



SAFETY DATA SHEET

CORTROL IS3000E

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

1.1. Product identifier

Trade name or designation of the mixture CORTROL IS3000E

Version number 6.0

Revision date 22/10/2021

Supersedes date 15/04/2020

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

Identified uses Water based dissolved oxygen scavenger/ metal passivator.

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, city Chirchik, Region

Tashkent Republic of Uzbekistan, 111702

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, city Chirchik, Region Tashkent

Republic of Uzbekistan, 111702

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

Health hazards

Acute toxicity, oral

Category 4

H302 - Harmful if swallowed.

2.2. Label elements

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

Contains: Sodium bisulphite

Hazard pictograms



Signal word

Warning

Hazard statements

H302

Harmful if swallowed.

Precautionary statements

Prevention

P264

Wash thoroughly after handling.



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Response

P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

Storage Not available.

Disposal Not available.

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical description Sodium bisulphite, aqueous solution

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|------------------------|--|------------------------|------------------------|--------------|-------|
| Sodium bisulphite | 30 - < 40 | 7631-90-5 231-548-0 | 01-2119524563-42 | 016-064-00-8 | |
| Classification: | Acute Tox. 4;H302 | | | | B |
| Sulphur dioxide | < 1 | 7446-09-5 231-195-2 | 01-2119485028-34 | 016-011-00-9 | # |
| Classification: | Press. Gas;H280, Skin Corr. 1B;H314, Acute Tox. 3;H331 | | | | 5,U |

The classification of the above substance(s) is given, including the hazard class, category code and hazard statements which are assigned in accordance with their physicochemical, health and environmental hazards. Please refer to section 16 where the full text of each relevant H-statement is listed.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact Wash off immediately with plenty of water.

Eye contact Immediately flush eye(s) with plenty of water.
Get medical attention if irritation persists after washing.

Ingestion Rinse mouth.
Do not give anything to eat or drink.
Do not induce vomiting.
Call a physician or poison control centre immediately.

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 Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None.

5.2. Special hazards arising from the substance or mixture Oxides of sulphur evolved in fire.

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)



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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 Wear protective clothing, gloves and safety goggles.

For emergency responders Use personal protection recommended in Section 8 of the SDS.

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.

6.3. Methods and material for containment and cleaning up Contain and absorb on absorbent material (e.g. sand). Place in waste disposal container. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

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 Vent carefully before opening. Sulfur dioxide can be formed during the normal use and handling of this product.

7.2. Conditions for safe storage, including any incompatibilities Reasonable and safe chemical storage. Store at ambient temperature. Store in a well ventilated place. Avoid freezing.

7.3. Specific end use(s) Only for professional and industrial users

Shelf life 135 days

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UAE. OELs. Maximum Allowable Limits for Air Pollutants in Working Areas [Law to Protect the Air from Pollution, Resolution of the Cabinet of Ministers No. 12 of 2006]

| Components | Type | Value |
|-----------------------------------|------|--------------------------------|
| Sodium bisulphite (CAS 7631-90-5) | TWA | 5 mg/m ³ |
| Sulphur dioxide (CAS 7446-09-5) | STEL | 13 mg/m ³ |
| | | 5 ppm |
| | TWA | 5,2 mg/m ³ 2 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|-----------------------------------|------|---------------------|
| Sodium bisulphite (CAS 7631-90-5) | TWA | 5 mg/m ³ |
| Sulphur dioxide (CAS 7446-09-5) | STEL | 0,25 ppm |

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

| Components | Type | Value |
|---------------------------------|------|----------------------------------|
| Sulphur dioxide (CAS 7446-09-5) | STEL | 2,7 mg/m ³ |
| | | 1 ppm |
| | TWA | 1,3 mg/m ³ 0,5 ppm |

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.



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Derived no effect levels (DNELs)

Workers

| Components | Value | Assessment factor | Notes |
|-----------------------------------|-----------|-------------------|------------------------------|
| Sodium bisulphite (CAS 7631-90-5) | | | |
| Long-term, Systemic, Inhalation | 246 mg/m3 | | |
| Sulphur dioxide (CAS 7446-09-5) | | | |
| Long-term, Systemic, Inhalation | 1,3 mg/m3 | | |
| Short-term, Systemic, Inhalation | 2,7 mg/m3 | | respiratory tract irritation |

Predicted no effect concentrations (PNECs)

| Components | Value | Assessment factor | Notes |
|-----------------------------------|-----------|-------------------|-------|
| Sodium bisulphite (CAS 7631-90-5) | | | |
| Freshwater | 1,09 mg/l | 10 | |
| Marine water | 0,11 mg/l | 100 | |
| STP | 82,5 mg/l | 10 | |

