Safety Data Sheet

according to Regulation (EU) No. 2015/830

Date of issue: Revision date: 03/07/2015 Supersedes: 06/10/2010 Version: 5.0

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

1.1. Product identifier

Product form : Article
Product name : LIGHT STICK

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 : Lighting and markings

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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nrizzo@cyalume.com - www.cyalume.eu

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

Sticks are hermetically closed articles which do not present any particular risk, as long as they are used according to the manufacturer's recommendations. Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with. Not classified as flammable by EC criteria.

2.2. Label elements

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

This product is an article according to REACH regulation, not subjected to classification and labeling.

2.3. Other hazards

Other hazards not contributing to the

classification

: None, to our knowledge.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Description: : Plastic article containing an oxalate solution in a glass ampoule immersed in an activator

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
butyl benzoate	(CAS No) 136-60-7 (EC no) 205-252-7	60 - 80	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
hydrogen peroxide solution %	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9	< 5	Ox. Liq. 1, H271 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Skin Corr. 1A. H314

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Specific concentration limits:

Name	Product identifier	Specific concentration limits
hydrogen peroxide solution %	(CAS No) 7722-84-1 (EC no) 231-765-0 (EC index no) 008-003-00-9	(5 =< C < 8) Eye Irrit. 2, H319 (8 =< C < 50) Eye Dam. 1, H318 (C >= 35) STOT SE 3, H335 (35 =< C < 50) Skin Irrit. 2, H315 (50 =< C < 70) Skin Corr. 1B, H314 (50 =< C < 70) Ox. Liq. 2, H272 (C >= 70) Skin Corr. 1A, H314 (C >= 70) Ox. Liq. 1, H271

Full text of H-statements: see section 16

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : Sticks are hermetically closed articles which do not present any particular risk, as long as they

are used according to the manufacturer's recommendations.

First-aid measures after inhalation : Not specifically applicable

In the event of contact with the liquid: Wash with soapy water. If skin irritation or rash occurs: First-aid measures after skin contact

Get medical advice/attention.

In the event of contact with the liquid: Immediately rinse with water for a prolonged period while First-aid measures after eye contact

holding the eyelids wide open. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Not specifically applicable.

4.2. Most important symptoms and effects, both acute and delayed

: Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries

Indication of any immediate medical attention and special treatment needed

No immediate medical care or specific treatment identified.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2). Dry powder. Foam. Water spray.

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of : If exposed to hight temperatures, which may result of a wrong utilisation or of the environment, leaks of liquid may occur potentially releasing decomposition products of the liquid contained in

the article.

5.3. Advice for firefighters

Firefighting instructions : Contain the extinguishing fluids by bunding. Use water spray or fog for cooling exposed

containers.

Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : In case of liquid leak : Avoid contact with skin and eyes.

6.1.2. For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Do not allow product to spread into the environment. Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

: Recover mechanically the product. For containment

Methods for cleaning up : Wash contaminated area with large amounts of water. Other information : Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practice. Comply with

instructions for use (refer to technical sheet).

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Hygiene measures : Do not eat, drink or smoke during work. Wash hands and other exposed areas with mild soap

and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area. Keep away from heat. Keep away from sources of

ignition.

Incompatible products : Strong oxidizing agents. Reducing agent. Acids. Bases.

Special rules on packaging : Store in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

hydrogen peroxide solution % (7722-84-1)		
United Kingdom	Local name	Hydrogen peroxide
United Kingdom	WEL TWA (mg/m³)	1,4 mg/m³
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m³)	2,8 mg/m³
United Kingdom	WEL STEL (ppm)	2 ppm

8.2. Exposure controls

Hand protection : Not required for normal conditions of use
Eye protection : Not required for normal conditions of use
Skin and body protection : Not required for normal conditions of use
Respiratory protection : Not required for normal conditions of use

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Colour : Variable. : odourless. Odour Odour threshold : Not applicable рΗ : Not applicable Relative evaporation rate (butyl acetate=1) : Not applicable : No data available Melting point Freezing point : Not applicable : Not applicable Boiling point Flash point : Not applicable : Not applicable Auto-ignition temperature Decomposition temperature : No data available

Flammability (solid, gas) : The product is not flammable

Vapour pressure : Not applicable : Not applicable Relative vapour density at 20 °C Relative density : No data available : Water: Insoluble Solubility Not applicable Log Pow Viscosity, kinematic : Not applicable Viscosity, dynamic : Not applicable : Not explosive. Explosive properties

Oxidising properties : Non oxidizing material according to EC criteria.

Explosive limits : Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

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10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

Heat. Sparks. Open flame. Ignition sources.

10.5. Incompatible materials

Reducing agents. Strong oxidizing agents. Acids. Bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

hydrogen peroxide solution % (7722-84-1)	
LD50 oral rat	444,5 mg/kg (100%)
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	> 0,17 mg/l/4h (maximum attainable concentration)
butyl benzoate (136-60-7)	
LD50 oral rat	735 mg/kg (Rat)
LD50 dermal rabbit	4000 mg/kg (Rabbit)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
	pH: Not applicable
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
	pH: Not applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Not applicable)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.

hydrogen peroxide solution % (7722-84-1)		
LC50 fish	16,4 mg/l/96h (Pimephales promelas)	
EC50 Daphnia	2,4 mg/l/48h (Daphnia magna)	
ErC50 (algae)	1,38 mg/l/72h (Skeletonema costatum)	

12.2. Persistence and degradability

nydrogen peroxide solution % (7722-84-1)		
Persistence and degradability	Readily biodegradable.	
butyl benzoate (136-60-7)		
Persistence and degradability	Biodegradability in water: no data available.	
12.3. Bioaccumulative potential		
LIGHT STICK		
Log Pow	Not applicable	
hydrogen peroxide solution % (7722-84-1)		
Log Pow	-1,57 (20 °C)	
Bioaccumulative potential	Not potentially bioaccumulable.	

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Bioaccumulative potential No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations.

Additional information : Empty the packaging completely prior to disposal. Recycle or dispose of in compliance with

current legislation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

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) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

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

Special transport precautions : No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page). This sheet has been revised completely (changes were not marked).

Data sources : SDS of suppliers. ECHA - European Chemical Agency.

Other information : This product is an article according to REACH regulation, not subjected to classification and

labeling. This SDS was carried out deliberately in order to provide our customers with relevant

information security.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H271	May cause fire or explosion; strong oxidiser
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

SDS EU (REACH Annex II)

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

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