



Defunkify Dish Washing Detergent – Free & Clear

SAFETY DATA SHEET

1. SECTION 1: CHEMICAL/MIXTURE IDENTIFICATION

- 1.1 Product identifier**
Product Name Defunkify Dish Washing Detergent – Free & Clear
CAS No. Mixture.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified use(s) Dish washing 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
Telephone (541) 359-1959
E-mail
- 1.4** Emergency telephone number (800) 424-9300 [CHEMTREC]
Emergency Phone No.
- 1.5** Contact E-mail Info@defunkify.com

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) None.
Signal word(s) **Warning**
Hazard statement(s) H316 – Skin Corrosion/Irritation – Category 3
H320 – Serious Eye Damage/Irritation – Category 2B
Precautionary statement(s) IF IN EYES: Rinse with water for several minutes. Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes. If eye irritation persists: get medical advice/attention.
IF SWALLOWED: Drink plenty of water. Do NOT induce vomiting. Call a poison center or doctor if you feel unwell.

IF ON SKIN: Rinse with plenty of water. If skin irritation occurs: get medical advice/attention.

IF INHALED: N/A

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.
Sodium citrate	20 - 30	6132-4-3
Sodium carbonate	15 - 25	497-19-8
Sodium percarbonate	10 - 20	15630-89-4
Potassium carbonate	2 - 10	584-08-07
Sodium sulfate	2 - 10	7757-82-6
Sodium gluconate	2 - 10	527-07-1
Sodium silicate (hydrous)	2 - 10	1344-09-08
Protease enzyme	1 - 3	9001-92-7
Carboxymethyl inulin (CMI)	1 - 3	430439-54-6
Tetrasodium glutamate diacetate (GLDA)	1 - 3	51981-21-6
Sodium C14-C16 olefin sulfonate	1 - 3	68439-57-6
Lauryl/myristyl glucoside	1 - 3	110615-47-9
Sorbitan laurate	0.5 - 1.5	1338-39-2
Amylase enzyme	0.1 - 1.0	9000-90-2
Tetraacetythylenediamine (TAED)	0.1 - 1.0	10543-57-4

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

N/A

Skin Contact

Rinse with plenty of water. If skin irritation occurs: get medical advice/attention.

Eye Contact

Rinse with water for several minutes. Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes. If eye irritation persists: get medical advice/attention.

Ingestion

Drink plenty of water. Do NOT induce vomiting. Call a poison center or doctor if you feel unwell.

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.

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	
Household Handling	Small spills and leaks may be cleaned up and disposed of in household trash or diluted and disposed of down drain.
Industrial Handling	Stop spill at source and contain material. Adsorb spillages onto sand, earth or any suitable adsorbent material. Dispose of liquid and adsorbent material in accordance with all applicable local, state, and federal regulations. Small amounts may be flushed to a sewer.
6.4 Reference to other sections	See Also Section: 8, 13.

7. SECTION 7: HANDLING AND STORAGE

General hygiene measures for the handling of chemicals are applicable.

7.1 Precautions for safe handling	
Household Handling	Use as directed on product label. Wash hands and exposed skin after use. Do not eat, drink or smoke when using this product.
Industrial Handling	Wear suitable personal protective equipment. Wash hands and exposed skin after use.
7.2 Conditions for safe storage, including any incompatibilities	KEEP OUT OF REACH OF CHILDREN AND PETS. Store in original container in a cool, dry location and keep container closed after use.
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	Not established.
8.1.2 Biological limit value	Not established.
8.1.3 PNECs and DNELs	Not established.
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.
Respiratory protection	Wear impervious gloves (EN374). Normally no personal respiratory protection is necessary.
Thermal hazards	Not applicable.
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	Solid powder.
Color	White/off-white
Odor	Unfragranced.
Odor Threshold	Not established.
pH (1% aqueous solution)	10.0-11.0
Solubility	Soluble in water.

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	Cleaning products should not be mixed with other household chemicals unless specifically provided according to label directions.
10.5 Incompatible materials	Strong oxidizers or reducing agents, strong acids or strong bases.
10.6 Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Ingredient(s)	CAS No.	Oral LD 50 (Rat)	Dermal LD 50 (Mouse)	Inhalation LC 50 (Rat)
Sodium citrate	6132-4-3	11700 mg/kg	>2000 mg/kg	Not listed
Sodium carbonate	497-19-8	2800 mg/kg	>2000 mg/kg	Not listed
Sodium percarbonate	15630-89-4	1034 mg/kg	>2000 mg/kg	4580 g/m ³
Potassium carbonate	584-08-07	>2,000 mg/kg	Not listed	Not listed
Sodium sulfate	7757-82-6	Not listed	Not listed	Not listed
Sodium gluconate	527-07-1	>2000 mg/kg	Not listed	Not listed
Sodium silicate (hydrous)	1344-09-08	3400 mg/kg	>5000 mg/kg	2.06 g/m ³
Protease enzyme	9001-92-7	1800 mg/kg	Not listed	Not listed
Carboxymethyl inulin (CMI)	430439-54-6	Not listed	Not listed	Not listed
Tetrasodium glutamate diacetate (GLDA)	51981-21-6	>2,000 mg/kg	Not listed	Not listed
Sodium C14-C16 olefin sulfonate	68439-57-6	2079 mg/kg	6300 – 13500 mg/kg	>52 mg/L
Lauryl/myristyl glucoside	110615-47-9	>5,000 mg/kg	>5,000 mg/kg	>5 mg/L
Sorbitan laurate	1338-39-2	Not listed	Not listed	Not listed
Amylase enzyme	9000-90-2	Not listed	Not listed	Not listed
Tetraacetythylenediamine (TAED)	10543-57-4	5.9 g/kg	Not listed	Not listed

Acute toxicity	None anticipated.
Irritation	Causes mild skin and eye irritation.
Corrosivity	None anticipated.
Sensitisation	None anticipated.
11.2 Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Ingredient(s)	CAS No.	Fish LC 50 (96h)	Daphnea EC 50 (48h)
Sodium citrate	6132-4-3	Not listed	1535 mg/L
Sodium carbonate	497-19-8	300 mg/L	200 – 227 mg/L
Sodium percarbonate	15630-89-4	Not listed	Not listed
Potassium carbonate	584-08-07	68 mg/L	430 mg/L
Sodium sulfate	7757-82-6	Not listed	Not listed
Sodium gluconate	527-07-1	>1000 mg/L	>1000 mg/L
Sodium silicate (hydrous)	1344-09-08	1108 mg/L	1700 mg/L
Protease enzyme	9001-92-7	8.2 mg/L	586 µg/L
Carboxymethyl inulin (CMI)	430439-54-6	Not listed	Not listed
Tetrasodium glutamate diacetate (GLDA)	51981-21-6	8.2 mg/L	586 µg/L
Sodium C14-C16 olefin sulfonate	68439-57-6	4.2 mg/L	4.53 mg/L

Lauryl/myristyl glucoside	110615-47-9	> 1 – 10 mg/L	> 1 – 10 mg/L
Sorbitan laurate	1338-39-2	Not listed	Not listed
Amylase enzyme	9000-90-2	Not listed	Not listed
Tetraacetythylenediamine (TAED)	10543-57-4	Not listed	Not listed

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 regulated for transport in accordance with US DOT Regulations.

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 CPSC's implementation of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

16. SECTION 16: OTHER INFORMATION

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC and, as a result, this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Dune Sciences, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Dune Sciences, Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.