SAFETY DATA SHEET



Professional Easy Off Dish Detergent

1. Product and company identification

Product name : Professional Easy Off Dish Detergent

Supplier

Reckitt Benckiser LLC.

Morris Corporate Center IV

399 Interpace Parkway (P.O. Box 225) Parsippany, New Jersey 07054-0225

+1 973 404 2600

Material uses : Dishwashing detergents.

Product use : Professional SDS # : D8159477

Formulation #: : (e0062-010) 8101330 v1.0

UPC Code / Sizes : One gallon (128 Fluid ounces/3.79L) HDPE bottle with cap

Manufacturer :

Reckitt Benckiser LLC. Morris Corporate Center IV

399 Interpace Parkway (P.O. Box 225) Parsippany, New Jersey 07054-0225

+1 973 404 2600

Validation date : 09/06/2014. Emergency telephone number : 1-800-338-6167

Transport Emergency: 1-800-424-9300 (U.S. & Canada) CHEMTREC

phone: Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

2. Hazards identification

Emergency overview

Physical state : Liquid. [Clear viscous liquid.]

Color : Blue.

Odor : Characteristic.
Signal word : CAUTION

Hazard statements : CAUSES EYE IRRITATION. HARMFUL IF SWALLOWED.

Precautionary measures : Keep out of the reach of children. Do not swallow. Avoid contact with eyes. Remove contaminated clothing. Keep container tightly closed and sealed until ready for use.

Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Potential acute health effects

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Ingestion : Irritating to mouth, throat and stomach.

Eyes : Irritating to eyes.

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2. Hazards identification

Potential chronic health effects

Chronic effects: Contains material that may cause target organ damage, based on animal data.

Target organs : Contains material which may cause damage to the following organs: upper respiratory

tract

Over-exposure signs/symptoms

Eyes : Adverse symptoms may include the following:

pain or irritation watering redness

Medical conditions aggravated by overexposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at

risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
· · · · · · · · · · · · · · · · · · ·	68585-34-2 25155-30-0	5 - 10 5 - 10
Coco amidopropyl betaine	61789-40-0	1 - 2.5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

First aid

Eye contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. **Inhalation** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.

Ingestion Call physician immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth

to an unconscious person.

Protection of first-aiders

: Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

5. Fire-fighting measures

Flammability Remark : Not available.

Explosibility Remark : Not available.

Flammability of the product

In a fire, hazardous decomposition products may be produced.

Extinguishing media

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

5. Fire-fighting measures

Special hazards arising from the substance or mixture

Special exposure hazards 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.

Hazardous thermal decomposition products Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

Advice for firefighters

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.

Special remarks on explosion hazards

Sensitivity to mechanical impact Not available.

Sensitivity to static discharge Not available.

6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

7. Handling and storage

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)		STEL (15 mins)		Ceiling (ACGIH TLV)					
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
No exposure limit value known.											

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Manufacturer: Exposure controls

Engineering measures

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

 Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Other protection

: Not available.

9. Physical and chemical properties

Physical state : Liquid. [Clear viscous liquid.]
Flash point : Closed cup: >100°C (>212°F)

Burning time : Not applicable.

Burning rate : Not applicable.

Auto-ignition temperature : Not available.

Flammable limits : Not available.

Color : Blue.

Odor : Characteristic.

Taste : Not available.

Molecular weight : Not applicable.

Molecular formula : Not applicable.

pH : 6 to 9 [Conc. (% w/w): 100%]

Boiling/condensation point : Not available.

Melting/freezing point : Not available.

Critical temperature : Not available.

: 1.03 Relative density (g/ml) **Bulk density** : 8.7 lbs/gal : Not available. Vapor pressure Vapor density : Not available. : Not available. Volatility **Odor threshold** : Not available. **Evaporation rate** : Not available. **SADT** : Not available.

Viscosity : Dynamic (room temperature): 600 to 1200 mPa·s (600 to 1200 cP)

lonicity (in water)Dispersibility propertiesNot available.

