SAFETY DATA SHEET



A-456 II DISINFECTANT CLEANER

Section 1. Chemical product and company identification

Product name	: A-456 II DISINFECTANT CLEANER		
Recommended use and restrictions	: Cleaner and disinfectant	: Cleaner and disinfectant	
	Use only for the purpose on the pro	duct label.	
Product dilution information	: Not applicable		
Supplier's information	: Ecolab Inc. Institutional Division 370 N. Wabasha Street St. Paul, MN 55102 1-800-352-5326		
Code	: 903964-01		
Date of issue	: 02 Oct 2013	: 02 Oct 2013	
EPA Registration No.	: 6836-78-1677		
	EMERGENCY HEALTH INFORMATION: 1-800-328-0026 Outside United States and Canada CALL 1-651-222-5352 (in USA)		
Section 2. Hazards identification			
Pro	oduct AS SOLD	Product AT USE DILUTION	
GHS Classification : FL	AMMABLE LIQUIDS - Category 4	Data not available - Refer to Product AS	

	Product AS SOLD Pro	oduct AT USE DILUTION
GHS Classification	· · · · · · · · · · · · · · · · · · ·	ita not available - Refer to Product AS DLD
GHS label elements		
Signal word	: Danger	
Symbol		
Hazard statements	: Combustible liquid. Harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage.	
Precautionary statem	<u>ients</u>	
Prevention Response	 Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from flames and hot surfaces No smoking. Wash hands thoroughly after handling. : 	

Section 2. Hazards identification

	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. 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 physician.	
Storage	: Store in a well-ventilated place. Keep cool.	
Disposal	: See section 13 for waste disposal information.	
Other hazards	: None known.	

Section 3. Composition/information on ingredients

: Mixture

Product AS SOLD Hazardous ingredients	Concentration Range (%)	CAS number
Alkyl (C14, 50%; C12, 40%; C16, 10%) dimethyl benzyl ammonium chloride.	8.680	68424-85-1
Octyl decyl dimethyl ammonium chloride Didecyl dimethyl ammonium chloride	6.510 3.906	32426-11-2 7173-51-5
Dioctyl dimethyl ammonium chloride	2.604	5538-94-3
Product AT USE DILUTION		
Hazardous ingredients	Concentration Range (%)	CAS number
Data not available - Refer to Product AS SOLD		

Section 4. First aid measures

Substance/mixture

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.	Data not available - Refer to Product AS SOLD
Skin contact	: Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.	
Ingestion	:	

Section 4. First aid measures

Get medical attention immediately. Rinse mouth. Do not induce vomiting.

Protection of firstaiders
No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Notes to physician
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The

exposed person may need to be kept under medical surveillance for 48 hours.

See toxicological information (section 11)

Section 5. Fire-fighting measures

Product AS SOLD	
Suitable fire extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Specific hazards arising from the chemical	: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Specific fire-fighting methods	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Eliminate all ignition sources. Use personal protective equipment as required. Do not touch or walk through spilled material.	Data not available - Refer to Product AS SOLD
Environmental precautions	: Avoid contact of spilled material and runoff with soil and surface waterways.	
Methods for cleaning up	: Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/ neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. If emergency personnel are not present, contain and collect small spillages with non-combustible absorbent material, e.g. sand, earth or other suitable material and place in a suitable container for disposal. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.	

Section 7. Handling and storage

	Product AS SOLD	Pr
Handling	: Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Use only with adequate ventilation. Wash thoroughly after handling.	Da St
Storage	 Keep out of reach of children. Keep container tightly closed. Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame). Store in a segregated and approved area. Store between the following temperatures: 0 and 50°C 	

Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name		Exposure limits
ALCOHOL		ACGIH TLV (United States, 3/2012). STEL: 1000 ppm 15 minutes. OSHA PEL (United States, 6/2010). TWA: 1900 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours.
Appropriate engineering controls	 Product AS SOLD Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to kee worker exposure to airborne contaminants be any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Provide suitable facilities for quick drenching or flushing of the eyes and bo in case of contact or splash hazard. 	ep low
Personal protection	·	
Eye protection	: Use chemical splash goggles. For continued of severe exposure wear a face shield over the goggles.	Dr
Hand protection	: Use chemical-resistant, impervious gloves.	
Skin protection	: Use synthetic apron, other protective equipme as necessary to prevent skin contact.	ent
Respiratory protection	: A respirator is not needed under normal and intended conditions of product use.	
Hygiene measures	: Wash hands, forearms and face thoroughly at smoking and using the lavatory and at the end should be used to remove potentially contamin before reusing.	of the working period. Appropriate techniques

Section 9. Physical and chemical properties

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Liquid.	Data not available - Refer to Product AS SOLD
Color	: Purple [Dark]	
Odor	: disinfectant	
рН	: 12 to 13.5(100%)	
Flash point	: 58 °C (Closed cup)	
Explosion limits	Not available.	
Flammability (solid, gas)	Not available.	
Melting point	: Not available.	
Boiling point	: Not available.	
Evaporation rate (butyl acetate = 1)	: Not available.	
Vapor pressure	: Not available.	
Vapor density	: Not available.	
Relative density	: 0.99 to 1.01 (Water = 1)	
Solubility	: Not available.	
Partition coefficient: n-octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Odor threshold	: Not available.	

