

AIKEN CHEMICAL COMPANY, INC.

Safety Data Sheet

All-Purpose Citrus Cleaner

SECTION 1: Identification

1.1 Product identifier

Product name	Citrus Cleaner
Product number	4398PS, 4390P
Brand	Purple Power

1.3 Recommended use of the chemical and restrictions on use

Hard surface cleaner/degreaser

1.4 Supplier's details

Name	Aiken Chemical Company, Inc.
Address	P.O. Box 27147 Greenville, SC 29616 USA
Telephone	864-968-1250
Fax	864-968-1252
email	donnie@clean-rite.com

1.5 Emergency phone number(s) 800-424-9300

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

- Eye damage/irritation Cat. 2A
- Skin corrosion/irritation Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Hazard statement(s)

H315	Causes skin irritation
H319	Causes serious eye irritation

Precautionary statement(s)

P264	Wash hands thoroughly after handling.
P280	Wear eye protection/face protection.
P280	Wear protective gloves.
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.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Silicic acid sodium salt

Concentration 1 - 5 % (weight)
CAS no. 1344-09-8

2. Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-

Concentration 1 - 5 % (weight)
CAS no. 160875-66-1

3. Benzenesulfonic acid, C10-16-alkyl derivs

Concentration 1 - 5 % (weight)
CAS no. 68584-22-5

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician/doctor if necessary. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Show this material safety data sheet to the doctor in attendance.

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact Rinse with plenty of water. Get medical attention if irritation develops and persists.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Personal protective equipment for first-aid responders

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

4.2 Most important symptoms/effects, acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include irritation, burns, and pain. Causes skin irritation and eye irritation. Review section 2 of SDS to see all potential hazards.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

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5.2 Specific hazards arising from the chemical

This material will not burn until the water has evaporated. Residue can burn.

5.3 Special protective actions for fire-fighters

Fire fighters should enter area only if they are protected from all contact with the material. Full protective clothing, including self-contained breathing apparatus, coat, pants, gloves, boots and bands around legs, arms, and waist, should be worn. No skin surfaces should be exposed.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Face shield and/or safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US)

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Distribution, Workplace and Household Settings: No special protective equipment required. Product Manufacturing Plant (needed at Product-Producing Plant ONLY): In case of insufficient ventilation wear suitable respiratory equipment

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Liquid
Odor	Clear liquid with a pleasant orange odor
Odor threshold	No data available.
pH	10.5
Melting point/freezing point	~0°C (~32°F)
Initial boiling point and boiling range	~100°C (~212°F)
Flash point	>93.33°C (>200°F) PMCC
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.002
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information

VOC 0.45% Out Of Total

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

None under normal use conditions.

10.5 Incompatible materials

None under normal use conditions.

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10.6 Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

All data is collected from supplier SDS's or historical data. Aiken Chemical Co. performs no animal testing.

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Oral ID50 (Rat); 3400 mg/kg

D-LIMONENE: d-Limonene has been shown to have low oral toxicity (LD50>2 g/kg) when tested on rats and showed low dermal toxicity (LD50> 5 g/kg) when tested on rabbits. The product may be fatal if swallowed and enters airways. An LC50 is not established. Inhalation may cause irritation of the nose, throat, and respiratory tract. The product is a skin irritant. The product may cause sensitization by skin contact.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: LD50 judged > 500 mg/kg based on deaths at 200 mg/kg (0/6) and 2000 mg/kg (2/3) plus oral LD50 data on surrogate chemicals.

Skin corrosion/irritation

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: LD50 Dermal Rabbit 4640 mg/kg

D-LIMONENE: LD50 Dermal Rabbit not classified.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: LD50 Dermal Rabbit 2764 mg/kg.

Serious eye damage/irritation

Product:

Eye damage/irritation category 2A.

Ingredients:

Sodium Silicate Solution: Eye damage/irritation category 1.

d-Limonene: not classified.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Species: rabbit Result: Risk of serious damage to eyes. Method: OECD Guideline 405.

Respiratory or skin sensitization

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: not classified.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Assessment of sensitization: Based on the structure, there is no suspicion of a skin-sensitizing potential.

Guinea pig maximization test Species: guinea pig Result: Skin sensitizing effects were not observed in animal studies. Method: OECD Guideline 406

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D-Limonene: Skin Sensitizer category 1.

Germ cell mutagenicity

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: No information available

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: No data available.

