

Safety Data Sheet

BRILLIANT ENGINE



Safety Data Sheet dated 21/8/2023, version 7.0

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: BRILLIANT ENGINE

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

Recommended use:

MULTI-PURPOSE UV DYE FOR ENGINE PARTS

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)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Contains

tris(branched-alkyl) borate: 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:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
>= 1% - < 2.5%	reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	Index 607-530-00-7 number: CAS: 125643-61-0 EC: 406-040-9 REACH No.: 01-00000155 51-76-XXXX	4.1/C4 Aquatic Chronic 4 H413
>= 0.5% - < 1%	tris(branched-alkyl) borate	REACH No.: 01-21200795 16-48-XXXX	 3.4.2/1B Skin Sens. 1B H317 Specific Concentration Limits: C >= 72%: Skin Sens. 1B H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

For symptoms and effects caused by substances, see section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Alcohol resistant foam fire extinguisher.

Extinguishing media which must not be used for safety reasons:

High pressure water jet.

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.

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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.

Advice on general occupational hygiene:

Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

See subsection 10.5

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

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use.

Protection for skin:

Not needed for normal use.

Protection for hands:

work gloves resistant to penetration (ref. standard EN 374).

Suitable material:

NBR (nitrile rubber).

Material thickness: minimum 0.12 mm.

Break through time : > 480 min

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

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Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Amber	--	--
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:	N.A.	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	insoluble	--	--
Solubility in oil:	total	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	0.85 g/mL (+20°C / +68°F)	ASTM-D4052	--
Relative vapour density:	N.A.	--	--

Particle characteristics:

Particle size:	N.A.	--	--
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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

No data available

10.4. Conditions to avoid

Avoid extreme heat and high-energy ignition sources.

10.5. Incompatible materials

strong acids and bases.

Strong oxidizing agents.

10.6. Hazardous decomposition products

When heated or in the event of fire may release gases and vapors potentially dangerous to health.

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

Not classified

Based on available data, the classification criteria are not met

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

Adverse health effects

Exposure to oil vapors in concentrations higher than the Occupational Exposure Limit may cause respiratory irritation.

Toxicological information of the main substances found in the product:

N.A.

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

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

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- N.A.
- 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.
- 14.3. Transport hazard class(es)
 - N.A.
- 14.4. Packing group
 - N.A.
- 14.5. Environmental hazards
 - N.A.
- 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)

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Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 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:
No restriction.
Restrictions related to the substances contained:
No restriction.
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.

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H413 May cause long lasting harmful effects to aquatic life.
H317 May cause an allergic skin reaction.

Hazard class and hazard category	Code	Description
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Aquatic Chronic 4	4.1/C4	Chronic (long term) aquatic hazard, category 4

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 9: Physical and chemical properties
SECTION 15: Regulatory information
SECTION 16: Other information

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.

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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.
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.