SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP LUSTER WASH 55GL

Material number : 000000000000057685

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : 404-352-1680

Emergency telephone numbers		
For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency	:	CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Transportation Wash

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	colourless
Odour	mild

GHS Classification

Skin corrosion : Category 1
Serious eye damage : Category 1
Specific target organ toxicity - repeated exposure (Inhalation) : Category 2

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
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.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 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/doctor.
P314 Get medical advice/ attention if you feel unwell.
P363 Wash contaminated clothing before reuse.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
2-aminoethanol	141-43-5	>= 10 - < 30
tetrasodium ethylenediaminetetraacetate	64-02-8	>= 5 - < 10
2-butoxyethanol	111-76-2	>= 5 - < 10
sodium xylenesulphonate	1300-72-7	>= 5 - < 10
4-Nonylphenol branched, ethoxylated	127087-87-0	>= 1 - < 5
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 5
sodium hydroxide	1310-73-2	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

		Wash off immediately with plenty of water for at least 15 minutes. If on clothes, remove clothes. Wash contaminated clothing before re-use. If symptoms persist, call a physician.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If in eyes, rinse with water for 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain. Effects are dependent on exposure (dose, concentration, contact time). Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure if inhaled. Review section 2 of SDS to see all potential hazards.
Notes to physician	:	Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Immediately evacuate personnel to safe areas.
Ensure adequate ventilation.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Oxidizing agents
Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-aminoethanol	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL

		ST	6 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 6 mg/m3	OSHA Z-1
		STEL	6 ppm 15 mg/m3	OSHA P0
		TWA	3 ppm 8 mg/m3	OSHA P0
		PEL	3 ppm 8 mg/m3	CAL PEL
		STEL	6 ppm 15 mg/m3	CAL PEL
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		PEL	20 ppm 97 mg/m3	CAL PEL
sodium hydroxide	1310-73-2	C	2 mg/m3	ACGIH
		C	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z-1
		C	2 mg/m3	OSHA P0
		C	2 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200.mg/g Creatinine	ACGIH BEI

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection
Material : Protective gloves
Remarks : Impervious gloves The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Ensure that eyewash stations and safety showers are close to the workstation location.
Face-shield

		Safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	colourless
Odour	:	mild
Odour Threshold	:	No data available
pH	:	13.5 - 14
Melting point/freezing point	:	No data available
Boiling point	:	104.44 °C
Flash point	:	does not flash
Evaporation rate	:	1
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	not determined
Relative vapour density	:	No data available
Density	:	1.09 g/cm3
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	not determined
Thermal decomposition	:	No data available
Viscosity		
Viscosity, kinematic	:	10.5 mm2/s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	No data available
Incompatible materials	:	Oxidizing agents Acids
Hazardous decomposition products	:	Carbon dioxide (CO2) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	:	None known.
Symptoms of Overexposure	:	Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. Symptoms may differ depending on organs and systems affected. These effects generally are reflected in reduced function or change, which may include cramping, swelling, respiratory issues, and general pain. Effects are dependent on exposure (dose, concentration, contact time).

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	Confirmed animal carcinogen with unknown relevance to humans 2-butoxyethanol 111-76-2
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate : 3,317 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate : 60.36 mg/l Exposure time: 4 h

Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

2-aminoethanol:
Acute oral toxicity : LD50 Oral Mouse: 700 mg/kg

LD50 Oral Rat: 1,515 mg/kg

Acute inhalation toxicity : LC50 Mouse: > 1.21 mg/l

2-butoxyethanol:
Acute oral toxicity : LD50 Oral Rat: 880 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: 1,060 mg/kg

4-Nonylphenol branched, ethoxylated:
Acute oral toxicity : LD50 Oral Rat: 16,000 mg/kg

Acute dermal toxicity : LD50 Rabbit: 2,573 mg/kg

Alcohols, C9-11, ethoxylated:
Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

sodium hydroxide:
Acute dermal toxicity : Acute toxicity estimate Rabbit: 1,350 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

Components:

tetrasodium ethylenediaminetetraacetate:
Exposure routes: Inhalation
Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
sodium hydroxide :

Toxicity to fish	:	LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l Exposure time: 96 h Test Method: static test LC50 (Oncorhynchus tshawytscha (chinook salmon)): 152 mg/l Exposure time: 96 h LC50 (Oncorhynchus mykiss (rainbow trout)): 40 mg/l Exposure time: 48 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 34 - 47 mg/l Exposure time: 48 h EC50 (Crangon crangon (shrimp)): 33 - 100 mg/l Exposure time: 48 h

Persistence and degradability

No data available
Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Components:
2-aminoethanol :

Partition coefficient: n-octanol/water : log Pow: -1.31

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

Components:
sodium hydroxide :

Additional ecological information : Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IMDG (Vessel):

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Cargo Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Passenger Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: TDG (Canada):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

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

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
2-butoxyethanol 111-76-2 6.2483 %

California Prop. 65

WARNING: This product can expose you to chemicals including 2,2'-iminodiethanol, ethylbenzene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

DSL	All components of this product are on the Canadian DSL
TSCA	On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

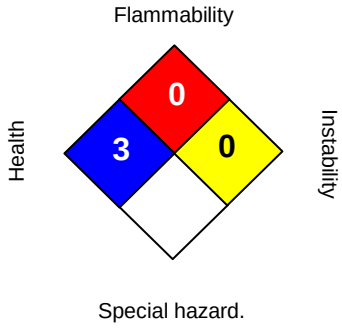
Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms :

Signal word : **Danger:**

Hazard statements : Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements :

Prevention: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. 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/doctor. Get medical advice/ attention if you feel unwell. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

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