

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 8/29/2019 Version: 1.0

SECTION 1: Identification of the subst	ance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: Brilliant Cresyl Blue (C.I. 51010)
IUPAC name	: bis(1,3-diamino-7-(diethylamino)-4-methyl-5λ⁴-phenoxazin-5-ylium); tetrachlorozincdiuide
EC-No.	: 279-675-0
CAS-No.	: 81029-05-2
Product code	: 45545810
Formula	: (C17H20CIN3O)2·ZnCl2
Product group	: Raw material
1.2. Relevant identified uses of the substar	nce or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Laboratory use,Industrial use,Professional use
Industrial/Professional use spec	: For professional use only
Use of the substance/mixture	: For analytical purposes
	Scientific research and development Not for human consumption or veterinary purposes.
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safety dat	a sheet
Supplier	
Scafell Organics	
Molekula Ltd	
Lingfield Way Darlington - England	
T +44 (0) 1949 823777 / +44 (0) 7590 545705	
info@molekula.com / kbowen@molekula.com - ww	w.molekula.com
1.4. Emergency telephone number	
Emergency number :	+44 (0) 7590 545705
SECTION 2: Hazards identification	
2.1. Classification of the substance or mixt	ure
Classification according to Regulation (EC) No.	1272/2008 [CLP]
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Ca	ategory 3, H335
Respiratory tract irritation	
Full text of H statements : see section 16	
Adverse physicochemical, human health and en	vironmental effects
No additional information available	
2.2. Label elements	
Labelling a seconding to Developting (EQ) No. 4070	
Labelling according to Regulation (EC) No. 1272	
Hazard pictograms (CLP)	
Hazard pictograms (CLP)	GHS07
Hazard pictograms (CLP) Signal word (CLP)	GHS07 : Warning
Hazard pictograms (CLP)	GHS07
Hazard pictograms (CLP) Signal word (CLP)	: GHS07 : Warning : H315 - Causes skin irritation. H319 - Causes serious eye irritation.
Hazard pictograms (CLP) Signal word (CLP) Hazard statements (CLP)	<ul> <li>GHS07</li> <li>GHS07</li> <li>Warning</li> <li>H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.</li> <li>H335 - May cause respiratory irritation.</li> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove</li> </ul>
Hazard pictograms (CLP) Signal word (CLP) Hazard statements (CLP)	: GHS07 : Warning : H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H335 - May cause respiratory irritation. : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P280 - Wear protective clothing, eye protection, face protection, protective gloves.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients			
3.1. Substances			
Name	Product identifier	%	
Brilliant Cresyl Blue (C.I. 51010)         (CAS-No.) 81029-05-2 (EC-No.) 279-675-0         100			
Full text of H-statements: see section 16			

# Full text of H-statements: see section 16

3.2. Mixtures Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If possible show this sheet, if not available show packaging or label. Never give anything by mouth to an unconscious person. Do not leave affected person unattended.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If breathing difficulties persist : Get medical advice/attention.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. If irritation persists, consult a doctor.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects after inhalation	: Irritation to throat. Headache. Cough. Burning sensation.
Symptoms/effects after skin contact	: Causes skin irritation. Itching. Redness, pain.
Symptoms/effects after eye contact	: Causes serious eye irritation. redness, itching, tears. stinging.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Abdominal pain, nausea.
4.3. Indication of any immediate medical at	tention and special treatment needed

Get immediate medical advice/attention.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the substa	ance or mixture
Hazardous decomposition products in case of fire	: None known.
5.3. Advice for firefighters	
Precautionary measures fire	: Keep container tightly closed and away from heat, sparks and flame. Keep away from combustible materials.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Warn all persons of toxic hazard.

<b>SECTION 6: Accidental release measu</b>	ures
6.1. Personal precautions, protective equi	pment and emergency procedures
General measures	: Isolate from fire, if possible, without unnecessary risk. Avoid dust formation. No flames, no sparks. Eliminate all sources of ignition.
6.1.1. For non-emergency personnel	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Do not touch or walk on the spilled product. Avoid contact with skin, eyes and clothing.
Measures in case of dust release	: Keep upwind. Avoid creating or spreading dust. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection. Use self-contained breathing apparatus and chemically protective clothing.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Descent antes to accord and sublic systems. Natified	authorition if product optors covers or public vectors

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: On land, sweep or shovel into suitable containers. Shovel or sweep up and put in a closed container for disposal.

