

M S D S N o .

MATERIAL SAFETY DATA

D A T E :

PRODUCT	PRODUCT NAME:	LIGHT STICK Oxalate Component,Green
IDENTIFICATION	SYNONYMS:	LUMICA LIGHT Green Luminescer Component
	CHEMICAL FAMILY:	Mixture
	MOLECULAR FORMULA:	Mixture
	MOLECULAR WGT.:	Mixture

WARNING NO WARNING STATEMENT

OSHA REGULATED COMPONENTS	COMPONENT	CAS.No.	%	TWA/CEILING	REFERENCE
	Dibutyl phthalat	000084-74-2	86-99	5mg/M3	OSHA/ACGIH

NFPA HAZARD RATING	Fire 1 Health 0 0 Reactivity - Special	FIRE: Material that must be preheated before ignition can occur. HEALTH: Materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material. REACTIVITY: Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive water.
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HEALTH HAZARD INFORMATION EFFECTS OF OVEREXPOSURE: The acute oral (rat) and acute (dermal) rabbit LD50 values are both greater than 5g/kg. No skin or eye irritation was seen in evaluations with rabbits.

Toxicology information on regulated components of this product is as follows:
The oral (rat) and the dermal (rabbit) LD50 values for dibutyl phthalate are 8.0g/kg and 21.0g/kg, respectively.
The 2hour inhalation(rat)LC50 of the aerosol is 25.0mg/l.
Inhalation of dibutyl phthalate may cause nausea and upper respiratory tract irritation. Repeated has been associate with adverse reproductive effects in laboratory animals, including testicular atrophy and embryotoxicity.

FIRST AID: In case of skin contact, wash affected areas of skin with soap and water.
In case of eye contact, immediately irrigate with plenty of water for 15minutes.

EXPOSURE CONTROL METHODS	Engineering controls are not usually if good hygiene practices are followed. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. Avoid unnecessary skin contact. Impervious gloves are recommended to prevent prolonged skin contact. For operations where eye or face contact can occur, eye protection is recommended. Where exposures are below the Permissible Exposure Limit(PEL), no respiratory protection is required. Where exposures exceed the
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PEL, use respirator approved by NIOSH for the material and level of exposure. See "GUIDE TO INDUSTRIAL RESPIRATORY PROTECTION"(NIOSH).

FIRE AND EXPLOSION HAZARD INFORMATION	FLASH POINT:	>200F (>93.3C)
	METHOD:	Closed Cup
	FLAMMABLE LIMITS (%BY VOL):	Not Applicable
	AUTOIGNITION TEMP:	Not Applicable
	DECOMPOSITION TEMP:	>200F (>93.3C)
	FIRE FIGHTING:	Use water spray, carbon dioxide or dry chemical to extinguish fires. Use water to keep containers cool. Wear self-contained, positive pressure breathing apparatus.

REACTIVITY DAT STABILITY:	Stable
CONDITIONS TO AVOID:	None known
POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	None known
INCOMPATIBLE MATERIALS:	Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition or combustion may produce carbon monoxide and/or carbon dioxide.

PHYSICAL PROPERTIES	APPEARANCE AND ODER:	Green transparent liquid
	BOILING POINT:	644 f(340 C)
	MELTING POINT:	Not Applicable
	VAPOR PRESSURE:	Not Applicable
	SPECIFIC GRAVITY:	1.05
	VAPOR DENSITY:	Not Applicable
	%VOLATILE(BY VOL):	Negligible
	OCTANOL/H2O	
	PARTITION COEF:	Not Applicable
	pH:	Neutral
	SATURATION IN AIR (BY VOL):	Not Applicable
	EVAPORATION RATE:	Not Applicable
	SOLUBILITY IN WATER:	Insoluble

SPILL OR LEAK PROCEDURES	STEPS TO BE TAKEN IN CASE MATERIALS RELEASED OR SPILLED:	Cover spills with some inert absorbent; sweep up and place in a waste disposal container. Flush area with water.
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WASTE DISPOSAL Disposal must be made in accordance with applicable governmental regulations.

SPECIAL PRECAUTIONS	HANDLING AND STORAGE/OTHER:	None
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D.O.T.SHIPPING PROPER SHIPPING HAZARDOUS SUBSTANCE,
 INFORMATION NAME: LIQUID,N.O.S.
 HAZARD CLASS: ORM-E
 UN/NA: NA9188
 D.O.T.HAZARDOUS (Reportable Quantity of product)
 SUBSTANCES: DIBUTYL PHTHALATE (10.1 lbs-99%)
 D.O.T.LABEL REQUIRED: None

TSCA This product is manufactured in compliance with all provisions of the
 INFORMATION Toxic Substances Control Act,15 U.S.C.
 It contains material(s) which is(are) produced under a low volume
 exemption[40CFR 723.50] and is restricted in use to chemical light applications.

ENVIRONMENTAL The following components are defined as toxic chemicals subject to reporting requirements of
 INFORMATION Section 313 of Title 111 and of 40 CFR 372 or other EPA regulations.

COMPONENT	CAS.NO.	SARA TITLE 111			RCRA	TSCA 12B
		TPQ(1bs.)	RQ(1bs.)	S313		
Dibutyl phthalate	000084-74-2	86- NONE	10	YES	U069	YES

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA
 Not Applicable under SARA TITLE 111