Version: 1.5

Effective Date: Feb-19-2023 Previous Date: Jun-22-2022



SAFETY DATA SHEET KLARAID* PC1212

1. Identification

Product identifier KLARAID PC1212

Other means of identification None.

Recommended use Coagulant

Recommended restrictions Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc. 3600 Horizon Blvd. Trevose, PA 19053

T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The material is not hazardous under the criteria of the Federal OSHA Hazard Communication

Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e.,

material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD

COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our

assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician if symptoms develop or persist.

Rinse skin with water/shower. Skin contact

Eve contact Immediately flush eyes with water for 15 minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Direct contact with eyes may cause temporary irritation.

Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delaved

Indication of immediate medical attention and special

treatment needed **General information** Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods

Water fog. Carbon dioxide (CO2). Foam. Dry chemical powder. Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Methods and materials for containment and cleaning up Keep unnecessary personnel away. Do not touch or walk through spilled material. For personal protection, see section 8 of the SDS. Spills are very slippery.

Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Following product recovery, flush area with water.

Never return spills to original containers for re-use.

Avoid discharge into drains, water courses or onto the ground. **Environmental precautions**

7. Handling and storage

Precautions for safe handling

Use care in handling/storage. Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation. Store in cool, well ventilated area. Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits **Biological limit values**

This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

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

Appropriate engineering

Provide adequate ventilation.

controls

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Page: 2 / 7 Material name: KLARAID* PC1212

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only

depend on its material but also on other quality features and is different from one producer to the

other. Glove selection must take into account any solvents and other hazards present.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection

program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed

whenever workplace conditions warrant a respirator's use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid
Physical state Liquid.
Form Liquid.
Color Light yellow
Odor Mild

Odor threshold Not available.

pH (concentrated product) 5.6

Melting point/freezing point 28 °F (-2 °C) Initial boiling point and boiling 212 °F (100 °C)

range

Flash point $> 212 \,^{\circ}\text{F} (> 100 \,^{\circ}\text{C}) \, \text{P-M(CC)}$

< 1 (Air = 1)

Evaporation rate Not available.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.
Vapor pressure 18 mm Hg
Vapor pressure temp. 70 °F (21 °C)

Relative density 1.04

Relative density temperature 70 °F (21 °C)

Solubility(ies)

Vapor density

Solubility (water) 100 %

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.Viscosity1280 cpsViscosity temperature70 °F (21 °C)

Other information

Explosive properties

Oxidizing properties

Pour point

Not explosive.

Not oxidizing.

5.7 (5% SOL.)

33 °F (1 °C)

VOC

0 % (Estimated)

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Material name: KLARAID* PC1212 Page: 3 / 7

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Avoid contact with strong oxidizers.

Hazardous decomposition

products

Hydrogen chloride, oxides of carbon and nitrogen evolved in fire.

11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactProlonged or repeated contact may cause irritation.Eye contactDirect contact with eyes may cause temporary irritation.

Ingestion May cause slight gastrointestinal irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results	
KLARAID PC1212			
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 2000 mg/kg	
Inhalation			
LC50	Rat	(No deaths at one hour of 10 L/min)	
Oral			
LD50	Rat	> 5000 mg/kg	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.		
Serious eve damage/eve	Direct contact with eyes may cause temporary irritation.		

Serious eye damage/eye Direct contact with eyes irritation

irritation

Respiratory or skin sensitization

Respiratory sensitizationThis product is not expected to cause respiratory sensitization. **Skin sensitization**This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - Not classified. single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not classified.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Algae	EC50	Algae	0.128 mg/L, 72 hour

Material name: KLARAID* PC1212 Page: 4 / 7

Product		Species	Test Results
	NOEL	Algae	0.052 mg/L, 72 hour
Crustacea	20% Mortality	Daphnia magna	1.28 mg/L, 48 hour
	EC50	Daphnia magna	> 100 mg/l, 48 hours Fresh water
	LC50	Ceriodaphnia	0.272 mg/L, 48 hour
		Daphnia magna	14 mg/L, 48 hour
		Mysid Shrimp	502.8 mg/L, 48 hour
	NOEL	Ceriodaphnia	0.2 mg/L, 48 hour
		Mysid Shrimp	100 mg/L, 48 hour
Fish	LC50	Danio rerio	> 100 mg/l, 96 hours Fresh water
		Fathead Minnow	1.32 mg/L, 96 hour
		Rainbow Trout	0.392 mg/L, 96 hour
	NOEL	Fathead Minnow	0.12 mg/L, 96 hour
		Rainbow Trout	0.296 mg/L, 96 hour
		Sheepshead Minnow	1600 mg/L, 96 hour

Persistence and degradability

Bioaccumulative potentialNot available.Mobility in soilNot available.Other adverse effectsNot available.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Via an authorized waste disposal contractor to an approved waste disposal site, observing all local

and national regulations. Since emptied containers may retain product residue, follow label

warnings even after container is emptied.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)All components of the mixture on the TSCA 8(b) inventory are designated "active".

Material name: KLARAID* PC1212 Page: 5 / 7

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

*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).

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue dateNov-01-2014Revision dateFeb-19-2023

Version # 1.5

NFPA ratings Health: 0
Flammability: 0

Instability: 0

NFPA ratings



Material name: KLARAID* PC1212 Page: 6 / 7

List of abbreviations DOT: Department of Transportation (49 CFR 172.101).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration.

WHMIS: Workplace Hazardous Materials Information System.

COD: Chemical Oxygen Demand

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstract Service Registration Number

NFPA: National Fire Protection Association

IMDG: International Maritime Dangerous Goods Code

LC50: Lethal Concentration, 50%

LD50: Lethal Dose, 50%

NOEL: No Observed Effect Level STEL: Short Term Exposure Limit TOC: Total Organic Carbon

TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

TWA: Time Weighted Average

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

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

Prepared by This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department

(1-215-355-3300).

Material name: KLARAID* PC1212

Version number: 1.5

Page: 7 / 7

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