



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product Name Bromocresol Green 0.04% Alcoholic Indicator
Product code RRSP6601
CAS No. 64-17-5
EC No. 200-578-6
REACH Registration No. Not known.

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

Identified Use(s) PC21 Laboratory chemicals
Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet**Manufacturer**

Company Identification Atom Scientific Ltd
Address of Manufacturer Unit 2B East Tame Business Park
Rexcine Way
Hyde
Cheshire
Postal code SK14 4GX
Telephone: 0161 3665123
Fax 01704 337167
E-mail technical@atomscientific.com
Office hours 08:00 - 17:00

Supplier

Company Identification Atom Scientific Ltd
Address of Supplier Unit 2B East Tame Business Park
Rexcine Way
Hyde
Cheshire
Postal code SK14 4GX
Telephone: 0161 3665123
Fax 01704 337167
E-mail technical@atomscientific.com
Office hours 08:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No. 07833453806
Contact Peter Keenan
National response center
Address National Poisons Information Service (Birmingham Centre)
City Hospital
Dudley Road,



Birmingham,
United Kingdom

Emergency Phone No.

+00 448 706 006 266 NHS Direct - 0845 4647 or 111

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Acute Tox. 4 :Harmful if swallowed.
Eye Irrit. 2 :Causes serious eye irritation.
Flam. Liq. 2 :Highly flammable liquid and vapour.
STOT SE 2 :May cause damage to organs.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

Bromocresol Green 0.04% Alcoholic Indicator

Hazard Pictogram(s)



GHS02



GHS08



GHS07

Signal Word(s)

Danger

Hazard Statement(s)

H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H371: May cause damage to organs.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P308+P311: IF exposed or concerned: Call a POISON CENTER/doctor.
P337+P313: If eye irritation persists: Get medical advice/attention.
P403+P235: Store in a well-ventilated place. Keep cool.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.



3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
ethanol ethyl alcohol	64-17-5	200-578-6	99.90	Flam. Liq. 2 H225	GHS02
methanol	67-56-1	200-659-6	0.10	Flam. Liq. 2 H225 Acute Tox. 3 H301 Acute Tox. 3 H311 Acute Tox. 3 H331 STOT SE 1 H370	GHS02 GHS06 GHS08

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Treat symptomatically.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

May cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	Use to extinguish.
Unsuitable extinguishing media	Water jet spray

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. May decompose in a fire, giving off toxic and irritant vapours.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained



breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Use vacuum equipment for collecting spilt materials, where practicable. Containers must not be punctured or destroyed by burning, even when empty.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

PC21 Laboratory chemicals

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note



Ethanol	64-17-5	1000	1920			
Methanol	67-56-1	200	266	250	333	Sk
Methanol	67-56-1	200	260	0	0	IOELV, Skin

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	Workplace Exposure Limits (WEL)

Remark	Notes
Sk	Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
IOELV	IOELV: Indicative Occupational Exposure Limit Value
Skin	The possibility of significant uptake through the skin.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
	Colour : colourless
Odour	typical alcoholic odour
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	14.0 °C - closed cup



Initial boiling point and boiling range	78°C
Flash Point	14.0 °C - closed cup
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Upper explosion limit: 19 %(V) Lower explosion limit: 3.3 %(V)
Vapour pressure	59.5 hPa at 20.0 °C
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	0.789 g/mL at 25 °C
Solubility(ies)	Solubility (Water) : Completely soluble in water. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	log Pow: -0.349 at 24 °C
Auto-ignition temperature	363.0 °C
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.
9.2 Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Self classification: Harmful if swallowed.
Acute toxicity - Skin Contact	Not classified.
	Calculated acute toxicity estimate (ATE) Calc ATE - 300000.00000



Acute toxicity - Inhalation	Not classified. Calculated acute toxicity estimate (ATE) Calc ATE - 3000.00000
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Self classification: Causes serious eye irritation.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Self classification: May cause damage to organs.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

11.2 Other information

RTECS: Not available
 Central nervous system depression, Drowsiness, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
 Kidney - Irregularities - Based on Human Evidence (2-Propanol)

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

The product has high mobility in soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Not known.

13. SECTION 13: DISPOSAL CONSIDERATIONS



13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 1170

14.2 UN proper shipping name

UN proper shipping name ETHANOL (ETHYL ALCOHOL)

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class	3
ADR Classification Code	F1
Special Provisions	144 601
Limited Quantities	1 L
Excepted Quantities	E2
Emergency Action Code	•2YE
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	
Mixed Packing Instructions for Packages	MP19
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1
Tank Code for Tanks	LGBF
Special Provisions for Tanks	
Vehicle for Tank Carriage	FL
ADR Transport Category	2
Tunnel Restriction Code	D/E
Special Provisions for Carriage - Packages	
Special Provisions for Carriage - Bulk	
Special Provisions for Carriage - Loading, Unloading and Handling	
Special Provisions for Carriage - Operation	S2 S20



ADR HIN	33
IMDG	
IMDG Class	3
Special Provisions	144 601
Limited Quantities	1 L
Excepted Quantities	E2
Mixed Packing Instructions for Packages	P001 IBC02 R001
Special Packing Provisions for Packages	
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1
IMDG EMS	F-E, S-D
Stowage and Handling	Category A
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	ETHANOL
Excepted Quantities	E2
Passenger and Cargo Aircraft Limited	Y341
Quantities Packing Instructions	
Passenger and Cargo Aircraft Limited	1L
Quantities Max net Qty	
Passenger and Cargo Aircraft Packing	353
Instructions	
Passenger and Cargo Aircraft Max net	5L
Qty	
Cargo Aircraft Packing Instructions	364
Cargo Aircraft Max net Qty	60L
Special Provisions	A3, A58, A180
Emergency Response Guidebook (ERG)	3L
Code	
Labels	
Labels	3



14.4 Packing group

Packing group 3.1,II

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available



15. SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

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subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles ethanol ethyl alcohol (64-17-5), methanol (67-56-1)

Community Rolling Action Plan (CoRAP) methanol (67-56-1)

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer Not listed

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

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European Parliament and of the Council concerning the export and import of hazardous chemicals

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hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS02



GHS08



GHS07

GHS06: GHS: skull and crossbones

Hazard classification

Acute Tox. 3 : Acute toxicity, Category 3

Flam. Liq. 2 : Flammable liquid, Category 2



STOT SE 1 : Specific target organ toxicity — single exposure, Category 1

Hazard Statement(s)

H225: Highly flammable liquid and vapour.
H301: Toxic if swallowed.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H370: Causes damage to organs.
H371: May cause damage to organs.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash hands and exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311: IF exposed or concerned: Call a POISON CENTER/doctor.
P330: Rinse mouth.
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use to extinguish.
P403+P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR : European Agreement concerning the International Carriage of Dangerous



Goods by Road

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

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