Protection	
	impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
	Respiratory protection	
	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.	



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	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).	
9	PHYSICAL AND CHEMICAL PROPERTIES	
9.1	Information on basic physical and chemical properties	
a)	Appearance	Form : Powder Colour :Light yellow
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	pH	9 - 10
e)	Melting point/freezing point	>300°C
f)	Initial boiling point and boiling range	no data available
g)	Flash point	no data available
h)	Enthalpy of Vaporization	no data available
i)	Index of Refraction	no data available
j)	Molar Refractivity	no data available
k)	Vapour pressure	no data available
l)	Density	no data available
m)	Oxidizing properties	no data available
n)	Solubility	Slightly soluble in water, Soluble in 50 mg/ml dimethyl sulfoxide, Soluble in alcohol
o)	Partition coefficient: noctanol/water	no data available
p)	Polarizability	no data available
q)	Decomposition temperature	no data available
r)	Molar Volume	no data available
s)	Surface Tension	no data available
9.2	Other safety information	
	IUPAC Name	5-amino-2,3-dihydrophthalazine-1,4-dione
	Molecular Formula	C ₈ H ₇ N ₃ O ₂
	Molecular Weight	177.16 g/mol
	SMILES	<chem>c1(=O)[nH][nH]c(=O)c2c(cccc12)N</chem>
	InChI	InChI=1S/C8H7N3O2/c9-5-3-1-2-4-6(5)8(13)11-10-7(4)12/h1-3H,9H2,(H,10,12)(H,11,13)
	EINECS No.	208-309-4
10	STABILITY AND REACTIVITY	
10.1	Reactivity	no data available
10.2	Chemical stability	no data available
10.3	Possibility of hazardous reactions	no data available
10.4	Conditions to avoid	no data available
10.5	Incompatible materials	Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents
10.6	Hazardous decomposition products	Other decomposition products - no data available
11	TOXICOLOGICAL INFORMATION	
11.1	Information on toxicological effects	
	Acute toxicity	no data available
	Skin corrosion/irritation	no data available
	Serious eye damage/eye irritation	no data available
	Respiratory or skin sensitization	no data available



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	Germ cell mutagenicity	no data available	
	Carcinogenicity	IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	
	Reproductive toxicity	no data available	
	Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation.	
	Specific target organ toxicity - repeated exposure	no data available	
	Aspiration hazard	no data available	
	Potential health effects		
	Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.	
	Ingestion	May be harmful if swallowed.	
	Skin	May be harmful if absorbed through skin. May cause skin irritation.	
	Eyes	May cause eye irritation.	
	Signs and Symptoms of Exposure		
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.		
	Additional Information		
	RTECS	TH8890060	
12	ECOLOGICAL INFORMATION		
12.1	Toxicity	no data available	
12.2	Persistence and degradability	no data available	
12.3	Bioaccumulative potential	no data available	
12.4	Mobility in soil	no data available	
12.5	Results of PBT and vPvB assessment	no data available	
12.6	Other adverse effects	no data available	
13	DISPOSAL CONSIDERATIONS		
13.1	Waste treatment methods		
	Product		
	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.		
	Contaminated packaging		
	Dispose of as unused product.		
14	TRANSPORT INFORMATION		
14.1	UN number		
	ADR/RID	IMDG	IATA
	-	-	-
14.2	UN proper shipping name		
	ADR/RID	IMDG	IATA
	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	Transport hazard class(es)		
	ADR/RID	IMDG	IATA
	-	-	-



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14.4	Packaging group		
	ADR/RID	IMDG	IATA
	-	-	-
14.5	Environmental hazards		
	ADR/RID	IMDG Marine pollutant	IATA
	no	no	no
14.6	Special precautions for user		
	no data available		
15	REGULATORY INFORMATION		
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.		
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture		
	no data available		
15.2	Chemical Safety Assessment		
	no data available		
16	OTHER INFORMATION		
	Further information		
	<p>The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dr J Pharmachem (India) and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.jpharmachem.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.</p> <p>Month of creation :- October 2013 Month of revision :- October 2016</p>		