

Safety Data Sheet

BEST BUBBLES FLUO



Safety Data Sheet dated 29/6/2022, version 4.0

This version cancels and substitutes any previous version

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

1.1. Product identifier

Mixture identification:

Trade name: BEST BUBBLES FLUO

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

fluorescent micro leak detector

1.3. Details of the supplier of the safety data sheet

Company:

ERRECOM SPA

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it


1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

 Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P280 Wear eye protection.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

None

Contains

1,2-benzisothiazolin-3-one: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

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No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 5% - < 7%	glycerol	CAS: 56-81-5 EC: 200-289-5 REACH No.: 01-21194719 87-18-XXXX	Substance with a Union workplace exposure limit.
>= 1% - < 2.5%	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	CAS: 308062-28-4 EC: 931-292-6 REACH No.: 01-21194900 61-47-XXXX	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411
>= 0.01% - < 0.05%	1,2-benzisothiazolin-3-one	Index number: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9 REACH No.: 01-21207615 40-60-XXXX	3.4.2/1A Skin Sens. 1A H317 4.1/A1 Aquatic Acute 1 H400 3.1/4/Oral Acute Tox. 4 H302 Specific Concentration Limits: C >= 0,05%: Skin Sens. 1,1A,1B H317
>= 0.0001% - < 0.01%	sodium hydroxide	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH No.: 01-21194578 92-27-XXXX	2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.
- 4.2. Most important symptoms and effects, both acute and delayed
None
- 4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
Water.
Carbon dioxide (CO₂).
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 5.3. Advice for firefighters
Use suitable breathing apparatus.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
For non emergency personnel:
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
For emergency responders:
Wear personal protection equipment.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

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7.2. Conditions for safe storage, including any incompatibilities

Store away from direct sunlight.

Keep in a well ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

glycerol - CAS: 56-81-5

EU - TWA: 10 mg/m³

sodium hydroxide - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m³ - Notes: URT, eye, and skin irr

DNEL Exposure Limit Values

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Worker Professional: 11 mg/kg - Consumer: 5.5 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Worker Professional: 6.2 mg/m³ - Consumer: 1.53 mg/m³ - Exposure: Human Inhalation

- Frequency: Long Term, systemic effects

Consumer: 0.44 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

1,2-benzisothiazolin-3-one - CAS: 2634-33-5

Worker Professional: 1 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation -

Frequency: Long Term, local effects

sodium hydroxide - CAS: 1310-73-2

Worker Professional: 1 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation -

Frequency: Long Term, local effects

PNEC Exposure Limit Values

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

Target: Fresh Water - Value: 0.034 mg/L

Target: Marine water - Value: 0.003 mg/L

Target: Freshwater sediments - Value: 5.24 mg/kg

Target: Marine water sediments - Value: 0.524 mg/kg

Target: Soil (agricultural) - Value: 1.02 mg/kg

Target: Aquatic, periodic release - Value: 0.0335 mg/L

Target: Microorganisms in sewage treatments - Value: 24 mg/kg

8.2. Exposure controls

Eye protection:

Tightly fitting safety goggles.

Protection for skin:

Not needed for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

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None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Green	--	--
Odour:	characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	8	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	total	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	1.02 g/mL (+20°C/+68°F)	ASTM-D4052	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

- a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
- b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met
- c) serious eye damage/irritation
The product is classified: Eye Irrit. 2 H319
- d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
- f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
- g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
- h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
- j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

glycerol - CAS: 56-81-5

- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 12600 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 18700 mg/kg
- Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4

- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 1064 mg/kg
Test: NOAEL - Route: Oral - Species: Rat 88 mg/kg/day
Test: LOAEL - Route: Skin - Species: Mouse 0.045 mg/cm²
 - b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin Positive
 - c) serious eye damage/irritation:
Test: Eye Irritant Positive
 - d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin Negative
- 1,2-benzisothiazolin-3-one - CAS: 2634-33-5
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 670 mg/kg - Notes: OECD TG 401
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: OECD TG 402
 - b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit Positive - Duration: 4h - Notes:
US-EPA

