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SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: WATERBORNE DYE

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

1.3. Details of the supplier of the safety data sheet

Registered company name: BLANCHON.

Address: 50, 8ème rue.69800.SAINT PRIEST.FRANCE. Telephone: 00.33.4.72.89.06.09. Fax: 00.33.4.72.89.06.02.

fds@blanchon.com http://www.blanchon.com/

1.4. Emergency telephone number: 00.33.1.45.42.59.59.

Association/Organisation: Orfila (INRS).

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

May produce an allergic reaction (EUH208).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling:

Contains C.I. REACTIVE BLACK 31. May produce an allergic reaction. **EUH208** Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.

EUH208 EUH208 Contains MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1). May produce an allergic reaction.

EUH210 Safety data sheet available on request.

Precautionary statements - General:

P102 Keep out of reach of children.

Precautionary statements - Prevention:

P271 Use only outdoors or in a well-ventilated area.

Precautionary statements - Disposal:

P501 Dispose of contents / container to an approved landfill.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

| Identification | (EC) 1272/2008 | Note | % |
|-------------------------|----------------|------|-------------------|
| CAS: 13463-67-7 | | [1] | $0 \le x \% < 10$ |
| EC: 236-675-5 | | | |
| REACH: 01-2119489379-17 | | | |
| | | | |
| TITANIUM DIOXIDE | | | |

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| | T | |
|-------------------------------------|-------------------------|------------------|
| CAS: 85585-91-7 | GHS07 | $0 \le x \% < 1$ |
| EC: 287-793-9 | Wng | |
| | Skin Sens. 1B, H317 | |
| C.I. REACTIVE BLACK 31 | | |
| INDEX: 613-088-00-6 | GHS05, GHS07, GHS09 | 0 <= x % < 1 |
| CAS: 2634-33-5 | Dgr | |
| EC: 220-120-9 | Acute Tox. 4, H302 | |
| | Skin Irrit. 2, H315 | |
| 1,2-BENZISOTHIAZOL-3(2H)-ONE | Eye Dam. 1, H318 | |
| | Skin Sens. 1, H317 | |
| | Aquatic Acute 1, H400 | |
| | M Acute = 1 | |
| CAS: 55965-84-9 | GHS06, GHS05, GHS09 | 0 <= x % < 1 |
| | Dgr | |
| MIXTURE OF: | Acute Tox. 3, H301 | |
| 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3- | Acute Tox. 3, H311 | |
| ONE AND | Skin Corr. 1B, H314 | |
| 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) | Skin Sens. 1, H317 | |
| | Acute Tox. 3, H331 | |
| | Aquatic Acute 1, H400 | |
| | M Acute = 10 | |
| | Aquatic Chronic 1, H410 | |
| | M Chronic = 10 | |

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of an allergic reaction, seek medical attention.

In the event of splashes or contact with skin:

In the event of an allergic reaction, seek medical attention.

In the event of swallowing:

Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)

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- carbon dioxide (CO2)

5.3. Advice for firefighters

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

| CAS | TWA: | STEL: | Ceiling: | Definition: | Criteria: |
|------------|----------|-------|----------|-------------|-----------|
| 13463-67-7 | 10 mg/m3 | | | A4 | |

- France (INRS - ED984:2012):

| CAS | VME-ppm: | VME-mg/m3: | VLE-ppm: | VLE-mg/m3: | Notes: | TMP No: |
|------------|----------|------------|----------|------------|--------|---------|
| 13463-67-7 | - | 10 | - | - | - | - |

- UK / WEL (Workplace exposure limits, EH40/2005, 2007):

| (| CAS | TWA: | STEL: | Ceiling: | Definition: | Criteria: |
|---|-----------|----------|-------|----------|-------------|-----------|
| 1 | 3463-67-7 | 10 mg/m3 | | | | |

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

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Final use: Workers.

Exposure method: Inhalation.

Potential health effects: Long term local effects.

