



P&WC

Version: 6.4
Effective date: 25/06/2020
Previous Date: 01/03/2018

SAFETY DATA SHEET

SPECTRUS OX1201 (Bioltrol OX 40)

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

1.1. Product identifier

Trade name or designation of the mixture SPECTRUS OX1201 (Bioltrol OX 40)

Version number 6.4

Revision date 25/06/2020

Supersedes date 01/03/2018

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

Identified uses Water-based microbial control agent.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

JV Process and Water Chemicals LLC

Address: Street V. Kadirov 10, Chirchik city,
Tashkent Region, Republic of Uzbekistan, 111727

Tel: +99871 209 10 40

Email address: info@pwch.uz

www.pwch.uz

1.4. Emergency telephone number

Multilingual emergency number (24/7)

Street V. Kadirov 10, Chirchik city,
Tashkent Region,
Republic of Uzbekistan, 111727

Tel: +99871 209 10 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Sodium bromide (CAS 7647-15-6) (560 g/l)

Hazard pictograms None.

Signal word None.

Hazard statements The product does not need to be labelled in accordance with EC directives or respective national laws.

Precautionary statements

Prevention Not available.

Response Not available.



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Storage	Not available.
Disposal	Not available.
Supplemental label information	EUH210 - Safety data sheet available on request.
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical description	Sodium bromide, aqueous solution				
Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Sodium bromide	30 - < 60	7647-15-6 231-599-9	-	-	
Classification:	-				

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eye(s) with plenty of water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Non flammable. Use extinguishing media appropriate for the surrounding materials. Dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture Hydrogen bromide.
Sodium oxide

5.3. Advice for firefighters

Special protective equipment for firefighters	Self contained breathing apparatus. (CEN : EN 137) Protective clothing (CEN : EN 469) Protective gloves (CEN : EN 659) Helmet (CEN : EN 443)
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials. Prevent spillage and fire-fighting water from entering in public sewers or the immediate environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Protective clothing It is possible to pass or work near the treated system during product application.
For emergency responders	Use personal protection recommended in Section 8 of the SDS.



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6.2. Environmental precautions	Prevent from entering sewers or the immediate environment. Accidental release of large quantities into the aquatic environment may harm aquatic organisms. Transport and store in approved containers according to applicable national and international regulations.
6.3. Methods and material for containment and cleaning up	Absorb onto inert material and dispose of according to Hazardous Waste Regulations. Flush cleaned area thoroughly with water.
6.4. Reference to other sections	Please refer also to section no. 8 'Exposure controls' for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Normal chemical handling.
7.2. Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, well-ventilated area. Avoid contact with strong acids and oxidisers.
7.3. Specific end use(s)	Only for professional and industrial users The material which has been in contact with this product can be cleaned with water. Product needs to be activated by oxidizing with chlorine or hypochlorite to form in-situ hypobromite. The activated product is typically used on an intermittent basis to control microbiological growth. It may be used in a programme which includes non-oxidizing biocides and other treatment chemicals. The minimum contact time is: < 1 hours. Proper treatment levels and ways of addition depend on many factors such as microbial contamination, conditions particular for a given installation, and system operating characteristics. The product should be used in accordance with control procedures that SUEZ Water Technologies & Solutions establishes for a specific application.
Shelf life	360 Days

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Not available.
Derived no effect levels (DNELs)	Not available.
Predicted no effect concentrations (PNECs)	Not available.
8.2. Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety procedures.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Safety goggles. CEN : EN 166
Skin protection	
- Hand protection	Protective gloves (Plastic, impervious) (Protection against unintentional short-term contact) Penetration time: > 480 min Coating thickness: 0,5 mm CEN : EN 420
- Other	Protective clothing. CEN : EN ISO 13688; EN ISO 6529; EN 14605
Respiratory protection	In case of insufficient ventilation, use a breathing mask with filter type: P2 CEN : EN 140; EN 143; EN 149
Thermal hazards	Not available.
Environmental exposure controls	Prevent from entering in public sewers or the immediate environment.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Colour Colourless

Physical state Liquid

Odour Slight

Odour threshold Not available.

pH (concentrated product) 7,5 Neat

pH in aqueous solution 8 (5% Solution)

Melting point/freezing point < -34 °C

Initial boiling point and boiling range 100 °C

Flash point Not applicable.

Evaporation rate Slower than Ether

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure 18 mmHg

Vapour pressure temp. 21 °C

Vapour density < 1

Relative density 1,41

Relative density temperature 21 °C

Solubility

Solubility (water) 100 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not applicable.

Decomposition temperature Not available.

Viscosity 12 mPa.s

Viscosity temperature 21 °C

Explosive properties Not available.

