



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

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

1.1. Product identifier

Trade name or designation of the mixture CORTROL OS5614 (BoilGard OS 212)

Date of first issue 09/02/2006

Version number 6.4

Revision date 03/09/2020

Supersedes date 02/04/2019

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

Identified uses Boiler feedwater oxygen scavenger

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

Health hazards

Skin sensitisation

Category 1B

H317 - May cause an allergic skin reaction.

2.2. Label elements

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

Contains: Carbohydrazide

Hazard pictograms





P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

Signal word	Warning
Hazard statements	
H317	May cause an allergic skin reaction.
Precautionary statements	
Prevention	
P280	Wear protective gloves.
Response	
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
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	Solution of hydrazine derivative				
Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Carbohydrazide	10 - 20	497-18-7 207-837-2	01-2119965166-31	-	
Classification:	Skin Sens. 1B;H317				

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	Move to fresh air.
Skin contact	Take off immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Eye contact	Immediately flush eye(s) with plenty of water.
Ingestion	Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed May cause allergic skin reaction.

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	Not available.

5.2. Special hazards arising from the substance or mixture Oxides of carbon and nitrogen evolved in fire.



SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

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 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.
Do not empty into drains, dispose of this material and its container to hazardous or special waste collection point.

6.3. Methods and material for containment and cleaning up Absorb onto inert material and dispose of according to Hazardous Waste Regulations.
Flush area with water.
Spread sand/grit.

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 Contact with oxidisers, peroxide and metal oxide may result in a violent reaction.
Contamination with low pH products and low grade metal accelerate decomposition to hydrazine.

7.2. Conditions for safe storage, including any incompatibilities Keep only in the original container.
Store containers closed when not in use.
Keep away from heat.

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

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)

Workers

Components	Value	Assessment factor	Notes
Carbohydrazide (CAS 497-18-7)			
Long-term, Systemic, Dermal	0,75 mg/kg	100	
Long-term, Systemic, Inhalation	2,64 mg/m ³	25	

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Carbohydrazide (CAS 497-18-7)			
Freshwater	1,5 µg/l	1000	
Intermittent releases	0,015 mg/l	100	
Marine water	0,15 µg/l	10000	
STP	2,5 mg/l	10	

8.2. Exposure controls

Appropriate engineering controls Ensure good ventilation.



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

Individual protection measures, such as personal protective equipment

Eye/face protection	Safety goggles. CEN : EN 166
Skin protection	
- Hand protection	Neoprene gloves (Protection against unintentional short-term contact) Nitrile gloves (Protection against unintentional short-term contact) Coating thickness: 0.4 mm Penetration time: > 480 min 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 face mask with breathing 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. Do not empty into drains, dispose of this material and its container to hazardous or special waste collection point.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Colour	Colourless to light yellow
Physical state	Liquid
Odour	Slight
Odour threshold	Not available.
pH (concentrated product)	9
pH in aqueous solution	7,8 (5% SOL.)
Melting point/freezing point	0 °C
Initial boiling point and boiling range	100 °C
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.
Flammability limit - upper (%)	Not available.
Vapour pressure	18 mm Hg
Vapour pressure temp.	21 °C
Vapour density	< 1 (Air = 1)
Relative density	1,04
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 cps
Viscosity temperature	21 °C
Explosive properties	Not available.

Material name: CORTROL OS5614 (BoilGard OS 212)



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

Oxidising properties Not available.

9.2. Other information

Pour point 3 °C
Shelf life 360 days
VOC 0 % (Calculated)

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 Keep away from heat.
10.5. Incompatible materials Avoid contact with strong oxidisers.
10.6. Hazardous decomposition products Oxides of carbon and nitrogen evolved in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product	Test Results
CORTROL OS5614 (BoilGard OS 212) (Mixture)	Acute Dermal LD50 Rabbit: > 5000 mg/kg (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: > 5000 mg/kg (Calculated according to GHS additivity formula)
Components	Test Results
Carbohydrazide (497-18-7)	Acute Dermal LD50 Rabbit: > 2000 mg/kg Acute Oral LD50 Rat: > 5000 mg/kg

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 May cause an allergic skin reaction.
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.
Inhalation Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact May cause an allergic skin reaction.
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.



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

SECTION 12: Ecological information

12.1. Toxicity

Product	Species	Test Results	
CORTROL OS5614 (BoilGard OS 212) (CAS Mixture)			
Aquatic			
Crustacea	10% Mortality	Ceriodaphnia	52 mg/l, Static Renewal Bioassay, 48 hour
	LC50	Ceriodaphnia	92 mg/l, Static Renewal Bioassay, 48 hour
		Daphnia magna	460 mg/l, Static Renewal Bioassay, 48 hour
	NOEL	Daphnia magna	100 mg/l, Static Renewal Bioassay, 48 hour
Fish	5% Mortality	Fathead minnow	52 mg/l, Static Renewal Bioassay, 96 hour
	LC50	Fathead minnow	140 mg/l, Static Renewal Bioassay, 96 hour

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Not available.

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 05
16 Wastes not otherwise specified in the list.
16 03 Off-specification batches and unused products.
16 03 05 Organic 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.



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

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

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.

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



P&WC

SAFETY DATA SHEET

CORTROL OS5614 (BoilGard OS 212)

Version: 6.4
Effective date: 03/09/2020
Previous Date: 02/04/2019

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).
Safety data sheets of raw materials.

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

H317 May cause an allergic skin reaction.

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: 8,11