



# SAFETY DATA SHEET

DN WS FLASH BRILLIANT WHITE

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

### 1.1. Product identifier

**Product name** : DN WS FLASH BRILLIANT WHITE

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

**Product use** : Waterborne coating for exterior use.

### 1.3. Details of the supplier of the safety data sheet

Registered Office: Akzo Nobel India Ltd.  
Geetanjali Apartment,  
1st Floor, 8B Middleton Street, Kolkata -  
700071

Head Office:  
Akzo Nobel India Limited  
9th Floor, Magnum Towers  
Golf Course Ext. Rd.  
Sector 58, Gurugram 122011  
Haryana, India.

**Telephone number** : Customer Care (Toll Free) : 1800 3000 4455

**e-mail address of person responsible for this SDS** : [customercare.india@akzonobel.com](mailto:customercare.india@akzonobel.com)

### 1.4 Emergency telephone number

**Version** : 2.02

**Date of previous issue** : 31-8-2020

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Product definition** : Mixture**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Skin Sens. 1, H317

Aquatic Acute 1, H400

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

**Ingredients of unknown toxicity** : 0%**Ingredients of unknown ecotoxicity** : 0%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements****Hazard pictograms** :**Signal word** : Warning
**Hazard statements** : H317 - May cause an allergic skin reaction.  
 H400 - Very toxic to aquatic life.  
 H411 - Toxic to aquatic life with long lasting effects.
**Precautionary statements**
**General** : P102 - Keep out of reach of children.  
 P101 - If medical advice is needed, have product container or label at hand.
**Prevention** : P262 - Do not get in eyes, on skin, or on clothing.**Response** : P312 - Call a POISON CENTER or doctor/physician if you feel unwell.**Storage** : Not applicable.**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national or international regulations.
**Hazardous ingredients** : methylisothiazolinone  
 C(M)IT/MIT(3:1)  
 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.
**Special packaging requirements**
**Containers to be fitted with child-resistant fastenings** : Not applicable.
**Tactile warning of danger** : Not applicable.**2.3 Other hazards****Other hazards which do not result in classification** : None known.

## DN WS FLASH BRILLIANT WHITE

## SECTION 3: Composition/information on ingredients

## 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
diuron (ISO)	EC: 206-354-4 CAS: 330-54-1 Index: 006-015-00-9	<1	Acute Tox. 4, H302 Carc. 2, H351 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
ethanediol	EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	<1	Acute Tox. 4, H302	[1] [2]
pyrithione zinc	EC: 236-671-3 CAS: 13463-41-7	≤0,3	Acute Tox. 3, H301 Acute Tox. 3, H331 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=1)	[1]
2-aminoethanol	EC: 205-483-3 CAS: 141-43-5	≤0,1	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412	[1] [2]
methylothiazolinone	CAS: 2682-20-4 Index: self classification	<0,01	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	[1]
C(M)IT/MIT(3:1)	REACH #: 01-2120764691-48 CAS: 55965-84-9 Index: 613-167-00-5	<0,0015	EUH071 Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
ethyl acrylate	EC: 205-438-8 CAS: 140-88-5 Index: 607-032-00-X	<0,1	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

**DN WS FLASH BRILLIANT WHITE****SECTION 3: Composition/information on ingredients**

- [1] Substance classified with a health or environmental hazard  
 [2] Substance with a workplace exposure limit  
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII  
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII  
 [5] Substance of equivalent concern  
 [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains methylisothiazolinone, C(M)IT/MIT(3:1). May produce an allergic reaction.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

<b>DN WS FLASH BRILLIANT WHITE</b>
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<b>SECTION 5: Firefighting measures</b>
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**5.1 Extinguishing media**

**Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.

**Unsuitable extinguishing media** : Do not use water jet.

**5.2 Special hazards arising from the substance or mixture**

**Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

**Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

**5.3 Advice for firefighters**

**Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

**Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

<b>SECTION 6: Accidental release measures</b>
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**6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions**

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**6.3 Methods and material for containment and cleaning up**

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

**6.4 Reference to other sections**

: See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

<b>SECTION 7: Handling and storage</b>
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The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

: Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is

## SECTION 7: Handling and storage

handled, stored and processed.  
 Put on appropriate personal protective equipment (see Section 8).  
 Never use pressure to empty. Container is not a pressure vessel.  
 Always keep in containers made from the same material as the original one.  
 Comply with the health and safety at work laws.  
 Do not allow to enter drains or watercourses.

### Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
ethanediol	<b>EU OEL (Europe, 2/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 20 ppm 8 hours. TWA: 52 mg/m <sup>3</sup> 8 hours. STEL: 40 ppm 15 minutes. STEL: 104 mg/m <sup>3</sup> 15 minutes.
2-aminoethanol	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 2,5 mg/m <sup>3</sup> 8 hours. TWA: 1 ppm 8 hours. STEL: 7,6 mg/m <sup>3</sup> 15 minutes. STEL: 3 ppm 15 minutes.
ethyl acrylate	<b>EU OEL (Europe, 2/2017). Notes: list of indicative occupational exposure limit values</b> TWA: 21 mg/m <sup>3</sup> 8 hours. TWA: 5 ppm 8 hours. STEL: 42 mg/m <sup>3</sup> 15 minutes. STEL: 10 ppm 15 minutes.

**SECTION 8: Exposure controls/personal protection**

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

**8.2 Exposure controls**

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Use safety eyewear designed to protect against splash of liquids.

**Skin protection****Hand protection****Gloves**

: When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time >480 minutes according to EN374) is recommended. Recommended gloves: Viton ® or Nitrile, thickness  $\geq 0.38$  mm. When only brief contact is expected, a glove with protection class of 2 or higher (breakthrough time >30 minutes according to EN374) is recommended. Recommended gloves: Nitrile, thickness  $\geq 0.12$  mm. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

**Body protection** : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**OLD LEAD-BASED PAINTS:**

When surfaces are to be prepared for painting, account should be taken of the age of the property and the possibility that lead-pigmented paint might be present. There is a possibility that ingestion or inhalation of scrapings or dust arising from the preparation work could cause health effects. As a working rule you should assume that this will be the case if the age of the property is pre 1960.



## SECTION 8: Exposure controls/personal protection

Where possible wet sanding or chemical stripping methods should be used with surfaces of this type to avoid the creation of dust. When dry sanding cannot be avoided, and effective local exhaust ventilation is not available, it is recommended that a dust respirator is worn, that is approved for use with lead dusts, and its type selected on the basis of the COSHH assessment, taking into account the Workplace Exposure Limit for lead in air. Furthermore, steps should be taken to ensure containment of the dusts created, and that all practicable measures are taken to clean up thoroughly all deposits of dusts in and around the affected area.

Respiratory protection in case of dust or spray mist formation. (particle filter EN143 type P2) Respiratory protection in case of vapour formation. (half mask with combination filter A2-P2 til concentrations of 0,5 Vol%.)

The current Control of Lead at Work Regulations approved code of practice should be consulted for advice on protective clothing and personal hygiene precautions. Care should also be taken to exclude visitors, members of the household and especially children from the affected area, during the actual work and the subsequent clean up operations. All scrapings, dust, etc. should be disposed of by the professional painting contractor as Hazardous Waste.

Extra precautions will also need to be taken when burning off old lead-based paints because fumes containing lead will be produced. It is recommended that a respirator, approved for use with particulate fumes of lead is selected on the basis of the COSHH assessment, taking into account the Workplace Exposure Limit for lead in air. Similar precautions to those given above about sanding should be taken with reference to protective clothing, disposal of scrapings and dusts, and exclusion of other personnel and especially children from the building during actual work and the subsequent clean up operations.

Avoid the inhalation of dust. Wear suitable face mask if dry sanding. Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Various: See label.
<b>Odour</b>	: Not available.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: 8,5
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: 100°C
<b>Flash point</b>	: Not applicable.
<b>Evaporation rate</b>	: Not available.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 1,413
<b>Solubility(ies)</b>	: Easily soluble in the following materials: cold water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.



**DN WS FLASH BRILLIANT WHITE****SECTION 9: Physical and chemical properties**

- Decomposition temperature** : Not available.  
**Viscosity** : Kinematic (room temperature): 5,66 cm<sup>2</sup>/s  
**Explosive properties** : Not available.  
**Oxidising properties** : Not available.  
**9.2. Other information**  
**Solubility in water** : Not available.