Carcinogenicity

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: Not classified

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Not classified

Reproductive toxicity

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: Not classified

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Not classified

STOT-single exposure

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: Not classified

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Not classified

STOT-repeated exposure

Product:

Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: Not classified

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Not classified

Aspiration hazard

Product:

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Not classified.

Ingredients:

Sodium Silicate Solution: Not classified

D-LIMONENE: Not classified

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Not classified

SECTION 12: Ecological information

Toxicity

D-LIMONENE: According to the official classification this product may be very toxic to aquatic life. However, due to the physical properties of the product (density and volatility) it will not remain in the environment for an extended period of time. LC50 (fish and daphnia) = 0.1 to 1 mg/L (per REACH dossier)

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: EC50 (48 h) > 10 - 100 mg/l, Daphnia magna Analogous: Assessment derived from products with similar chemical character. EC50 (72 h) > 10 - 100 mg/l, Scenedesmus subspicatus Analogous: Assessment derived from products with similar chemical character.

Persistence and degradability

Product:

Expected to be readily biodegradable.

Ingredients:

Sodium Silicate Solution: Will biodegrade readily

D-LIMONENE: d-Limonene is classified as readily biodegradable.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: ≥ 90 % Biomethane active substance (mod. OECD 303A) Analogous: Assessment derived from products with similar chemical character. > 60 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) Readily biodegradable.

Bioaccumulative potential

Product:

Expected to be bioaccumulative.

Ingredients:

Sodium Silicate Solution: Unlikely

D-LIMONENE: The geometric mean of three predicted BCF for d-limonene is 683, i.e. BCF < 2000 L/kg. Consistently the Log KOW is below 4.5. d-Limonene is not bioaccumulative.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: Accumulation in organisms is not to be expected.

Mobility in soil

Product:

Not enough data.

Ingredient:

D-LIMONENE: Citrus extractive volatilize rapidly. Citrus extractive are expected to volatilize from soil or water to the air and oxidize to carbon dioxide in the presence of sunlight.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: The substance will not evaporate into the atmosphere from the water surface. Absorption to solid soil phase is possible.

Results of PBT and vPvB assessment

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Product:
Not enough data.

Ingredients:

D-LIMONENE: d-Limonene is readily biodegradable, and with a predicted BCF of 683 L/kg. All aquatic EC50/LC50 are higher than 0.1 mg/L, therefore d-limonene should not be considered environmentally toxic (the official classification includes H410 for long lasting effects on the aquatic toxicity and hence, at least for the time being the substance shall be classified as such). d-Limonene is not PBT.

Poly(oxy-1,2-ethanediyl), alpha-(2-propylheptyl)-omega-hydroxy-: No data available.

SECTION 13: Disposal considerations

Disposal of the product

Dispose in accordance with all applicable federal, state, and local regulation. Contact your federal, state, and local authorities for specific rules.

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN Number: Not regulated as dangerous goods.

Class: N/A

Packing Group: N/A

Proper Shipping Name: N/A

Reportable quantity (RQ): N/A

Marine pollutant: N/A

Poison inhalation hazard: N/A

IMDG

UN Number: Not regulated as dangerous goods.

Class:

Packing Group:

EMS Number:

Proper Shipping Name:

IATA

UN Number: Not regulated as dangerous goods.

Class:

Packing Group:

Proper Shipping Name:

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

EPCRA 311-312

Hazard Categories): None

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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15.2 Chemical Safety Assessment

NFPA (National Fire Protection Association)

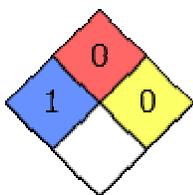
HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

HMIS Rating

Citrus Cleaner	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

NFPA Rating



SECTION 16: Other information

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one

half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

fw = fresh water

mw = marine water

or = occasional release

dw = dry weight

SCBA = Self Contained Breathing Apparatus

Legend

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDHL - Immediately Dangerous to Life or Health concentrations

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TWA - Time Weight Average
STEL - Short Term Exposure Limits
S* - Skin notation
TSCA - Toxic Substance Control Act

16.1 Further information/disclaimer

The information is based on our knowledge to date but does not constitute an assurance of product properties and does not imply a legal contractual relationship. Safety Data Sheet information is based on the individual ingredients Safety Data Sheets provided by the supplier.

16.2 Preparation information

Aiken Chemical Company, Inc.
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