# 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid creating or spreading dust. Provide local exhaust or general room ventilation.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, including a	ny incompatibilities
Technical measures	: Ensure adequate ventilation, especially in confined areas.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight. Keep container closed when not in use.
Incompatible products	: Strong oxidizing agents.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
Heat and ignition sources	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage area	: Store below 20 °C. Store in a dry place. Store in a closed container.
7.2 Creatific and use(a)	

## 7.3. Specific end use(s)

For analytical purposes. Scientific research and development. Not for human consumption or veterinary purposes.

# SECTION 8: Exposure controls/personal protection 8.1. Control parameters

No additional information available

# 8.2. Exposure controls

## Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety procedures.

## Personal protective equipment:

Avoid all unnecessary exposure.

# Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

## Hand protection:

The protective gloves to be used must comp	ly with the specifications of the regulation 2016/425 and the resultant standard EN 374
	$\gamma$ with the specifications of the regulation 2010/425 and the resultant standard LN 574

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.11		EN 374

### Eye protection:

Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Use eye protection according to EN 166, designed to protect against powders and dusts.

Туре	Use	Characteristics	Standard
Safety goggles	Fine dust, Dust	tightly fitting safety goggles, With side shields	EN 166

# Skin and body protection:

Emergency safety showers should be available in the immediate vicinity of any potential exposure. Keep suitable chemically resistant protective clothing readily available for emergency use

Туре	Standard
Protective clothing (with elasticated cuffs and closed neck)	EN ISO 13982

# **Respiratory protection:**

Keep self contained breathing apparatus readily available for emergency use. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Device	Filter type	Condition	Standard
Respiratory protective device with a particle filter	Туре Р1, Туре Р2	Dust protection	EN 14387

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# Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical p	
9.1. Information on basic physical and cl Physical state	: Solid
Appearance	: Crystalline powder.
Molecular mass	: 385.96 g/mol
Colour	: Green
Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
	: No data available
Decomposition temperature	: Non flammable.
Flammability (solid, gas)	
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	

No additional information available

10.1. Reactivity The product is non-reactive under normal conditions of use, storage and transport.
40.0 Chemical stability
10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
10.5. Incompatible materials
Strong oxidizers.
10.6. Hazardous decomposition products
No hazardous decomposition products known at room temperature.

<b>SECTION 11: Toxicological information</b>	1
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye irritation.
Additional information	: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

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Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: May cause respiratory irritation.
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information		
12.1. Toxicity		
Acute aquatic toxicity :	Not classified	
Chronic aquatic toxicity :	Not classified	
12.2. Persistence and degradability		
Brilliant Cresyl Blue (C.I. 51010) (81029-05-2)		
Persistence and degradability	No data available.	
12.3. Bioaccumulative potential		
Brilliant Cresyl Blue (C.I. 51010) (81029-05-2)		
Bioaccumulative potential	No data available.	
12.4. Mobility in soil	No data available.	
	No data available.	
12.4. Mobility in soil	No data available.	
<b>12.4. Mobility in soil</b> No additional information available	No data available.	
12.4. Mobility in soilNo additional information available12.5. Results of PBT and vPvB assessment		
12.4. Mobility in soilNo additional information available12.5. Results of PBT and vPvB assessmentBrilliant Cresyl Blue (C.I. 51010) (81029-05-2)	of REACH regulation, annex XIII	
12.4. Mobility in soilNo additional information available12.5. Results of PBT and vPvB assessmentBrilliant Cresyl Blue (C.I. 51010) (81029-05-2)This substance/mixture does not meet the PBT criteria	of REACH regulation, annex XIII	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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# 14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

# SECTION 15: Regulatory information

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

# 15.1.1. EU-Regulations

No REACH Annex XVII restrictions Brilliant Cresyl Blue (C.I. 51010) is not on the REACH Candidate List Directive 2012/18/EU (SEVESO III)

# 15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

<b>SECTION 16: Other information</b>	on
Data sources	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	None.
Full text of H- and EUH-statements	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2

Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.