Registered office: Pirojshanagar, Eastern Express Highway, Vikhroli, Mumbai 400 079, India.

Phone: (91-22) 2518 8010 / 2518 8020 / 2518 8030 extn: 4768 Fax: (91-22) 2518 8096 / Printing date 05/16/2015

2518 8068

e-mail: sm.lovekar@godrejinds.com

Reviewed on 05/16/2015

1 Identification

- · Trade name: <u>GODREJ SLES</u> L24-230
- · CAS Number:
- 3088-31-1 · EC number:
- 221-416-0
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Personal care products

· Details of the supplier of the safety data sheet

- · Manufacturer/Supplier: Godrej Industries Limited, Plot No 3, Village Kanerao, Taluka Valia, District Bharuch, Pincode: 393135 Gujarat, India.
- · Information department: Tel: 91-2643 270756 / 57 / 58 / 59 / 60 Office hours only (08.30 – 17.00 hours GMT +4.5 hours) Fax: 91-2643 270018 Email: sm.lovekar@godrejinds.com, hemant.sawant@godrejinds.com
- · Emergency telephone number: Contact details of importer: Emergency telephone number: 9909028240, 9820607143, 9820305315 Other Comments (e.g. language(s) of the phone service): English

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- Skin Sens. 1 H317 May cause an allergic skin reaction.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant 📈

Irritating to eyes and skin. May cause sensitisation by skin contact. • Information concerning particular hazards for human and environment: Not applicable.

· Label elements

- · Labelling according to EU guidelines: The product has been classified and marked in accordance with directives on hazardous materials.
- · Code letter and hazard designation of product:



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Godrej Industries Limited

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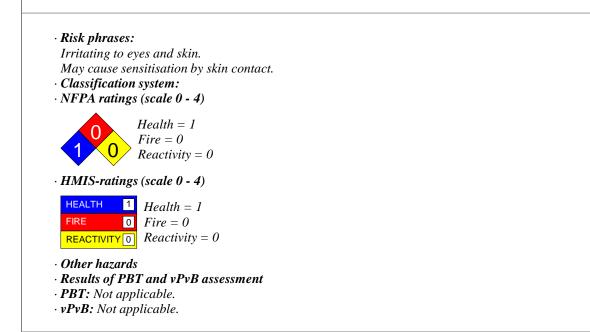
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3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description 3088-31-1 sodium 2-(2-dodecyloxyethoxy)ethyl sulphate
- · Identification number(s)
- · EC number: 221-416-0

· Additonal information: Molecular formula: C16H34O6S.Na

Purity: 28%

4 First-aid measures

· Description of first aid measures

· After inhalation:

Supply fresh air and to be sure call for a doctor.

Monitor for respiratory distress. If cough or difficulty breathing develops, evaluate for respiratory tract irritation, bronchitis, or pneumonitis. Administer oxygen and assist ventilation as required. Treat bronchospasm with beta2 agonist and corticosteroid aerosols.

· After skin contact:

Remove contaminated clothing and wash exposed area thoroughly with soap and water. A physician may need to examine the area if irritation or pain persists.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

If symptoms persist consult doctor.

Administer charcoal as a slurry (240 ml water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents

· Most important symptoms and effects, both acute and delayed No further relevant information available.

· Information for doctor: Treat symptomatically and supportively.

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5 Fire-fighting measures

· Extinguishing media

- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. · Special hazards arising from the substance or mixture
- In case of fire, the following can be released: Sulphur dioxide (SO2) Carbon monoxide (CO) *Carbon dioxide (CO2)*
- · Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up: Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.
- · Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin.

· Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:
- Store in a cool, dry, well-ventilated area away from incompatible substances.
- Information about storage in one common storage facility: Do not store together with acids.