DNEL: 10 ppm

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.
DNEL: 700 mg/kg body weight/day

Predicted no effect concentration (PNEC):

TITANIUM DIOXIDE (CAS: 13463-67-7)

Environmental compartment: Air.

PNEC: 1667 mg/kg

Environmental compartment: Soil.

PNEC: 100 mg/kg

Environmental compartment: Fresh water. PNEC: 0.127 mg/l

Environmental compartment: Sea water. PNEC: 1 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.61 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 1000 mg/kg

Environmental compartment: Marine sediment. PNEC: 100 mg/kg

FNEC. 100 lilg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 100 mg/l

8.2. Exposure controls

Appropriate engineering controls

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Recommended properties:

- Impervious gloves in accordance with standard EN374

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- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state:

Fluid liquid.

Important health, safety and environmental information

Not stated. pH:

> Neutral 100 °C.

Boiling point/boiling range: Flash point interval: Not relevant.

Vapour pressure (50°C): Below 110 kPa (1.10 bar).

Density: > 1 Water solubility: Soluble.

 $v < 7 \text{ mm}2/s (40^{\circ}\text{C})$ Viscosity: Not specified. Melting point/melting range: Not specified. Self-ignition temperature: Decomposition point/decomposition range: Not specified.

9.2. Other information

V.O.C. : <= 60 g/l.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

Acute toxicity:

MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) (CAS: 55965-84-9)

LD50 = 1096 mg/kgOral route:

Species: Rat

TITANIUM DIOXIDE (CAS: 13463-67-7)

Oral route: LD50 > 5000 mg/kg

Species: Rat

OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Dermal route: LD50 > 5000 mg/kg

Species: Rabbit

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Inhalation route (Dusts/mist): LC50 > 6.82 mg/l

Species: Rat

Skin corrosion/skin irritation:

TITANIUM DIOXIDE (CAS: 13463-67-7)

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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Serious damage to eyes/eye irritation:

TITANIUM DIOXIDE (CAS: 13463-67-7)

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitisation:

TITANIUM DIOXIDE (CAS: 13463-67-7)

OECD Guideline 406 (Skin Sensitisation)

Specific target organ systemic toxicity - repeated exposure :

TITANIUM DIOXIDE (CAS: 13463-67-7)

Oral route: C = 3500 mg/kg bodyweight/day

Species: Rat

Duration of exposure: 90 days

Inhalation route: C = 10 mg/litre/6h/day

Species: Rat

Duration of exposure: 90 days

11.1.2. Mixture

Respiratory or skin sensitisation:

Contains at least one sensitising substance. May cause an allergic reaction.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) (CAS: 55965-84-9)

LC50 = 0.20 mg/lFish toxicity:

Factor M = 1

Duration of exposure: 96 h

EC50 = 0.16 mg/lCrustacean toxicity:

Factor M = 1

Species: Daphnia magna Duration of exposure: 48 h

ECr50 = 0.018 mg/lAlgae toxicity:

Factor M = 10

Duration of exposure: 72 h

TITANIUM DIOXIDE (CAS: 13463-67-7)

Fish toxicity: LC50 > 100 mg/l

Species: Oncorhynchus mykiss Duration of exposure: 96 h

EC50 > 100 mg/lCrustacean toxicity:

Species: Daphnia magna Duration of exposure: 48 h

ECr50 = 16 mg/lAlgae toxicity:

Species: Pseudokirchnerella subcapitata

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12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) (CAS: 55965-84-9)

Duration of exposure: 72 h

Biodegradability:

no degradability data is available, the substance is considered as not degrading

quickly.

TITANIUM DIOXIDE (CAS: 13463-67-7)

Biodegradability:

no degradability data is available, the substance is considered as not degrading

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

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SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704)

NFPA 704, Labelling: Health=0 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

| H301 | Toxic if swallowed. |
|------|----------------------------|
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin |

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.H318 Causes serious eye damage.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods. IATA : International Air Transport Association. ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.