Section 10. Stability and reactivity

: Not available.

Viscosity

Product AS SOLD	
Stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Slightly reactive or incompatible with the following materials: acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure : Skin contact, Eye contact, Inhalation, Ingestion

Section 11. Toxicological information

	Product AS SOLD	Product AT USE DILUTION
Symptoms		
Eye contact	: Adverse symptoms may include the following: pain watering redness	Data not available - Refer to Product AS SOLD
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Inhalation	: Adverse symptoms may include the following: coughing Respiratory tract irritation	
Ingestion	: Adverse symptoms may include the following: stomach pains	
Acute toxicity		
Eye contact	: Causes serious eye damage.	
Skin contact	: Causes severe burns. Harmful in contact with skin.	
Inhalation	: May cause respiratory irritation.	
Ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.	
Toxicity data		

Product/ingredient name

i readering balent name			
quaternary ammonium compounds, benzyl- c12-c16-alkyldimethyl, chlorides	LD50 Dermal	Rabbit	3340 mg/kg
	LD50 Oral	Rat	344 mg/kg
1-decanaminium, n,n-dimethyl-n-octyl-,	LC50 Inhalation	Rat	0.07 mg/l
chloride	Dusts and mists		-
	LD50 Dermal	Rabbit	2930 mg/kg
	LD50 Oral	Rat	238 mg/kg
alcohols, c9-11, ethoxylated	LD50 Dermal	Rat	>5000 mg/kg
	LD50 Oral	Rat	1400 mg/kg
ethanol	LC50 Inhalation	Rat	117 mg/l
	Vapor		
	LD50 Dermal	Rabbit	15800 mg/kg
	LD50 Oral	Rat	10470 mg/kg
didecyldimethylammonium chloride	LC50 Inhalation	Rat	0.07 mg/l
	Dusts and mists		"
	LD50 Dermal	Rabbit	2930 mg/kg
	LD50 Oral	Rat	1150 mg/kg
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	LD50 Oral	Rat	1700 mg/kg
1-octanaminium, n,n-dimethyl-n-octyl-,	LC50 Inhalation	Rat	0.07 mg/l
chloride	Dusts and mists		
	LD50 Dermal	Rabbit	2930 mg/kg
	LD50 Oral	Rat	238 mg/kg
Chronic toxicity			
	ionificant offects or	aritiaal b	amarda

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.

: No known significant effects or critical hazards. **Fertility effects** Section 12. Ecological information **Product AS SOLD Ecotoxicity** : Water polluting material. May be harmful to the environment if released in large quantities. This material is very toxic to aquatic life. Aquatic and terrestrial toxicity Product/ingredient name Result **Species** Exposure Not available. Other adverse effects : No known significant effects or critical hazards. Section 13. Disposal considerations

	Product AS SOLD	Product AT USE DILUTION
Disposal methods	: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.	Data not available - Refer to Product AS SOLD
RCRA classification	: Unused product is D002 (Corrosive) Unused product is D001 (Ignitable)	

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT	
DOT Classification	Not regulated.
IMO/IMDG	
IMO/IMDG Classification	UN1993
IMO/IMDG Proper shipping name	Flammable liquid, n.o.s. (Ethanol)
Class	3
Packing group	Ш
For transmort in bull, and abination	decumente for enceifie transportatio

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION	
Not intended for transport.	

Section 15. Regulatory information

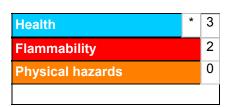
Product AS SOLD

U.S. Federal regulations			
TSCA 8(b) inventory	: All components are listed or exempted.		
EPA Registration No.	: 6836-78-1677		
SARA 302/304/311/312 ext	emely hazardous substances: No listed substance		
SARA 302/304 emergency	planning and notification: No listed substance		
<u>SARA 313</u>	Product name	<u>CAS number</u>	Concentration
Form R - Reporting requirements	: No listed substance		
<u>California Prop. 65</u>	: No listed substance		

Section 16. Other information

Product AS SOLD

Hazardous Material Information System (U.S.A.)



3

National Fire Protection Association (U.S.A.)



:

Date of issue	: 02 Oct 2013
Prepared by	: Regulatory Affairs
	1-800-352-5326

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.