

Astro-Clean

SECTION 1. IDENTIFICATION

Product Identifier	Astro-Clean
Other Means of Identification	Citrus-Based Heavy-Duty Cleaner
Recommended Use	Multipurpose carwash cleaner which can be sprayed or applied manually.
Restrictions on Use	None known.
Manufacturer / Supplier	Transchem Inc., 1225 Franklin Blvd, Cambridge, ON, N1R 7E5, 1-800-265-9100, www.transchem.com
Emergency Phone No.	CANUTEC (Canada), 613-996-6666, 24 Hours INFOTRAC (U.S.), 1-800-535-5053, 24 Hours
SDS No.	Ver. 2 (October 20, 2017)
Date of Preparation	May 04, 2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 1

GHS Label Elements



Signal Word:

Danger

Hazard Statement(s):

H315 Causes skin irritation.

H318 Causes serious eye damage.

Prevention:

P264 Wash hands and skin thoroughly after handling.

P280 Wear protective gloves.

P280 Wear eye protection/face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE/doctor.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Surfactant Blend	Proprietary	14-20	N/A
Sodium hydroxide	1310-73-2	2-3	Caustic soda

Product Identifier: Astro-Clean

SDS No.: Ver. 2 (October 20, 2017)

Date of Preparation: May 04, 2015

d-Limonene	5989-27-5	2-3	N/A
Tetrasodium EDTA	64-02-8	1-5	Ethylenediaminetetraacetic acid
Sodium Metasilicate	6834-92-0	1-3	N/A

Notes

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Get medical advice/attention if you feel unwell or are concerned.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. If skin irritation occurs get medical advice/attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Continue flushing for at least 15 minutes. Immediately call a Poison Centre or doctor.

Ingestion

Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Drink one glass of water. Immediately call a Poison Centre or doctor.

Most Important Symptoms and Effects, Acute and Delayed

If on skin: may cause moderate to severe irritation. Repeated or prolonged exposure can irritate the skin. Symptoms include pain, redness, and swelling. If in eyes: may cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin.

Special Instructions

Rinse affected area (skin, eyes) thoroughly with water.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Does not burn.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Concentrated product: it is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Small spills or leaks: contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

Large spills or leaks: dike spilled product to prevent runoff. Contact emergency services and manufacturer/supplier for advice. Review Section 13 (Disposal Considerations) of this safety data sheet.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. See Section 13 (Disposal Considerations) of this safety data sheet.

Conditions for Safe Storage

Comply with all applicable health and safety regulations, fire and building codes. Store in an area that is: separate from incompatible materials (see Section 10: Stability and Reactivity). Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Sodium hydroxide		2 mg/m ³ C	2 mg/m ³			

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: polyvinyl chloride, neoprene rubber, latex rubber.

Respiratory Protection

Not normally required if product is used as directed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear liquid.
Odour	Lemon
Odour Threshold	Not available
pH	12.9 - 13.7
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not applicable

Product Identifier: Astro-Clean

SDS No.: Ver. 2 (October 20, 2017)

Date of Preparation: May 04, 2015

Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.07
Solubility	Soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Incompatible materials.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Corrosive, oxidizing nitrogen oxides; very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Tetrasodium EDTA	> 1-5 mg/L (rat) (4-hour exposure)	1780 mg/kg (rat)	
Sodium Metasilicate		1153 mg/kg (rat)	
Sodium hydroxide		500 mg/kg (rabbit)	1350 mg/kg (rabbit)
d-Limonene		4400 mg/kg (rat)	> 5000 mg/kg (rabbit)

Skin Corrosion/Irritation

Human experience shows moderate or severe irritation. Symptoms include pain, redness, and swelling.

Serious Eye Damage/Irritation

May irritate or burn the eyes. Permanent damage including blindness may result.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Can cause nose, throat and respiratory tract irritation, coughing and headache.

Ingestion

Product is harmful if swallowed. May cause irritation of the mouth, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Prolonged or repeated exposure can cause drying, defatting, and dermatitis.

Respiratory and/or Skin Sensitization

Product Identifier: Astro-Clean
 SDS No.: Ver. 2 (October 20, 2017)
 Date of Preparation: May 04, 2015

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
d-Limonene	Group 3			

Contains 2-butoxyethanol. (2-butoxyethanol) IARC: Group 3 – Not classifiable as to its carcinogenicity to humans. ACGIH®: A3 – Confirmed animal carcinogen.

Reproductive Toxicity

Development of Offspring

No indication from ingredients.

Sexual Function and Fertility

No indication from ingredients.

Effects on or via Lactation

No indication from ingredients.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

All components of this product are biodegradable by Regulation (EC) No 648/2004.

Toxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Tetrasodium EDTA	34-62 mg/L (Lepomis macrochirus (bluegill); 96-hour; static)	113 mg/L (Daphnia magna (water flea); 48-hour; static)		
Sodium Metasilicate	210 mg/L (96-hour)	216 mg/L (96-hour)		
Sodium hydroxide	45.4 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; static)	100 mg/L (Daphnia magna (water flea); 48-hour)		
d-Limonene	0.619-0.796 mg/L (Pimephales promelas (fathead minnow); 96-hour; flow-through)	28.2 mg/L (Daphnia magna (water flea); 48-hour; flow-through)		

Persistence and Degradability

(Tetrasodium EDTA) By using samples from a river, a ditch and a lake as inocula in the closed bottle test, a biodegradation between 60 and 83% was obtained after 49 days at pH 6.5, whereas between 53 and 72% were obtained after 28 days at pH 8.0.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Review federal, state/provincial, and local government requirements prior to disposal.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations.

Product Identifier: Astro-Clean
SDS No.: Ver. 2 (October 20, 2017)
Date of Preparation: May 04, 2015

Special Precautions for User Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are commercially available and presumed to be listed by manufacturer.

Additional USA Regulatory Lists

California Proposition 65: No listed substances are known to be present.

New Jersey Right To Know: Sodium Hydroxide (CAS: 1310-73-2); Dipentene (CAS: 138-86-3); 2-butoxyethanol (CAS: 111-76-2).

SARA Title III - Section 313: 2-butoxyethanol (CAS: 111-76-2).

SECTION 16. OTHER INFORMATION

NFPA Rating	Health - 2	Flammability - 0	Instability - 0
SDS Prepared By	Technical Group		
Date of Preparation	May 04, 2015		
Revision Indicators	The following SDS content was changed on October 20, 2017: SECTION 1. IDENTIFICATION; Other Means of Identification. SECTION 2. HAZARDS IDENTIFICATION; GHS Classification; GHS Label Elements. SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS; Ingredient Information. SECTION 5. FIRE-FIGHTING MEASURES; Special Protective Equipment and Precautions for Fire-fighters. SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES; pH. SECTION 11. TOXICOLOGICAL INFORMATION; LC50/LD50 values; Skin Corrosion/Irritation; Serious Eye Damage/Irritation; Ingestion; Carcinogenicity. SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity. SECTION 15. REGULATORY INFORMATION; Toxic Substances Control Act (TSCA) Section 8(b).		
Disclaimer	The information contained here in has been compiled from sources believed to be reliable and is accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Recipient assumes all responsibility for the use of this information and the use, storage, or disposal of the product, including any resultant personal injury or property damage.		

Product Identifier: Astro-Clean
SDS No.: Ver. 2 (October 20, 2017)
Date of Preparation: May 04, 2015

Page 06 of 06