Solubility : Easily soluble in the following materials: cold water and hot water.

Physical/chemical : Not available. properties comments

10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Conditions to avoid : No specific data.

Keep away from extreme heat. Protect from moisture. Keep from freezing.

Incompatible materials : Do not mix with household chemicals

Hazardous decompositionproducts
: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products: carbon oxides, Various Organic chemicals.

Possibility of hazardous : Under normal conditions of storage and use, hazardous reactions will not occur. Polymerization. : There are no data available on the mixture itself.

11. Toxicological information

Acute toxicity		4	
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Product/ingredient name	Result	Species	Dose	Exposure
sodium	LD50 Oral	Rat	438 mg/kg	-
dodecylbenzenesulfonate				

Conclusion/Summary: Harmful if swallowed.

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium dodecylbenzenesulfonate	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
1-Propanaminium, 3-amino- N-(carboxymethyl)-N,N- dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-

Conclusion/Summary
 Skin
 Eyes
 Respiratory
 Not available.
 Irritating to eyes.
 Not available.

Sensitizer

Product/ingredient name	Route of	Species	Result
	exposure		
Not available.			

Conclusion/Summary: Not available.Skin: Not available.Respiratory: Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary: Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Not available.						

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Not available.			

11. Toxicological information

Conclusion/Summary

: Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available.				

Conclusion/Summary

: Not available.

Reproductive toxicity

• • • • • • • • • • • • • • • • • • • •	Maternal toxicity	 Development toxin	Species	Dose	Exposure
Not available.					

Conclusion/Summary : Not available.

12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
sodium dodecylbenzenesulfonate	Acute EC50 29000 μg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	Acute EC50 7.81 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 5.88 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 112.4 mg/l	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 1.18 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
Alcohols, C10-16, ethoxylated, sulfates, sodium salts	Acute EC50 3.43 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours

Conclusion/Summary

: Not available.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

Conclusion/Summary

: Not available.

Partition coefficient: n-

: Not available.

octanol/water

: Not available.

Bioconcentration factor

: Not available.

Toxicity of the products of

biodegradation

: Not available.

Other adverse effects

Mobility

: No known significant effects or critical hazards.

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13. Disposal considerations

Waste disposal

: Waste must be disposed of according to applicable regulations. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

15. Regulatory information

United States

U.S. Federal regulations

: TSCA 8(a) PAIR: 2-benzylideneheptanal; 7-hydroxycitronellal; α-hexylcinnamaldehyde

SARA 302/304: No products were found.

SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed

(chronic) health hazard

Clean Water Act (CWA) 311: sodium dodecylbenzenesulfonate

Clean Air Act Section 112 : Not listed

(b) Hazardous Air **Pollutants (HAPs)**

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 311/312 HCS 1994

Classification

: Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
sodium dodecylbenzenesulfonate 1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts		No. No.	No. No.	No. No.	Yes. Yes.	Yes. No.

State regulations

Massachusetts

: The following components are listed: SODIUM DODECYLBENZENE SULFONATE

New York

The following components are listed: Sodium dodecylbenzene sulfonate; Dodecylbenzene sulfonate

New Jersey

: The following components are listed: SODIUM DODECYLBENZENE SULFONATE; BENZENESULFONIC ACID, DODECYL-, SODIUM SALT

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15. Regulatory information

Pennsylvania

: The following components are listed: BENZENESULFONIC ACID, DODECYL-, SODIUM SALT

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	level	Maximum acceptable dosage level
No listed substance				

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : None of the components are listed.

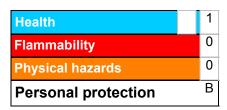
CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information

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



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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



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16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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Date of previous issue : 09/06/2014.

Version : 1
Prepared by :

Reckitt Benckiser LLC.
Product Safety Department

1 Philips Parkway

Montvale, New Jersey 07646-1810 USA.

FAX: 201-476-7770

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.