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.  
**10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).  
**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
**10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.  
**10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.  
**10.6 Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains methylisothiazolinone, C(M)IT/MIT(3:1). May produce an allergic reaction.

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
ethanediol	LD50 Intraperitoneal	Rat	5010 mg/kg	-
	LD50 Intravenous	Rat	3260 mg/kg	-
	LD50 Oral	Rat	4700 mg/kg	-
	LD50 Route of exposure unreported	Rat	13 g/kg	-
ethyl acrylate	LD50 Subcutaneous	Rat	2800 mg/kg	-
	LC50 Inhalation Gas.	Rat	2180 ppm	4 hours
	LC50 Inhalation Gas.	Rat	1414 ppm	4 hours
	LD50 Dermal	Rat	3049 mg/kg	-
	LD50 Intraperitoneal	Rat	450 mg/kg	-
	LD50 Oral	Rat	800 mg/kg	-

**Conclusion/Summary** : Not available.

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**SECTION 11: Toxicological information**Acute toxicity estimates

Route	ATE value
Oral	26167,5 mg/kg
Inhalation (vapours)	785 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanediol  C(M)IT/MIT(3:1) ethyl acrylate	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 milligrams	-
	Skin - Mild irritant	Rabbit	-	555 milligrams	-
	Skin - Severe irritant	Human	-	0.01 Percent	-
	Eyes - Mild irritant	Rabbit	-	45 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

**Conclusion/Summary** : Not available.Sensitisation**Conclusion/Summary** : Not available.Mutagenicity**Conclusion/Summary** : Not available.Carcinogenicity**Conclusion/Summary** : Not available.Reproductive toxicity**Conclusion/Summary** : Not available.Teratogenicity**Conclusion/Summary** : Not available.Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
diuron (ISO)	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

**Other information** : Not available.**SECTION 12: Ecological information****12.1 Toxicity**

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

## DN WS FLASH BRILLIANT WHITE

## SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
diuron (ISO)	Acute EC50 0,0023 mg/l Fresh water	Algae - Chlorella pyrenoidosa	96 hours
	Acute EC50 2,4 ppb Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 0,005 mg/l Fresh water	Aquatic plants - Lemna sp.	96 hours
	Acute EC50 7,6 µg/l Fresh water	Aquatic plants - Lemna aequinoctialis	72 hours
	Acute EC50 8,6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 8,6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute EC50 8,4 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 2,41 µg/l Marine water	Aquatic plants - Halodule uninervis	72 hours
	Acute IC50 5,89 µg/l Marine water	Aquatic plants - Halodule uninervis	72 hours
	Acute IC50 2,47 µg/l Marine water	Aquatic plants - Zostera muelleri	72 hours
	Acute LC50 3044 µg/l Marine water	Crustaceans - Palaemon serratus - Zoea	48 hours
	Acute LC50 1,95 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 3100 µg/l Fresh water	Fish - Morone saxatilis	96 hours
	Acute LC50 2900 µg/l Fresh water	Fish - Cyprinus carpio - Fry	96 hours
	Chronic EC10 0,11 µg/l Fresh water	Algae - Fragilaria capucina - Exponential growth phase	96 hours
	Chronic EC10 0,76 µg/l Fresh water	Algae - Fragilaria capucina ssp. rumpens	96 hours
	Chronic IC10 0,47 µg/l Marine water	Aquatic plants - Halodule uninervis	72 hours
	Chronic IC10 0,7 µg/l Marine water	Aquatic plants - Halodule uninervis	72 hours
	Chronic IC10 0,49 µg/l Marine water	Aquatic plants - Zostera muelleri	72 hours
	Chronic NOEC 0,283 µg/l Marine water	Algae - Nitzschia pungens	96 hours
Chronic NOEC 0,34 µg/l Marine water	Aquatic plants - Halodule uninervis	72 hours	
Chronic NOEC 0,34 µg/l Marine water	Aquatic plants - Zostera muelleri	72 hours	
Chronic NOEC 26,4 ppb	Fish - Pimephales promelas	60 days	
Chronic NOEC 26,4 ppb	Fish - Pimephales promelas	60 days	
Chronic NOEC 26,4 ppb	Fish - Pimephales promelas	60 days	
Chronic NOEC 33,4 µg/l Fresh water	Fish - Pimephales promelas - Embryo	63 days	
ethanediol	Acute LC50 13140000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 13900000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 10500000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6900000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 10000000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41100000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 47400000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 46300000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 45500000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 41000000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 27540 mg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 52500 mg/l Fresh water	Fish - Pimephales promelas - Fry	96 hours

