

SAFETY DATA SHEET Doc. ID: P-7000-75 Rev. AA Issued (year/month/day) 2015/05/18

Section 1 Identification of the Substance/mixture and of the Company/undertaking

1.1	Product Identifier		
	Product Name	Lumi-Phos Plus Chemiluminescent Reagent	
	Part Number	P-7000, P-701, P-7010, P-7120, P-7125, P-7530	
1.2	Relevant identified uses of t	ises of the substance or mixture and uses advised against	
	Product Use	For laboratory use only. See product literature for details.	
1.3	Details of the supplier of the	e safety data sheet	
		Manufacturer	
		Lumigen,Inc. (A Beckman Coulter	
		company) 22900 W. Eight Mile Road	
		Southfield, MI 48033, U.S.A. Tel:248-351-5600	
	e-mail address	ksrashid@beckman.com	
1.4		-	
	Telephone number (24H)	ChemTel Expert Assistance	
	· · · · · · · · · · · · · · · · · · ·	Hotline/MSDS Fax Access by dialing 800-255-3924 or for	
		International +01-813-248-0585	
	S	Section 2 Hazards Identification	
2.1	.1 Classification of substance or mixture		
	Product Description Mixture		
		Colorless; Clear; Liquid; Ammonia-like	
	Classification according to EC 1272/2008 (CLP/GHS)		
		Not classified as hazardous per EC 1272/2008 (CLP/GHS)	
	Classification according to E	C Directives 1999/45/EC and 67/548/EEC	
		Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)	
	Classification according to U	S-OSHA (HCS 29 CFR 1910.1200) and UN GHS	
		Skin Irritation Category 3	
2.2	Classification according to U Label Elements	Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS	
2.2		Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS Hazardous Ingredients	
2.2		Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS Hazardous Ingredients 2-Amino-2-methyl-1-propanol	
2.2		Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS Hazardous Ingredients	
2.2		Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS Hazardous Ingredients 2-Amino-2-methyl-1-propanol Pictogram	
2.2		Skin Irritation Category 3 According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS Hazardous Ingredients 2-Amino-2-methyl-1-propanol Pictogram None	

Section 2 Hazards Identification (Continued)

Hazard Statements

H316 Causes mild skin irritation.

Precautionary Statements

P332+P313 If skin irritation occurs: Get medical advice/attention. Product label will display most significant precautionary statements.

2.3 Other hazards

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

Section 3 Composition and Information on Ingredients

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	GHS
2-Amino-2-methyl-1-propanol CAS # 124-68-5 EINECS # 204-709-8 Index # 603-070-00-6	1-3	Xi;R36/38 R52/53	Aquatic Longterm 3 Eye Irrit. 2 Skin Irrit. 2 H315; H319; H412	Acute Tox. Dermal 5 Acute Tox. Oral 5 Aquatic Longterm 3 Eye Irrit. 2 Skin Irrit. 2 H303; H313; H315; H319; H412

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

Section 4 First Aid Measures

4.1	Description of first aid measu	Ires
	Inhalation	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
	Eye Contact	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.
	Skin Contact	In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If pain or irritation occur, obtain medical attention.
	Ingestion	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.
4.2	2 Most important symptoms and effects, both acute and delayed	
		See Section 11 Toxicological Information for more detailed health information.

See Section 11 Toxicological Information for more detailed health information. Causes mild skin irritation.

Section 4 First Aid Measures (Continued)

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

Section 5 Fire Fighting Measures

	Flammable Properties	Nonflammable aqueous solution.
5.1	Extinguishing Media	In case of fire use carbon dioxide (CO2), dry chemical, water spray or foam. For large fires use extinguishing media suitable for surrounding fire.
5.2	Special hazards arising from the substance or mixture	
Special Fire and Explosion Hazards		azards
		No special hazards determined.
	Hazardous Combustion Prod	ucts
		No combustion products posing significant hazards are expected from this product (an aqueous solution).
5.3	Advice for fire fighters	
	Protective Equipment	Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.
5.4	Additional information	No further relevant information available.

Section 6 Accidental Release Measures

6.1	6.1 Personal precautions, protective equipment and emergency procedures	
	Personal Precautions	Observe general safety guidelines for protection; avoid eye and skin contact. Wear protective gloves, protective clothing and eye/face protection.
6.2	Environmental Precautions	No special requirements.
6.3	3 Methods and material for containment and cleaning up	
	Spill and Leak Procedures	Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.

6.4 Reference to other sections Refer sections 8 and 13.

Section 7 Handling and Storage

- 7.1 Precautions for safe handling Use good laboratory procedures; avoid eye and skin contact.
- 7.2 Conditions for safe storage, including any incompatibilities

Keep away from incompatible material (see Section 10). To maintain efficacy, store according to the instructions in the product labeling.

7.3 Specific end uses No further relevant information available.

Section 8 Exposure Controls and Personal Protection

8.1	Control parameters	
	Exposure Limits	
	US OSHA	None established
	ACGIH	None established
	DFG MAK	None established
	Ireland	None established
	IOELVs	None established
	NIOSH	None established
	Japan	None established
8.2	Exposure controls	
	Engineering Controls	No special engineering controls are required. Use with good general ventilation.
	Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
	Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
	Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

Section 9 Physical and Chemical Properties

9.1	.1 Information on basic physical and chemical properties			
	Physical State	Liquid	Specific Gravity (Water=1.0)	1.0
	Color	Colorless	Solubility	
	Transparency	Clear	Water	Soluble
	Odor	Ammonia-like	Organic	Not determined
	рН	9.60 @25°C	Partition coefficient: n-octanol/water	Not determined
	Freezing Point	Not determined	Auto-ignition Temp.	Not applicable
	Boiling Point	100°C (212°F)	Decomposition Temperature	Not determined
	Flash Point	Not applicable	Percent Volatiles	Not applicable

Section 9 Physical and Chemical Properties (Continued)

	Evaporation Rate	Not determined	Vapor Pressure	Not determined
	Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
	Flammability Limits	Not applicable	Explosive Properties	Not applicable
	Vapor Density	Not determined	Oxidizing Properties	Not determined
	Odor Threshold	Not applicable		
9.2	Other Information	No further relevant information available.		

Section 10 Stability and Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal temperatures and pressures.
10.3	³ Possibility of hazardous reactions	
		No further relevant information available.
10.4	Conditions to Avoid	To maintain product performance keep away from strong acids, strong bases, strong oxidizers. Avoid exposure to heat and direct sunlight.
10.5	Incompatible materials	No further relevant information available.
10.6	.6 Hazardous Decomposition Products	
		No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

Section 11 Toxicological Information

11.1 Information on toxicological effects Toxicity Data for Hazardous Ingredients

	Not applicable
Primary Routes of Exposure	Eye contact, ingestion, inhalation, and skin contact.
Skin Corrosion/Irritation	Causes mild skin irritation.
Serious eye damage/eye irritation	No data available.
Respiratory/skin sensitization	No data available.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.
Germ cell mutagenicity	No data available
Reproductive Toxicity	No data available.

Section 11 Toxicological Information (Continued)

Specific target organ toxicity – single exposure		
	No data available.	
Specific target organ toxicity – repeated exposure		
	No data available.	
Aspiration hazard	No data available.	
Other Information	No further relevant information available.	

Section 12 Ecological Information

12.1	Ecotoxicity	
	Fresh Water Species	No information available.
	Microtox	No information available.
	Water Flea	No information available.
	Fresh Water Algae	No information available.
12.2	Persistence and degradability	No information available.
12.3	Bioaccumulation	No information available.
12.4	Mobility in soil	No information available.
12.5	Results of PBT and vPvB assessment	
		Not determined for the product. PBT: Not applicable, vPvB: Not applicable.
12.6	Other Adverse Effects	No further relevant information available.

