PURPLE POWER, INC.
Safety Data Sheet
All-Purpose Citrus Cleaner

SECTION 1: Identification

1.1 Product identifier

Product name	All-Purpose Citrus Cleaner
Product number	4398PS
Brand	Purple Power

1.3 Recommended use of the chemical and restrictions on use

Hard surface cleaner/degreaser

1.4 Supplier's details

Name	Purple Power, Inc.
Address	P.O. Box 27147 Greenville, SC 29616 USA
Telephone	864-968-1250
Fax	864-968-1252
Email	drayton@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 (C.4.5), Cat. 1
- Skin corrosion/irritation (C.4.4), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram

Signal word **Warning**

Hazard statement(s)

H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Precautionary statement(s)

P260	Do not breathe fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280	Wear eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container in accordance with local regulation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Sodium Silicate Solution

Concentration 1 - 5 % (weight)

- Skin corrosion/irritation (C.4.4), Cat. 2
- Eye damage/irritation (C.4.5), Cat. 1

H315	Causes skin irritation
H318	Causes serious eye damage

2. Chelating Agent

Concentration 1 - 5 % (weight)
CAS no. 67401-50-7

- Corrosive to metals (C.4.29), Cat. 1
- Acute toxicity, inhalation (C.4.3), Cat. 4
- Eye damage/irritation (C.4.5), Cat. 1
- Skin corrosion/irritation (C.4.4), Cat. 2
- Specific target organ toxicity (repeated exposure) (C.4.12), Cat. 2

H290	May be corrosive to metals
H315	Causes skin irritation
H318	Causes serious eye damage
H333	May be harmful if inhaled
H373	May cause damage to organs [organs] through prolonged or repeated exposure [route]

3. Alkyl (C10-16) benzenesulfonic acid

Concentration 1 - 5 % (weight)

- Acute toxicity, dermal (C.4.2), Cat. 4
- Skin corrosion/irritation (C.4.4), Cat. 1
- Eye damage/irritation (C.4.5), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic) (chapter 4.1), Cat. 3
- Hazardous to the aquatic environment, short-term (acute) (chapter 4.1), Cat. 2

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H350	May cause cancer [route]
H411	Toxic to aquatic life with long lasting effects

4. D-LIMONENE

Concentration	1 - 5 % (weight)
EC no.	227-813-5
CAS no.	5989-27-5

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H410	Very toxic to aquatic life with long lasting effects

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.

4.2 Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary
If any symptoms listed above become present and or persist, contact a physician immediately. Treat symptomatically

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical
Based on all ingredients and dilution factors, this product is not expected to have any specific hazards.

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.

Further information
Slipping hazard if product is spilled on the floor.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

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 vapor 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

8.1 Control parameters

1. Chelating Agent (CAS: 67401-50-7)
TLV®: 2 mg/m3; USA (ACGIH)

PEL-C: 2 mg/m3; USA (NIOSH)

PEL-C: 2 mg/m3; USA (OSHA)

8.2 Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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) or EN 166(EU).

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.

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 orange liquid with a pleasant orange odor
Odor threshold	No data available.
pH	9.0 - 10.0
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.

SECTION 10: Stability and reactivity

10.1 Reactivity
Based on all ingredients and dilution factors, this product is expected to have low reactivity with metal.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Based on all ingredients and dilution factors, this product is not expected to have any hazardous reactions.

10.4 Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

10.5 Incompatible materials
Based on all ingredients and dilution factors, this product should be brought in contact with strong oxidizers or bases.

10.6 Hazardous decomposition products

Based on all ingredients and dilution factors, this product is not expected to decompose.

SECTION 11: Toxicological information

Information on toxicological effects

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

Chelating Agent: Oral: LD50, Rat, 3 030 mg/kg Estimated. Skin: LD50, Rabbit, > 5 000 mg/kg Estimated.

Alkyl (C10-16) benzenesulfonic acid: Oral LD50 Rat 500 - 2000 mg/kg Dermal Acute LD50 Rabbit > 2000 mg/kg
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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.

Skin corrosion/irritation
Based on all ingredients and dilution factors, this product may cause skin irritation.