- c) serious eye damage/irritation:
Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive - Notes: OECD TG 405
 - d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Human beings Positive
 - e) germ cell mutagenicity:
Test: Mutagenesis - Route: In vitro - Species: Salmonella Typhimurium Negative - Notes: OECD TG 471
Test: chromosomal aberration test - Route: In vitro - Species: Human lymphocytes Negative - Notes: OECD TG 473; with Metabolic activation
Test: Mutagenesis - Route: In vitro - Species: murine lymphoma cells Negative - Notes: OECD TG 476
Test: Micronucleus test - Route: In vivo - Species: Mouse Negative - Notes: OECD TG 474; Cell type: Bone marrow; Oral; Doses: 1200 mg/kg
- sodium hydroxide - CAS: 1310-73-2
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive
 - c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Positive - Source: OECD TG 405
 - d) respiratory or skin sensitisation:
Test: Respiratory Sensitization - Route: In vitro Negative - Notes: ECHA
Test: Skin Sensitization - Route: In vitro Negative - Notes: ECHA
 - e) germ cell mutagenicity:
Test: Ames test - Species: Salmonella Typhimurium Negative

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Not classified for environmental hazards

Based on available data, the classification criteria are not met

glycerol

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 5000 mg/L - Duration h: 24 - Notes: Species:

Carassius auratus

Endpoint: EC50 - Species: Daphnia > 10000 mg/L - Duration h: 24

Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2.67 mg/L

Endpoint: EC50 - Species: Daphnia 3.1 mg/L

Endpoint: IC50 - Species: Algae 0.143 mg/L

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae 0.067 mg/L - Duration h: 72

1,2-benzisothiazolin-3-one

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2.18 mg/L - Duration h: 96 - Notes: Species:

Oncorhynchus mykiss; Method: OECD TG 203

Endpoint: EC50 - Species: Daphnia 2.94 mg/L - Duration h: 48 - Notes: Species:

Daphnia magna; Method: OECD TG 202

Endpoint: ErC50 - Species: Algae 0.11 mg/L - Duration h: 72 - Notes: Species:

Pseudokirchneriella subcapitata; Method: OECD TG 201

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- Endpoint: ErC50 - Species: Algae 0.15 mg/L - Duration h: 72 - Notes: Species: Selenastrum capricornutum; Test type: Growth inhibitor
- b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish 0.3 mg/L - Duration h: 672 - Notes: Species: Oncorhynchus mykiss; Test type: Growth inhibitor
Endpoint: NOEC - Species: Daphnia 1.7 mg/L - Duration h: 504 - Notes: Species: Daphnia magna; Method: OECD TG 211
- d) Terrestrial toxicity:
Endpoint: LC50 - Species: earthworms > 410.6 mg/kg - Duration h: 336 - Notes: Species: Eisenia fetida; Method: OECD TG 207
Endpoint: NOEC - Species: Microflora of the soil 263.7 mg/kg - Duration h: 672 - Notes: OECD TG 216
- sodium hydroxide
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish 189 mg/L - Duration h: 48
Endpoint: EC0 - Species: Daphnia = 40.4 mg/L - Duration h: 48 - Notes: Species: Ceriodaphnia dubia
Endpoint: LC50 - Species: Fish 125 mg/L - Duration h: 96 - Notes: Species: Gambusia affinis
Endpoint: LC50 - Species: Fish 45.4 mg/L - Duration h: 96 - Notes: Species: Oncorhynchus mykiss
- c) Bacteria toxicity:
Endpoint: EC50 - Species: Bacteria 22 mg/L - Duration h: 0.25 - Notes: Species: Photobacterium phosphoreum
- 12.2. Persistence and degradability
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides - CAS: 308062-28-4
Biodegradability: Readily biodegradable
1,2-benzisothiazolin-3-one - CAS: 2634-33-5
Biodegradability: Readily biodegradable - Duration: 28 d - %: 70
- 12.3. Bioaccumulative potential
1,2-benzisothiazolin-3-one - CAS: 2634-33-5
Bioaccumulation: Not bioaccumulative
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.

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- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
 - ADR-Environmental Pollutant: No
 - IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) n. 2020/878
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 - Regulation (EU) n. 2017/776 (ATP 10 CLP)
 - Regulation (EU) n. 2018/669 (ATP 11 CLP)
 - Regulation (EU) n. 2018/1480 (ATP 13 CLP)
 - Regulation (EU) n. 2019/521 (ATP 12 CLP)
 - Regulation (EU) n. 2020/217 (ATP 14 CLP)
 - Regulation (EU) n. 2020/1182 (ATP 15 CLP)
 - Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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SECTION 16: Other information

Full text of phrases referred to in Section 3:

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- H317 May cause an allergic skin reaction.
- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

- ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
- SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- ATE: Acute Toxicity Estimate
- ATEmix: Acute toxicity Estimate (Mixtures)
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- CLP: Classification, Labeling, Packaging.
- DNEL: Derived No Effect Level.

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EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.