8.2. Exposure controls

Appropriate engineering controls Adequate ventilation to maintain air contaminants below exposure limits.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Splash proof chemical goggles.
CEN : EN 166
- Skin protection**
- **Hand protection** Neoprene gloves (Protection against unintentional short-term contact)
Nitrile gloves (Protection against unintentional short-term contact)
PVC gloves (Protection against unintentional short-term contact)
Penetration time: > 480 min
Coating thickness: 0.5 mm
CEN : EN 374-1/2/3/4; 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: E2-P2
CEN : EN 140; EN 14387
- Thermal hazards** Not available.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

- Colour** Colourless to light pink
- Physical state** Liquid

Odour Strong

Odour threshold Not available.

pH (concentrated product) 3,2

pH in aqueous solution 3,5 (5% SOL.)

Melting point/freezing point -8 °C

Initial boiling point and boiling range Not available.

Flash point Not applicable.

Evaporation rate < 1 (Ether = 1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

- Flammability limit - lower (%)** Not available.



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| | |
|--|------------------|
| Flammability limit - upper (%) | Not available. |
| Vapour pressure | 18 mm Hg |
| Vapour pressure temp. | 21 °C |
| Vapour density | < 1 (Air = 1) |
| Relative density | 1,26 |
| 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 | 6 cps |
| Viscosity temperature | 21 °C |
| Explosive properties | Not available. |
| Oxidising properties | Not available. |
| 9.2. Other information | |
| Pour point | -5 °C |
| Shelf life | 135 days |
| VOC | 0 % (Calculated) |

SECTION 10: Stability and reactivity

| | |
|---|---|
| 10.1. Reactivity | Avoid contact with acids. |
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | Not applicable. |
| 10.4. Conditions to avoid | Keep away from heat. |
| 10.5. Incompatible materials | Avoid contact with strong oxidisers. Avoid contact with acids. |
| 10.6. Hazardous decomposition products | Oxides of sulphur. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Product | Test Results |
|---------------------------|--|
| CORTROL IS3000E (Mixture) | Acute Dermal LD50 Rabbit: > 5000 mg/kg (Calculated according to GHS additivity formula) Acute Inhalation LC50 Rat: > 5 mg/l 4 hour (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: 3030 mg/kg (Calculated according to GHS additivity formula) |

| Components | Test Results |
|-------------------------------|---|
| Sodium bisulphite (7631-90-5) | Acute Dermal LD50 Rabbit: > 2000 mg/kg Acute Inhalation LC50 Rat: > 5,5 mg/l 4 hour Acute Oral LD50 Rat: 1420 mg/kg |

| | |
|--------------------------------------|---|
| Acute toxicity | Harmful if swallowed. |
| Skin corrosion/irritation | Based on available data, the classification criteria are not met. |
| Serious eye damage/irritation | May be irritating to eyes. |



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|---|---|
| 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 | 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 | |
|-------------------------------|----------------|---------------|-----------------------------------|
| CORTROL IS3000E (CAS Mixture) | | | |
| Aquatic | | | |
| Crustacea | 0% Mortality | Daphnia magna | 100 mg/l, Static Screen, 48 hour |
| | 100% Mortality | Daphnia magna | 500 mg/l, Static Screen, 48 hour |
| Fish | 0% Mortality | Rainbow trout | 500 mg/l, Static Screen, 48 hour |
| | 100% Mortality | Rainbow trout | 1000 mg/l, Static Screen, 48 hour |

12.2. Persistence and degradability

| | |
|-----------------------|---|
| | This product, being inorganic, has no TOC, BOD. |
| - COD (mgO2/g) | 54 |

12.3. Bioaccumulative potential

| | |
|--|----------------|
| 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. |
|-------------------------------|---|



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Disposal methods/information According to Hazardous Waste Regulations.

EWC (European Waste Code) recommendation : 16 03 03
16 Wastes not otherwise specified in the list.
16 03 Off-specification batches and unused products.
16 03 03 Inorganic wastes containing dangerous substances.
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.

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

Sulphur dioxide (CAS 7446-09-5)

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

Sulphur dioxide (CAS 7446-09-5)

National regulations Not available.



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15.2. Chemical safety assessment

Not available.

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

Registration No. – 141468
Category Code(s):
G5 Cooling and retort water treatment products
G6 Boiler treatment products, steam line products – food contact

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).

SECTION 16: Other information

List of abbreviations

COD: Chemical Oxygen Demand
CAS: Chemical Abstract Service.
EC-No: European Commission Number
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).
IATA: International Air Transport Association
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

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

H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.

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

Further information

Correction in Section: 2,3,4,8,10,11,13,16