



Defunkify Liquid Laundry Detergent

SAFETY DATA SHEET

1. SECTION 1: CHEMICAL/MIXTURE IDENTIFICATION

- 1.1 Product identifier**
Product Name Defunkify Liquid Laundry Detergent, Defunkify Liquid Laundry Detergent – Fresh Air Scent, Defunkify Liquid Laundry Detergent – Free and Clear.
CAS No. Mixture
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified use(s) Laundry Detergent
Uses advised against None known.
- 1.3 Details of the supplier of the product**
Company Identification Dune Sciences, Inc.
350 W. 5th Ave.
Eugene, OR 97401
(541) 359-1959
Telephone
E-Mail Info@defunkify.com
- 1.4** Emergency telephone number (800) 424-9300 [CHEMTREC]

2. SECTION 2: HAZARDS IDENTIFICATION

"Consumer Products", defined by the US Consumer Product Safety Act and are used as intended (typical consumer duration and frequency), are exempt from the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS is being provided to assist in the safe handling and proper use of the product.

2.1 Classification of the substance or mixture

GHS 29 CFR 1910.1200

2.2 Label elements

Hazard pictogram(s)



Signal word(s)

Hazard statement(s)

Warning

H302 – Harmful if swallowed – Category 4

H315 – Causes skin irritation – Category 2

H319 – Causes serious eye irritation – Category 2A

H402 – Harmful to aquatic life, acute – Category 3

H412 – Harmful to aquatic life, long-term – Category 3

Precautionary statement(s)

PREVENTION: Wear gloves/protective clothing and eye/face protection during use. Wash skin thoroughly after handling. Do not eat, drink, or smoke while using this product. Avoid release into the environment.

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

rinsing. If eye irritation persists: Get medical attention.
 IF SWALLOWED: Drink plenty of water. Call poison control if person feels unwell.
 IF ON SKIN: Take off contaminated clothing. Rinse with plenty of water. If skin irritation occurs, get medical attention.

2.3 Other hazards None.

2.4 Additional Information None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

29CFR 1910.1200

Ingredient(s)	%W/W	CAS No.
Decyl glucoside	>=8 - <20	68515-73-1
Sodium C14-16 olefin sulfonate	>=5 - <10	68439-57-6
Lauryl glucoside	>=5 - <10	110615-47-9
Enzyme blend	>=1- <5	Confidential Business Information
Potassium hydroxide	>= 0.5 - <2	1310-58-3
Ethanol	>=0.5 - <2	64-17-5

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Remove person to fresh air. If symptoms persist, get medical attention.

Skin Contact

Take off contaminated clothing. Rinse with plenty of water. If skin irritation develops, get medical attention.

Eye Contact

Flush eyes with water for several minutes while holding eyelids open. Remove contact lenses if present and easy to do. If eye irritation develops, get medical attention.

Ingestion

Give plenty of water to drink. Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

Water spray, foam, dry powder or CO2.

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

None anticipated. Not flammable or combustible.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Caution - spillages may be slippery. Ensure adequate ventilation. Wear personal protective equipment.

6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth, vermiculite or any suitable adsorbent material; collect in container for disposal according to local / national regulations.

7. SECTION 7: HANDLING AND STORAGE

General hygiene measures for the handling of chemicals are applicable.

7.1 Precautions for safe handling	Wear suitable personal protective equipment. Wash hands and exposed skin after use. Do not eat, drink or smoke when using this product.
7.2 Conditions for safe storage, including any incompatibilities	Keep in a cool, well ventilated place.
Storage Temperature	Ambient.
Storage Life	Stable under normal conditions.
Incompatible materials	None know.
7.3 Specific end use(s)	Laundry detergent.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

ACGIH (TLV), NIOSH (REL), and OSHA (PEL) exposure limits have not been established for this product or reportable ingredients.

8.1.2 Biological limit value	Not established.
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8.1.3 PNECs and DNELs	Not established.
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8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation.

8.2.2 Personal protection equipment

Eye/face protection	Wear protective eye glasses for protection against liquid splashes.
Skin protection (Hand protection/ Other)	Wear suitable gloves if prolonged skin contact is likely. Wear impervious gloves (EN374).
Respiratory protection	Normally no personal respiratory protection is necessary.

Thermal hazards	Not applicable.
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8.2.3 Environmental Exposure Controls

Do not release large quantities into the surface water or into drains.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Semi-viscous liquid.
Color	Clear, may be discolored slightly.
Odor	Un-scented.
Odor Threshold	Not established.
pH	7-9.
Melting Point/Freezing Point	Not applicable.
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	Not applicable.
Relative density	No information available.
Solubility	Soluble in water.
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.

	Viscosity	No information available.
	Explosive properties	Not explosive.
	Oxidising properties	Not oxidising.
9.2	Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal conditions.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4	Conditions to avoid	None anticipated.
10.5	Incompatible materials	None in particular.
10.6	Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Chemical name	CAS	Oral LD50	Dermal LD50	Inhalation LC50 (rat)
Decyl glucoside	68515-73-1	> 5,000 mg/kg (rat)	> 2,000 mg/kg (rabbit)	No data
Sodium C14-16 olefin sulfonate	68439-57-6	> 2,000 mg/kg (rat)	> 2,000 mg/kg (rabbit)	No data
Lauryl glucoside	110615-47-9	> 5,000 mg/kg (rat)	> 5,000 mg/kg (rabbit)	No data
Enzyme blend	CBI	1,800 mg/kg (rat)	No data	No data
Potassium hydroxide	1310-58-3	365 mg/kg (rat)	No data	No data
Ethanol	64-17-5	8,370 mg/kg (rat)	17,193 mg/kg (rabbit)	135.7 mg/L

	Acute toxicity	Harmful if swallowed.
	Irritation	Irritating to skin and eyes.
	Corrosivity	Irritating to skin. Causes serious eye irritation.
	Sensitisation	Irritating to skin.
	Repeated dose toxicity	None anticipated.
	Carcinogenicity	No evidence of carcinogenicity.
	Mutagenicity	No evidence of mutagenic potential.
	Toxicity for reproduction	None anticipated.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ingredient(s)	CAS No.	Fish (LC50, 96h)	Daphnia magna (EC50, 48h)
Decyl glucoside	68515-73-1	> 100 mg/L	> 100 mg/L
Sodium C14-16 olefin sulfonate	68439-57-6	2.6 mg/L	4.48 mg/L
Lauryl glucoside	110615-47-9	1-10 mg/L	10-100 mg/L
Enzyme blend	CBI	58.3-326.7 mg/L	31.7-457 mg/L
Potassium hydroxide	1310-58-3	80 mg/L	60 mg/L

12.2	Persistence and degradability	No information available.
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	No information available.
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Use appropriate tools to put the spilled substance in a convenient waste disposal container. Finish cleaning by spreading soap and water on the contaminated surface.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous for transport.

14.1	UN number	Not applicable.
14.2	UN Proper Shipping Name	Not applicable.
14.3	Transport hazard class(es)	Not applicable.
14.4	Packing Group	Not applicable.
14.5	Environmental hazards	Not applicable.
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.2	GHS	Created in accordance with the OSHA's implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
15.3	US EPA	TSCA: All ingredients are on the TSCA inventory.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16

LEGEND

DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

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Annex to the extended Safety Data Sheet (eSDS)

No information available.