



P&WC

SAFETY DATA SHEET

SCALETROL PDC9333 (Scaleshield PWC 45)

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

1.1. Product identifier

Trade name or designation of the mixture SCALETROL PDC9333 (Scaleshield PWC 45)

Version number 8.0

Revision date 25/02/2020

Supersedes date 11/07/2019

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

Identified uses Deposit 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

Health hazards

Serious eye damage/eye irritation Category 2 H319 - Causes serious eye irritation.

Skin sensitisation Category 1A H317 - May cause an allergic skin reaction.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard Category 3 H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Contains: Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)



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Hazard pictograms



Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of 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.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: 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 Aqueous solution of phosphonates and polymer

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
2-Phosphono-1,2,4-Butanetricarboxylic acid	10 - < 20	37971-36-1 253-733-5	01-2119436643-39	-	
Classification:	Met. Corr. 1;H290, Eye Irrit. 2;H319				
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)	0.0015 - 0.06	55965-84-9 -	-	613-167-00-5	
Classification:	Acute Tox. 3;H301, Acute Tox. 2;H310, Skin Corr. 1C;H314, Skin Sens. 1A;H317, Eye Dam. 1;H318, Acute Tox. 2;H330, Aquatic Acute 1;H400(M=100), Aquatic Chronic 1;H410(M=100)				B

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 Wash off immediately with plenty of water.
 Get medical attention if irritation develops and persists.
Eye contact Rinse immediately with plenty of water for at least 15 minutes.
 Get medical attention immediately.



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Ingestion	Rinse mouth. Do not induce vomiting. Do not give anything to eat or drink. Call a physician or poison control centre immediately.
4.2. Most important symptoms and effects, both acute and delayed	Irritant effects. 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, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	None.
5.2. Special hazards arising from the substance or mixture	Oxides of carbon, sulphur, and phosphorus 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)
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	Contain and absorb on absorbent material (e.g. sand). Place in waste disposal container.
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	Avoid contact with skin and eyes.
7.2. Conditions for safe storage, including any incompatibilities	Protect from freezing. Do not store at elevated temperatures. Store containers closed when not in use.
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.



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Derived no effect levels (DNELs)

Workers

Components	Value	Assessment factor	Notes
2-Phosphono-1,2,4 Butanetricarboxylic acid (CAS 37971-36-1)			
Long-term, Systemic, Dermal	4,2 mg/kg	100	
Long-term, Systemic, Inhalation	15 mg/m3	25	
Short-term, Systemic, Dermal	80 mg/kg	50	
Short-term, Systemic, Inhalation	158 mg/m3	13	

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
2-Phosphono-1,2,4 Butanetricarboxylic acid (CAS 37971-36-1)			
Freshwater	3,33 mg/l	10	
Intermittent releases	10,42 mg/l	100	
Marine water	0,33 mg/l	100	
Secondary poisoning	0,09 g/kg	90	
Sediment (freshwater)	1,47 mg/kg		
Soil	0,491 mg/kg	1000	
STP	50,4 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** 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)
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: P2
CEN : EN 140; EN 14387
- 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 yellow
- Physical state** Liquid
- Odour** Slight
- Odour threshold** Not available.
- pH (concentrated product)** 3,4 Neat
- pH in aqueous solution** 3,8 (5% Solution)
- Melting point/freezing point** -2 °C
- Initial boiling point and boiling range** 104 °C
- Flash point** Not applicable.
- Evaporation rate** Slower than Ether
- Flammability (solid, gas)** Not applicable.



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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 1,15

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 7 mPa.s

Viscosity temperature 21 °C

Explosive properties Not available.

Oxidising properties Not available.

9.2. Other information

Pour point 1 °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 Protect from freezing.

10.5. Incompatible materials Avoid contact with strong oxidisers.

10.6. Hazardous decomposition products Oxides of carbon, sulphur, and phosphorus evolved in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product

SCALETROL PDC9333 (Scaleshield PWC 45) (Mixture)

Test Results

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: > 5000 mg/kg (Calculated according to GHS additivity formula)

Components

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1) (55965-84-9)

Test Results

Acute Dermal LD50 Rabbit: 90 mg/kg

Acute Inhalation LC50 Rat: 0,33 mg/l 4 hour

Acute Oral LD50 Rat: 67 mg/kg



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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	Causes serious eye irritation.
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	Causes serious eye irritation.
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	
SCALETROL PDC9333 (Scaleshield PWC 45) (CAS Mixture)				
Aquatic				
Crustacea	20% Mortality	Mysid Shrimp	8000 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)	
	LC50	Daphnia magna	2639 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)	
	NOEL	Daphnia magna	2000 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)	
		Mysid Shrimp	1000 mg/l, Static Renewal Bioassay, 48 hour, (pH adjusted)	
	Fish	LC50	Fathead minnow	1830,1 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
			Rainbow trout	3249 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)
NOEL		Fathead minnow	1250 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)	
	Rainbow trout	2000 mg/l, Static Renewal Bioassay, 96 hour, (pH adjusted)		

12.2. Persistence and degradability

- COD (mgO₂/g) 315 (calculated data)
- BOD 5 (mgO₂/g) 11 (calculated data)
- BOD 28 (mgO₂/g) 24 (calculated data)



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- Closed Bottle Test (% Degradation in 28 days)	14 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	38 (calculated data)
- TOC (mg C/g)	123 (calculated data)

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1) 0,49

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 Nutrients: P : 13,5 mg/g (calculated data)

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.

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.



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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

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1) (CAS 55965-84-9)

National regulations Not available.

15.2. Chemical safety assessment Not available.

NSF Registered and/or meets USDA (according to 1998 guidelines): Registration No. – 142607
Category Code(s):
G5 Cooling and retort water treatment products

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
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.



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Version: 8.0

Effective date: 25/02/2020

Previous Date: 11/07/2019

References

Information on evaluation method leading to the classification of mixture

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

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.

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).

H290 May be corrosive to metals.
H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Revision information

Training information

Based on EC Directive / Regulations

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

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

(EC) No 1907/2006 (REACH)
(EU) 2015/830
(EC) No 1272/2008
(EU) No 1357/2014

Further information

Correction in Section: 2,3,6,8,11,15,16