• Further information about storage conditions: Use leak-proof Drums. Store in dry locations at ambient temperature (< 35° C) away from direct sunlight. The product will be stable for 1 year in the original sealed drum, under the above mentioned storage conditions and also maintaining the pH > 6 at all times. A slight pH drop is expected during prolonged storage. Avoid Freezing and Excessive Heating above 40 Deg C. Suitable containers are HMHDPE Drums / SS Tanks / ISO Tanks. DO NOT USE MILD STEEL TANKS OR TRANSFER LINES FOR THIS PRODUCT

· Specific end use(s) Personal care products

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· Change in condition

Melting point/Melting range:

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	(Contd. of page
Exposure controls/personal prot	tection
Additional information about design of	of technical systems:
Local exhaust ventilation required plus	good work practice.
Safety shower. Eye fountain.	
Control parameters	
Components with limit values that requ	uire monitoring at the workplace:
	lues that have to be monitored at the workplace.
Exposure controls	
Personal protective equipment:	
General protective and hygienic measu	ires:
Keep away from foodstuffs, beverages a	ınd feed.
Immediately remove all soiled and cont	aminated clothing.
Wash hands before breaks and at the en	ıd of work.
Avoid contact with the eyes and skin.	
Breathing equipment: Suitable respirat	tory protective device recommended.
Protection of hands:	
「 而	
Protective gloves	
The glove material has to be impermeal	ble and resistant to the product/ the substance/ the preparation.
	on to the glove material can be given for the product/ the preparation/ th
chemical mixture.	
Selection of the glove material on consi	ideration of the penetration times, rates of diffusion and the degradation
Material of gloves	
	rs not only depend on the material, but also on further marks of quality ar
varies from manufacturer to manufactu	rer.
Penetration time of glove material	
The exact break through time has to l observed.	be found out by the manufacturer of the protective gloves and has to b
<i>Eye protection:</i>	
Tightly sealed goggles	
Body protection: Protective work clothi	ing
Physical and chemical propertie	°S
Information on basic physical and che	
General Information	micai properties
Appearance:	Pale Yellow Liquid
Form:	Liquid
Color:	Pale Yellow Translucent
Odor:	Characteristic
$\mathbf{n}\mathbf{H} = \frac{1}{2} \mathbf{h} \mathbf{h} \mathbf{h} \mathbf{h} \mathbf{h} \mathbf{h} \mathbf{h} h$	
pH-value at 26 °C (79 °F):	6.47 (1 vol%)

5 °C (41 °F)

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Trade name: <u>GODREJ SLES 124-230</u>	ar e gour ojinus.com
	(Contd. of page 4
Boiling point/Boiling range:	100 °C (212 °F) (at 760 mm)
· Flash point:	> 93.9 °C (> 201 °F)
· Flammability (solid, gaseous):	Product is not flammable.
· Auto igniting:	Product is not self igniting.
Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure at 25 °C (77 °F):	0.00000000133 Pa
• Density at 39 •C (102 •F):	1.022 g/cm ³ (8.529 lbs/gal)
· Solubility in / Miscibility with Water:	Soluble.
· Partition coefficient (n-octanol/water) at 39	• <i>C</i> (102
• <i>F</i>):	-0.602 log POW
· Viscosity: Dynamic at 39 °C (102 °F):	
· Other information	Dissociation constant: The experimental pKa value for sodium 2-(2-dodecyloxyethoxy) ethyl sulphate was found i be 0.00000000000000043 at 39 degC Surface tension: The surface tension of sodium 2- (2 dodecyloxyethoxy) ethyl sulphate was estimated to be 49.414mN/m at 20 deg.C

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid Do not subject to acidic pH. Avoid contact with strong acids and oxidising substances
- · Incompatible materials: The product may react with acids.
- · Hazardous decomposition products: The product may yield oxides of sulphur & carbon

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

 $Oral \quad LD50 > 5000 \text{ mg/kg bw (rat)}$

Dermal LD50 3658.33 mg/kg bw (rabbit)

· Primary irritant effect:

• On the skin:

Irritant to skin and mucous membranes.

The test substance sodium 2-(2-dodecyloxyethoxy)ethyl sulphate was found to be irritating to skin of rabbit at a dose concentration of 0.5 ml in a 24 hr exposure.

• On the eye:

Irritating effect.

