



SAFETY DATA SHEET

Revision date 2017-03-02

Revision number 1.01

1. IDENTIFICATION

Product identifier

Product name PUR PAC 17

Other means of identification

Product code Polyaluminum Chloride
Synonyms Inorganic metal salt coagulant/flocculant in aqueous solution

Recommended use of the chemical and restrictions on use

Recommended use [RU] No information available
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier PURIFY
1707 Townhurst Dr
Houston, Tx 77043
Hours: Monday-Friday 9:00-5:00 CST (Central Standard Time)

Contact Point sales@purifywt.com

Emergency telephone number

24 Hour Emergency Phone Number Chemtrec (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Physical state liquid	Color colorless to yellow	Appearance No information available	Odor no appreciable odor
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**DANGER****Hazard statements**

Causes severe skin burns and eye damage
May be corrosive to metals

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other information

- May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	weight-%	TRADE SECRET
Trade Secret Ingredient	PROPRIETARY	45 - 55%	*

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First Aid Measures**Eye contact**

Remove contact lenses, if worn. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical advice immediately.

Skin contact

Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Ingestion

Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Most important symptoms and effects, both acute and delayed**Acute effects**

Possible eye, skin, and respiratory tract irritation or burns.

Chronic effects

May aggravate existing skin, eye, and lung conditions. Persons with kidney disorders have an increased risk from exposure based on general information found on aluminum salts.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents. Note: Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE-FIGHTING MEASURES

Extinguishing media**Suitable extinguishing media**

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture**Special Hazard**

May produce hazardous fumes or hazardous decomposition products.

Advice for firefighters**Firefighting measures**

Product is a water solution and nonflammable. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas; avoid breathing mist or spray.

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

Explosion data**Sensitivity to Mechanical Impact**

None.

Sensitivity to Static Discharge

None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear adequate personal protective clothing and equipment. Approved breathing apparatus may be necessary.

Environmental precautions

Environmental precautions

Do not allow liquid to enter streams or waterways.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Build dikes as necessary to contain flow of large spills.

Methods for cleaning up

Clear spills immediately. For small spills, use soda ash to neutralize, an inert material to absorb. Place contaminated materials into containers and store in a safe place to await proper disposal. Caution: Use of soda ash may generate carbon dioxide gas. Provide adequate ventilation to spill area.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Keep container closed when not in use

Keep away from heat and open flame.

Avoid contact with eyes, skin and clothing

Wear chemical splash goggles, gloves, and protective clothing when handling.

Wash thoroughly after handling

Avoid breathing vapor or mist

Use with adequate ventilation and employ respiratory protection where mist or spray may be generated.

FOR INDUSTRIAL USE ONLY.

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in a cool, dry place away from direct heat.

Do not store in unlined metal containers.

Product may slowly corrode iron, brass, copper, aluminum, mild steel, and stainless steel.

Keep container closed when not in use

Incompatible products

Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls

Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Individual protection measures, such as personal protective equipment**Eye/face Protection**

Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

Hand Protection

Appropriate chemical resistant gloves should be worn.

Skin and body protection

Standard work clothing and work shoes.

Respiratory protection

If exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Other personal protection data

Eyewash fountains and safety showers must be easily accessible.

Hygiene measures

Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	liquid
Color	colorless to yellow
Appearance	No information available
Odor	no appreciable odor
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks / Method</u>
pH	0.5 - 2.0	as is
Melting / freezing point	No information available	No information available
Boiling point / boiling range	No information available	No information available
Flash point	Not applicable	No information available
Evaporation rate	No information available	No information available
Flammability (solid, gas)	Not applicable	No information available
Flammability Limit in Air		
Upper flammability limit	Not applicable	No information available
Lower flammability limit	Not applicable	No information available
Vapor pressure	No information available	No information available

Vapor density	No information available	No information available
Specific gravity	1.350 - 1.390	No information available
Solubility (water)	Soluble below pH 4	No information available
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	Not applicable	No information available
Decomposition temperature	No information available	No information available
Kinematic viscosity	No information available	No information available
Dynamic viscosity	< 50 cps	No information available

Other information

Density	11.26 - 11.59 lb/gal
Bulk Density	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
Volatile Organic Compound (VOC) content, wt. %	No information available
Percent Volatile, wt. %	40 - 65 % (Water)

10. STABILITY AND REACTIVITY**Reactivity****Reactivity**

No data available.