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**SECTION 12: Ecological information**

pyrithione zinc	Acute LC50 43900 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 49000000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 0,51 µg/l Marine water	Algae - Thalassiosira pseudonana	96 hours
methylisothiazolinone	Acute EC50 8,25 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2,68 ppb Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 0,36 µg/l Marine water	Algae - Thalassiosira pseudonana	96 hours
ethyl acrylate	Chronic NOEC 2,7 ppb Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 0,24 mg/l	Daphnia	48 hours
	Acute LC50 0,18 mg/l	Fish	96 hours
	Acute LC50 12,4 mg/l	Fish - Lepomis Macrochirus	96 hours
ethyl acrylate	Acute LC50 6 mg/l	Fish - Oncorhynchus Mykiss	96 hours
	Acute LC50 4784 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 2500 µg/l Fresh water	Fish - Pimephales promelas	96 hours

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
diuron (ISO)	2,84	5,2	low
ethanediol	-1,36	-	low
pyrithione zinc	0,9	11	low
2-aminoethanol	-1,31	-	low
ethyl acrylate	1,18	2,072	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

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**SECTION 13: Disposal considerations**

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**Disposal considerations** : Do not allow to enter drains or watercourses.  
Dispose of according to all federal, state and local applicable regulations.  
If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.  
For further information, contact your local waste authority.

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.  
Empty containers must be scrapped or reconditioned.  
Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging		European waste catalogue (EWC)
CEPE Paint Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

**Information pertaining to IATA and ADN is considered not relevant since the material is not packaged in the correct approved packaging required of these methods of transport.**

	ADR	IMDG
<b>14.1 UN number</b>	UN3082	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diuron (ISO))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diuron (ISO)). Marine pollutant (diuron (ISO))
<b>14.3 Transport hazard class(es) Class</b>	9	9
<b>Subsidiary class</b>	-	-
<b>14.4 Packing group</b>	III	III
<b>14.5 Environmental hazards</b>		
<b>Marine pollutant</b>	Yes.	Yes.
<b>Marine pollutant substances</b>		diuron (ISO)
<b>14.6 Special precautions for user</b>	<b>Transport within user's premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	

<b>DN WS FLASH BRILLIANT WHITE</b>		
<b>Information pertaining to IATA and ADN is considered not relevant since the material is not packaged in the correct approved packaging required of these methods of transport.</b>		
<b>HI/Kemler number</b>	90	
<b>Emergency schedules (EmS)</b>		F-A, S-F
<b>14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code</b> : Not applicable.		
<b>Additional information</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed, or the component present is below its threshold.

###### Substances of very high concern

None of the components are listed, or the component present is below its threshold.

##### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

#### Other EU regulations

##### VOC for Ready-for-Use Mixture

: Not applicable.

##### Ozone depleting substances (1005/2009/EU)

Not listed.

##### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

##### Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

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**SECTION 15: Regulatory information**[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

**15.2 Chemical safety assessment**

: No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information****CEPE code** : 1

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Classification	Justification
Skin Sens. 1, H317	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 2, H411	Calculation method

[Full text of abbreviated H statements](#)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful 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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

[Full text of classifications \[CLP/GHS\]](#)

Acute Tox. 2, H310	ACUTE TOXICITY (dermal) - Category 2
Acute Tox. 2, H330	ACUTE TOXICITY (inhalation) - Category 2
Acute Tox. 3, H301	ACUTE TOXICITY (oral) - Category 3
Acute Tox. 3, H311	ACUTE TOXICITY (dermal) - Category 3
Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3
Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2



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**SECTION 16: Other information**

Aquatic Chronic 3, H412 Carc. 2, H351 EUH071 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Skin Corr. 1A, H314 Skin Corr. 1B, H314 Skin Corr. 1C, H314 Skin Irrit. 2, H315 Skin Sens. 1, H317 Skin Sens. 1A, H317 STOT RE 2, H373  STOT SE 3, H335	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 CARCINOGENICITY - Category 2 Corrosive to the respiratory tract. SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 1A SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 1C SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
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**Notice to reader**

***IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.***

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