The test substance was applied to the right eye of each of 6 rabbits. The eyes of all 6 rabbits were found to show evidence of significant corneal, iris and conjunctival changes. Mean irritation scores ranged from 34.8 at 24 hours to 10.2 after 7 days. Thus suggesting that sodium 2-(2-dodecyloxyethoxy)ethyl sulphate is irritating to the

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eves. · Sensitization:

Sensitization possible through skin contact.

In vivo LLNA study on mouse for skin sensitisation with sodium 2-(2-dodecyloxyethoxy) ethyl sulphate showed EC3 percentage of 11.8% this predicted value of percentage indicates that the test substance was found to be sensitizing to skin of mouse.

· Subacute to chronic toxicity:

Repeated dose toxicity: Oral

The Low Observed Effect Level (LOEL) of sodium 2-(2-dodecyloxyethoxy)ethyl sulphate in Sprague-Dawley rats in 21 days study was observed at dose concentration of 508 mg/kg bw/day (nominal)

· Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer) Substance is not listed.

· NTP (National Toxicology Program) Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

EC50 (72hr) (static) 115.072 mg/L (Pseudokirchneriella subcapitata)

LC50 (48hr) (static) 86.09 mg/L (Daphnia magna)

LC50 (96hr) (static) 25 mg/L (Danio rerio)

· Persistence and degradability The product is Readily biodegradable.

· Bioaccumulative potential

The estimated bioconcentration factor (BCF) for sodium 2-(2-dodecyloxyethoxy) ethyl sulphate is 71, indicating that sodium 2-(2-dodecyloxyethoxy) ethyl sulphate is not expected to bioaccumulate in the food chain.

· Mobility in soil

Soil Adsorption Coefficient i.e Koc value of sodium 2-(2-dodecyloxyethoxy) ethyl sulphate was estimated as 2111 L/kg by means of MCI method. This indicates that sodium 2-(2-dodecyloxyethoxy) ethyl sulphate will have a strong tendency of sorption to soil and have low migration potential to groundwater.

- Additional ecological information:
- General notes: Do not allow product to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- **Recommendation:** Incinerate according to applicable local, state and federal regulations.
- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

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UN-Number DOT, ADR, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
Packing group		
DOT, ADR, IMDG, IATA	Not applicable	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	· II of	
MARPOL73/78 and the IBC Code	Not applicable.	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · Product related hazard informations: The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:



· Risk phrases: Irritating to eyes and skin. May cause sensitisation by skin contact.

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· National regulations:

· Other regulations, limitations and prohibitive regulations EU (EINECS) – Listed Canada - DSL/NDSL - Listed China-NEPA (IECSC) - Listed Japan-MITI – Listed Philippines-PICCS-Listed New Zealand (NZIoC) – Listed Australia-AICS – Listed

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department.

· Contact:

Tel: 91-2643 270756 / 57 / 58 / 59 / 60 Office hours only (08.30 - 17.00 hours GMT + 4.5 hours)Fax: 91-2643 270018 email: sm.lovekar@godrejinds.com, hemant.sawant@godrejinds.com

· Date of preparation / last revision 05/16/2015 / -

· Abbreviations and acronvms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

- DOT: US Department of Transportation IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· Sources

• Occupational Safety & Health Administration (OSHA)

https://www.osha.gov/Publications/OSHA3514.html

• Data from published dossier on ECHA website:

http://apps.echa.europa.eu/registered/data/dossiers/DISS-dffb4072-e290-47ae-e044-00144f67d031/ DISSdffb4072-e290-47ae-e044-00144f67d031 DISS-dffb4072-e290-47ae-e044-00144f67d031.html

• * Data compared to the previous version altered.

- Section 1: Identification of the substance/preparation & of the company/undertaking.
- Section 2: Hazard Identification
- Section 3: Composition/Information on Ingredients
- Section 4: First-aid measures
- Section 5: Fire-fighting measures
- Section 6: Accidental Release measures
- Section 7: Handling and storage.
- Section 8: Exposure Controls/Personal protection.
- Section 9: Physical and Chemical properties.
- Section 10: Stability and Reactivity.
- Section 11: Toxicological Information.

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• Section 12: Ecological Information.

• Section 13: Disposal consideration • Section 15: Regulatory information

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