SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier
Product Name CITRIKLEEN ASC

Recommended use of the chemical and restrictions on use
Recommended use Degreaser – acidic
Restrictions on use For industrial use only

Supplier details

West Penetone Inc.
11411-160 Street
Edmonton, AB,
T5M3T7
Tel: 780-454-3919

Emergency Telephone Number
Canutec (613)-996-6666

2. HAZARDS IDENTIFICATION

Classification

Flammable liquids	Category 3

Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity – single exposure	Category 3
Aspiration hazard	Category 1

Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, chronic hazard	Category 3

Label Elements

DANGER

Hazard Statements
Flammable liquid and vapor
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of causing cancer
May damage fertility or the unborn child
May cause respiratory irritation
May be fatal if swallowed and enters airways
Harmful to aquatic life
Harmful to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not breathe dusts or mists.
Wash face, hands and any exposed skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth.
IF exposed or concerned: get medical advice/attention.

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
d-limonene	5989-27-5	10-30
diethylene glycol monobutyl ether	112-34-5	10-30
dodecylbenzene sulfonic acid	27176-87-0	1-5
triethanolamine dodecylbenzene sulfonate	27323-41-7	1-5
cocoamide DEA	68603-42-9	1-5
alcohols, C9-C11, ethoxylated	68439-46-3	1-5
poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-	34398-01-1	1-5

4. FIRST AID MEASURES

Eye contact — Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin contact — Wash with plenty of water. If skin irritation or rash occurs, get medical advice/attention. Take off contaminated clothing and wash it before re-use.

Inhalation — If difficulties occur after mist/vapors/spray has been inhaled, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion — Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed

Contact with eyes may cause serious damage leading to discomfort or pain, excess blinking and tear production with marked excess redness and swelling of the conjunctiva, blurred vision, and corneal damage. Contact with skin may cause burns or irritation with local redness and aggravate previous medical skin conditions. Contact may also cause an allergic skin reaction with prolonged or repeated exposure. Inhalation of mist/vapors/spray may cause respiratory tract irritation leading to a temporary burning sensation of the nose and throat, coughing, and difficulty breathing. High concentrations may cause central nervous system depression leading to headaches, dizziness, and nausea. Ingestion may cause irritation or a burning sensation of the mouth and throat and abdominal pain. Ingestion may cause pneumonitis if aspirated into lungs. See Section 2 for delayed effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
None.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed including oxides of carbon, nitrogen, and sulfur and other irritating gases.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions
Avoid discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
Contain and solidify with inert absorbent material. Keep in suitable, closed containers for disposal. Following product recovery, flush the area with plenty of water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling — Avoid contact and inhalation of mist/vapors/spray. Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage — Keep containers tightly closed away from direct sunlight in a well-ventilated place, away from incompatible materials.

Incompatible Materials — Acids, strong oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
d-limonene 5989-27-5	TWA: 30 ppm/165.5 mg/m^3 (AIHA)	Not available	Not available
diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm	Not available	Not available

Appropriate engineering controls

Engineering Controls — Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower should be made available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face Protection — Safety glasses with side shields or goggles. Use a face-shield when there is a high risk of splash.

Skin and body protection — Wear protective gloves and protective clothing.

Respiratory Protection — Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapor/aerosol release.

General Hygiene Considerations — Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :
Clear, orange liquid
ODOR
Citrus
ODOR THRESHOLD :
Not applicable
pH :
1.5-2.5
MELTING POINT / FREEZING POINT :
Approx. 0ºC
BOILING POINT/BOILING RANGE :
Approx. 100ºC
FLASH POINT :
>40ºC (TCC)
EVAPORATION RATE, water = 1 :
1
FLAMMABILITY (SOLID, GAS):
Not applicable
VAPOR PRESSURE, mm Hg AT 20ºC :
Equal to water
VAPOR DENSITY (Air = 1) :
Not available
RELATIVE DENSITY AT 20ºC:
0.950-0.960
SOLUBILITY IN WATER :
Forms stable emulsion
PARTITION COEFFICIENT, N-OCTANOL/WATER :
Not available
AUTO-IGNITION TEMPERATURE :
Not available
DECOMPOSITION TEMPERATURE:
Not available
VISCOSITY:
Not available
FLAMMABLE LIMITS :
UPPER: Not available **LOWER :** Not available

10. STABILITY AND REACTIVITY

Reactivity
Not reactive.