Serious eye damage/irritation
Based on all ingredients and dilution factors, this product is expected to cause eye irritation.

Respiratory or skin sensitization
Based on all ingredients and dilution factors, this product is not expected to cause skin sensitization.

Germ cell mutagenicity
Based on all ingredients and dilution factors, this product is not expected to be a germ cell mutagen.

Chelating Agent: Most data indicate that EDTA and its salts are not mutagenic. Minimal effects reported are likely due to trace metal deficiencies resulting from Chelating by ED

Alkyl (C10-16) benzenesulfonic acid: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
Based on all ingredients and dilution factors, this product is not expected to cause cancer.

Chelating Agent: The trisodium salt of EDTA did not cause cancer in laboratory animals.

Alkyl (C10-16) benzenesulfonic acid: IARC Category 1: Strong inorganic acid mists containing sulfuric acid.
IARC Monographs. Overall Evaluation of Carcinogenicity Not listed.
US. National Toxicology Program (NTP) Report on Carcinogens Not listed.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated.

Reproductive toxicity
Based on all ingredients and dilution factors, this product is not expected to be a reproductive toxin.

Chelating Agent: No relevant data found.

Alkyl (C10-16) benzenesulfonic acid: This product is not expected to cause reproductive or developmental effects

STOT-single exposure
Based on all ingredients and dilution factors, this product is not an STOT-SE Toxicant.

Chelating Agent: Evaluation of available data suggests that this material is not an STOT-SE Toxicant.

STOT-repeated exposure
Based on all ingredients and dilution factors, this product is not expected to be toxic to any specific organ with repeated exposure.

Chelating Agent: Based on information for a similar material: In animals, effects have been reported on the following organs: Respiratory tract.

Aspiration hazard
Based on all ingredients and dilution factors, this product is not expected to be an aspiration hazard.

Chelating Agent: Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

SECTION 12: Ecological information

Toxicity
Chelating Agent: LC50, Pimephales promelas (fathead minnow), 96 Hour, > 100 mg/l
LC50, Lepomis macrochirus (Bluegill sunfish), 96 Hour, 157 - 2,070 mg/l
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Alkyl (C10-16) benzenesulfonic acid: Algae EC50 Algae 47.3 mg/l, 72 hours
Crustacean EC50 Daphnia 2.4 mg/l, 48 hours
Fish LC50 Fish 1.67 mg/l, 96 hours

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)

Persistence and degradability
Based on all ingredients and dilution factors, this product may be readily biodegradable.

Sodium Silicate Solution: Will biodegrade readily

Chelating Agent: Biodegradability: For similar material(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

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

Bio accumulative potential
Based on all ingredients and dilution factors, this product is not expected to be bio-accumulative.

Sodium Silicate Solution: Unlikely

Chelating Agent: Bioaccumulation: For similar material(s): Bio concentration potential is low (BCF < 100 or Log Pow < 3).

Alkyl (C10-16) benzenesulfonic acid: No data available.

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 bio accumulative.

Mobility in soil
Based on all ingredients and dilution factors, this product is not expected to hydrolyze readily.

Chelating Agent: No relevant data found.

Alkyl (C10-16) benzenesulfonic acid: No data available.

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.

Results of PBT and vPvB assessment
Based on all ingredients and dilution factors, this product has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Chelating Agent: This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

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.

SECTION 13: Disposal considerations

Disposal of the product
Dispose in accordance with all applicable federal, state, provincial and local regulation. Contact your federal, state, provincial and local authorities for specific rules.

Disposal of contaminated packaging
Dispose in accordance with all applicable federal, state, provincial and local regulation. Contact your federal, state, provincial and local authorities for specific rules.

SECTION 14: Transport information

DOT (US)
UN Number: Not regulated for transportation.
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
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 302 Components

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

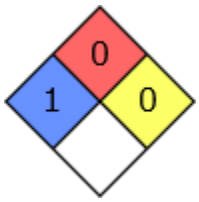
SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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
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

Purple Power, Inc.
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Greenville, SC, 29616
864-968-1250
800-828-1860
864-968-1252 (fax)