Oxidising properties Not available.

9.2. Other information

Pour point < -34 °C

Shelf life 360 Days

VOC

SECTION 10: Stability and reactivity

10.1. Reactivity Not available.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid 10.5. Keep away from heat.

Incompatible materials 10.6. Avoid contact with strong acids and oxidisers.

Hazardous decomposition products Hydrogen bromide.
Sodium oxide



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product	Test Results
SPECTRUS OX1201 (Bioltrol OX 40) (Mixture)	Acute Dermal LD50 Rabbit: > 5000 mg/kg (Calculated according to GHS additivity formula) Acute Inhalation LC50 Rat: > 5 mg/l 4 hours (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: > 5000 mg/kg (Calculated according to GHS additivity formula)
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	May be irritating to eyes.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Information on likely routes of exposure	
Ingestion	May cause irritation of the gastrointestinal tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Inhalation	Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact	May be irritating to the skin.
Eye contact	May be irritating to eyes.
Symptoms	Not available.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	None known.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity

Product	Species	Test Results
SPECTRUS OX1201 (Bioltrol OX 40) (CAS Mixture)		
Aquatic		
Crustacea	LC50	Daphnia magna
		Mysid Shrimp
Fish	NOEL	Daphnia magna
	LC50	Bluegill sunfish



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Product	Species	Test Results
		0,52 mg/l, Static Acute Bioassay, 96 hour, (As Bromine)
	Fathead minnow	> 10000 mg/l, Static Renewal Bioassay, 96 hour, (Product as is)
	Rainbow trout	> 1000 mg/l, Static Acute Bioassay, 96 hour, (Product as is)
		0,23 mg/l, Static Acute Bioassay, 96 hour, (As Bromine)
	Sheepshead minnow	0,19 mg/l, Flow-Thru Bioassay, 96 hour, (As Bromine)
	NOEL	0,3 mg/l, Static Acute Bioassay, 96 hour, (As Bromine)
	Bluegill sunfish	0,11 mg/l, Flow-Thru Bioassay, 96 hour, (As Bromine)
	Sheepshead minnow	0,11 mg/l, Flow-Thru Bioassay, 96 hour, (As Bromine)

12.2. Persistence and degradability

Negative effects from the recommended use is not expected.

12.3. Bioaccumulative potential

Bioaccumulation is not likely to occur since this material is highly soluble in water.

Partition coefficient n-octanol/water (log Kow)

Not available.

Bioconcentration factor (BCF)

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contaminated packaging

According to Hazardous Waste Regulations.

EWC (European Waste Code) recommendation : 15 01 10
 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified.
 15 01 Packaging (including separately collected municipal packaging waste).
 15 01 10 Packaging containing residues of or contaminated by dangerous substances.
 Depending on the origin and state of the waste, other EWC numbers may be applicable too.

Disposal methods/information

According to Hazardous Waste Regulations.

EWC (European Waste Code) recommendation : 16 03 04
 16 Wastes not otherwise specified in the list.
 16 03 Off-specification batches and unused products.
 16 03 04 Inorganic wastes
 Depending on the origin and state of the waste, other EWC numbers may be applicable too.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.



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IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

NSF Registered and/or meets USDA (according to 1998 guidelines):

Registration No. – 141071
 Category Code(s):
 G5 Cooling and retort water treatment products
 G7 Boiler, steam line treatment products – nonfood contact
 11: Preservatives for liquid-cooling and processing systems

Biocides

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).



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SECTION 16: Other information

List of abbreviations

COD: Chemical Oxygen Demand
EC-No: European Commission Number
IATA: International Air Transport Association
CAS: Chemical Abstract Service.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
TWA: Time Weighted Average.
STEL: Short-term Exposure Limit.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEL: No observed effect level.
BOD: Biochemical oxygen demand.
TOC: Total Organic Carbon.
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
IMDG Code: International Maritime Dangerous Goods Code.
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).

References

Information on evaluation method leading to the classification of mixture

Safety data sheets of raw materials.

The physical, health and environmental hazards of this mixture are assessed by applying the classification criteria for each hazard class or differentiation in Parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008 (CLP).

Full text of any H-statements not written out in full under Sections 2 to 15

None.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Training information

Provide training on safe handling while considering the type of application and exposure scenarios.

Based on EC Directive / Regulations

(EC) No 1907/2006 (REACH)
(EU) 2015/830
(EC) No 1272/2008
(EU) No 1357/2014
(EU) No. 528/2012 and amendments (Biocidal Product Regulation)
All active ingredients have been identified/notified for the relevant Product Types according to the First Review Regulation on existing active substances (EU) No. 1451/2007

Further information

Correction in Section: 8,11