Section 13 Disposal Considerations

13.1	Waste treatment methods	
	Product Waste Disposal	Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.
	Package disposal	Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.
13.2	Additional information	Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture US Federal and State Regulations

SARA 313 Hydrochloric Acid is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

CERCLA RG's, 40 CFR 302.4 Hydrochloric Acid is listed.

California Proposition 65 No ingredients listed.

Massachusetts MSL Hydrochloric Acid is listed.

New Jersey Dept. of Health RTK List

Hydrochloric Acid is listed.

Pennsylvania RTK Hydrochloric Acid is listed.

EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.

No ingredients listed.

According to EC Directives (1999/45/EC and 67/548 EEC)

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

Canada

WHMIS Classification:

D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin Irritation)

PIN Not applicable

Ingredients on Ingredient Disclosure List

None

Ingredients with unknown toxicological properties

None

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.

Section 16 Other Information

Reactivity with	ability: 0Codelealth: 20=NoneWater: 01=Slightontact: 12=Caution3=Severe
-----------------	---

Revision Changes

New document

Hazard Class, hazard statements and risk phrase description from section 3

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Xi - Irritant

Section 16 Other Information (Continued)

	R36/38 Irritating to eyes and skin. Acute Tox. Dermal 5 - Acute Toxicity Dermal, Category 5 Acute Tox. Oral 5 - Acute Toxicity Oral, Category 5 Eye Irrit. 2 - Eye Irritation Category 2 Aquatic Longterm 3 - Aquatic Hazard Long term, Category 3 Skin Irrit. 2 - Skin Irritation Category 2 H303 - May be harmful if swallowed H313 - May be harmful in contact with skin H315 - Causes skin irritation.
	H319 - Causes serious eye irritation.
Abbreviations and Assessme	H412 - Harmful to aquatic life with long lasting effects.
Abbreviations and Acronyms	ACGIH - American Conference of Governmental Industrial Hygienists ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road
	CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
	CLP - Classification, Labeling and Packaging
	DFGMAK - Republic Germany's maximum exposure limit
	GHS - Globally Harmonized System
	HCS - Hazard Communication Standard
	IARC - International Agency for Research on Cancer
	IATA - International Air Transport Association
	ICAO - International Civil Aviation Organization
	IMDG - International Maritime Dangerous Goods
	IOELVs - European Unions' Indicative Occupational Exposure Limit Values
	NIOSH - National Institute for Occupational Safety and Health
	NTP - National Toxicology Program
	OSHA - Occupational Safety and Health Administration
	PBT - Persistent bioaccumulative and toxic substances
	SARA - Superfund Amendments and Reauthorization Act
	TDG - Canadian Transportation Of Dangerous Goods Regulations.
	UN GHS - United Nations Globally Harmonized System
	US DOT - United States Department of Transportation
	WHMIS - Workplace Hazardous Material Information System
	vPvB - Very persistent and very bioaccumulative substances

Lumigen and Lumi-Phos are registered trademarks of Lumigen, Inc. The stylized logo is a trademark of Lumigen, Inc.

For further information, please contact your local Lumigen representative.

WHILE LUMIGEN BELIEVES THE INFORMATION CONTAINED HEREIN IS VALID AND ACCURATE, MAKES NO WARRANTY OR REPRESENTATION AS TO ITS VALIDITY, ACCURACY, OR CURRENCY. LUMIGEN SHALL NOT BE LIABLE OR OTHERWISE RESPONSIBLE IN ANY WAY FOR USE OF EITHER THIS INFORMATION OR MATERIALS TO WHICH IT APPLIES. DISPOSAL OF HAZARDOUS MATERIALS MAY BE SUBJECT TO LOCAL LAWS OR REGULATIONS.