Chemical stability**Chemical stability**

Stable.

Possibility of hazardous reactions**Possibility of hazardous reactions**

None under normal processing.

Hazardous polymerization

No.

Conditions to avoid**Conditions to avoid**

None known.

Incompatible materials**Materials to avoid**

Alkalis.

Hazardous decomposition products**Hazardous decomposition products**

Thermal decomposition may release toxic and/or hazardous gases such as aluminum, Cl₂, and HCl.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Eye contact**

Based on pH, this product is expected to cause severe eye irritation, possibly resulting in burns and eye damage. Prolonged exposure to Aluminum salts may cause conjunctivitis.

Skin contact

Prolonged and/or repeated contact will cause severe skin irritation and burns.

Ingestion

Harmful if swallowed. May cause burns of the mouth, throat and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation

Inhalation of mist or spray may irritate respiratory tract and may cause burns and difficulty breathing.

Acute toxicity - Product Information

Oral LD50 No information available

Dermal LD50 No information available

Inhalation LC50 No information available

Acute toxicity - Component Information

Component	weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret Ingredient	45 - 55%	> 2000 mg/kg (Rat)	--	--

Information on toxicological effects**Symptoms**

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Causes severe burns

Serious eye damage/eye irritation

Risk of serious damage to eyes

Sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or

suspected carcinogens by NTP, IARC, ACGIH, or OSHA.

Reproductive toxicity
No information available

Specific target organ toxicity - Single exposure
No information available.

Specific target organ toxicity - Repeated exposure
No information available

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 4086 mg/kg

Other information

Conclusions are drawn from sources other than direct testing.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

Fish No information available

Crustacea No information available

Algae/aquatic plants No information available

Persistence and degradability

Persistence and degradability
No information available

Bioaccumulative potential

Bioaccumulative potential
No information available.

Mobility

Mobility
No information available

Results of PBT and vPvB assessment

PBT and vPvB assessment
No information available

Other adverse effects

Other information

No other ecological studies have been carried out on this product.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Disposal of wastes**

Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulations.

Contaminated packaging

Since empty containers retain product residue, follow label warnings even after container is emptied.

RCRA

Is the unused product a RCRA hazardous waste if discarded? (Yes/No)

Yes

If yes, the EPA Hazardous Waste Code is:

D002 (corrosivity)

14. TRANSPORT INFORMATION

DOT

Regulated

DOT UN/NA Number

UN3264

Proper shipping name

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Polyaluminum Chloride Solution)

Hazard class

8

Packing group

III

ERG Number

154

ICAO/IATA

Regulated

UN number

UN3264

Proper shipping name

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Polyaluminum Chloride Solution)

Hazard class

8

Packing group

III

ERG Code

8L

IMDG

Regulated

UN number

UN3264

Proper shipping name

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Polyaluminum Chloride Solution)

Hazard class

8

Packing group

III

EmS

F-A; S-B

15. REGULATORY INFORMATION

International Inventories**TSCA (United States)**

All ingredients are on the inventory or exempt from listing

Australia (AICS)

All ingredients are on the inventory or exempt from listing

Canada (DSL)

All ingredients are on the inventory or exempt from listing

Canada (NDSL)

None of the ingredients are on the inventory.

China (IECSC)

All ingredients are on the inventory or exempt from listing

EINECS (European Inventory of Existing Chemical Substances)

All ingredients are on the inventory or exempt from listing

ELINCS (European List of Notified Chemical Substances)

None of the ingredients are on the inventory.

ENCS (Japan)

All ingredients are on the inventory or exempt from listing

South Korea (KECL)

All ingredients are on the inventory or exempt from listing

Philippines (PICCS)

All ingredients are on the inventory or exempt from listing

Legend

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- AICS** - Australian Inventory of Chemical Substances
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- IECSC** - China Inventory of Existing Chemical Substances
- EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Polyaluminum Chloride 1327-41-9	
Minnesota Hazardous Substance List	Present
Pennsylvania Right to Know List	Present

16. OTHER INFORMATION

NFPA Rating	Health - 2	Flammability - 0	Instability - 0	Special Hazard - COR
HMIS Rating	Health - 2	Flammability - 0	Physical hazards - 0	Personal protection - B
Product code	Not Applicable			
Revision date	2017-03-02			
Revision number	1.01			

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 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.

End of Safety Data Sheet