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid
Store away from incompatible materials.

Incompatible Materials
Acids, strong oxidizing agents

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition can lead to release of irritating gases and vapors such as oxides of carbon, nitrogen, and sulfur as well as other low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
ATE_{mix} – LD50 oral – approx. ≥ 4945 mg/kg (rat), LD50 dermal – approx. > 5770 mg/kg (rabbit)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
d-limonene 5989-27-5	4400 mg/kg (rat)	>5000 mg/kg (rabbit)	Not listed
diethylene glycol monobutyl ether 112-34-5	3384 mg/kg (rat)	2700 mg/kg (rabbit)	Not listed
dodecylbenzene sulfonic acid 27176-87-0	500-2000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not listed
triethanolamine dodecylbenzene sulfonate 27323-41-7	500-2000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not listed
cocoamide DEA 68603-42-9	>5000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not listed
alcohols, C9-C11, ethoxylated 68439-46-3	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not listed
poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- 34398-01-1	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	Not listed

Information on likely sources of exposure

Inhalation	May cause respiratory irritation and possible damage.
Serious eye damage/irritation	Causes serious eye damage.
Skin corrosion/irritation	Causes skin irritation or burns and possible sensitization.
Ingestion	May be fatal if swallowed and enters airways.

Delayed and immediate effects and also chronic effects from short and long-term exposure

Respiratory or skin sensitization	d-limonene (CAS 5989-27-5)	1 May cause an allergic skin reaction
Germ cell mutagenicity	No information available.	
Carcinogenicity	Cocoamide DEA (CAS 68603-42-9)	2B Possibly carcinogenic to humans
Reproductive toxicity	Cocoamide DEA (CAS 68603-42-9)	1B May damage fertility or the unborn child
STOT - single exposure	d-limonene (CAS 5989-27-5)	3 May cause respiratory irritation
STOT - repeated exposure	No information available	
Aspiration Hazard	d-limonene (CAS 5989-27-5)	1 May be fatal if swallowed and enters airways

Symptoms related to the physical, chemical and toxicological characteristics
See Section 2 & 4.

12. ECOLOGICAL INFORMATION

Ecotoxicity
If available, ecotoxicity values of individual components are shown below.

Chemical Name	Fish	Waterflea	Algae
d-limonene 5989-27-5	0.702 mg/L: 96 h fathead minnow LC50	69.6 mg/L: 48 h daphnia pulex EC50	Not available
diethylene glycol monobutyl ether 112-34-5	1300 mg/L: 96 h lepomis macrochirus LC50	Not available	>100 mg/L: 96 h desmodesmus subspicatus EC50
dodecylbenzene sulfonic acid 27176-87-0	1.67 mg/L: 96 h LC50	2.4 mg/L: 48 h EC50	47.3 mg/L: 72 h EC50
triethanolamine dodecylbenzene sulfonate 27323-41-7	6 mg/L: 96 h LC50	6.9 mg/L: 48 h Daphnia magna EC50	50-100 mg/L: 72 h EC50
cocoamide DEA 68603-42-9	<10 mg/L: 96 h LC50	<10 mg/L: 48 h LC50	<10 mg/L: 72 h LC50
alcohols, C9-C11, ethoxylated 68439-46-3	5-10 mg/L: 96 h LC50	5-10 mg/L: 48 h EC50	10-100 mg/L: 72 h EC50
poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- 34398-01-1	5-10 mg/L: 96 h LC50	5-10 mg/L: 48 h EC50	10-100 mg/L: 72 h EC50

Persistence and degradability
Expected to be readily biodegradable.

Bioaccumulative potential
Accumulation in organisms is not to be expected.

Mobility in soil
No information available

Other adverse effects
Do not release untreated into natural waters. No other adverse environmental effects are expected.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

TDG classification

UN 2924, Flammable Liquid, Corrosive, N.O.S. (d-limonene, sulfonic acid solution), Class 3 (8), PG III

15. REGULATORY INFORMATION

All ingredients are listed on the DSL

16. OTHER INFORMATION

Preparation Date	9 May, 2017
Revision Date	9 November, 2017
Revision Note	Update to Section 2 - Skin corrosion/irritation classification

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS