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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Linear Alkylbenzene Sulfonic Acid (LABSA) 96%	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Linear Alkylbenzene Sulfonic Acid (LABSA) 96%
Synonyms	Dodecylbenzenesulfonic acid; DBSA
CAS No.	27176-87-0
EC No.	248-289-4
Molecular formula	R-C6H4SO3H (R = C10-C13 linear alkyl)
Molecular weight	322.7 (average) g/mol
Relevant identified uses	Raw material for synthetic detergent industry: laundry and dishwasher powder, detergent gels, liquid soaps; wetting and washing agent in textile industry
Uses advised against	None
Company	Richest Group Ltd.
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SECTION 2: Hazards identification

GHS Classification	Met. Corr. 1; Acute Tox. 4 (Oral); Skin Corr. 1B; Eye Dam. 1
Pictogram(s)	GHS05 (Corrosion); GHS07 (Exclamation mark)
Signal word	Danger
Hazard statement(s)	H290 May be corrosive to metals H302 Harmful if swallowed H314 Causes severe skin burns and eye damage

Precautionary statement(s)	P234 Keep only in original packaging P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling P270 Do not eat, drink or smoke when using this product P280 Wear protective gloves/protective clothing/eye protection/face protection 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/shower P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P405 Store locked up P406 Store in corrosive resistant container with a resistant inner liner P501 Dispose of contents/container in accordance with local regulation
Other hazards	Strongly acidic anionic surfactant; reacts with bases with evolution of heat.

SECTION 3: Composition/information on ingredients

Component	Linear Alkylbenzene Sulfonic Acid
CAS No.	27176-87-0
EC No.	248-289-4
Classification	Met. Corr. 1; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; H290, H302, H314, H318
Concentration (%)	≥96% (with free oil ≤2% and sulfuric acid ≤1.5%)

SECTION 4: First aid measures

If inhaled	Remove person to fresh air and keep comfortable for breathing. Oxygen or artificial respiration if needed. Get immediate medical attention.
In case of skin contact	Take off immediately all contaminated clothing. Immediately flush skin with plenty of water for several minutes. Get medical attention immediately.
In case of eye contact	Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get emergency medical help immediately.
If swallowed	Rinse mouth. Do NOT induce vomiting. Get immediate medical help.
Most important symptoms and effects	Causes severe skin burns and eye damage. Harmful if swallowed. Ingestion may result in severe burns to mouth, esophagus and stomach.
Indication of any immediate medical attention	Treat symptomatically. Get emergency medical help immediately.

SECTION 5: Firefighting measures

Suitable extinguishing media	Dry chemical, foam, carbon dioxide, water fog/spray.
Unsuitable extinguishing media	None known.
Special hazards arising from the chemical	Irritating and toxic gases or fumes (carbon oxides, sulfur oxides, hydrogen sulfide) may be released during a fire. Decomposes above 205 °C.
Advice for firefighters	Firefighters should wear full fire-fighting turn-out gear including self-contained breathing apparatus with full facepiece operated in pressure demand mode.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Remove all sources of ignition. Wear positive pressure self-contained breathing apparatus, chemical protective clothing and chemical resistant gloves. Direct contact with leakage is prohibited.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not allow material to be released to the environment without proper governmental permits.
Methods and materials for containment and cleaning up	Small spills: absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Large spills: dike ahead of liquid spill, cover with foam, and transfer to tank car or special collector for disposal. Surfaces may become slippery after spillage.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Airtight operation with adequate local exhaust ventilation. Wash thoroughly after handling. Keep away from fire and heat sources. Smoking is forbidden in the workplace.
Conditions for safe storage, including any incompatibilities	Store in a cool, well-ventilated place in corrosive resistant container with a resistant inner liner. Keep tightly closed. Store separately from reducing agents, perchlorates, nitrates, metal powders, oxidizing agents, nitric acids and bases. Avoid freezing or excessive heat. Store locked up.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	Sulfuric acid (CAS 7664-93-9, component): ACGIH TLV-TWA 0.2 mg/m3; NIOSH PEL-TWA 1 mg/m3
Biological limit values	None established
Appropriate engineering controls	Airtight operation to prevent leakage. Strengthen ventilation. Provide safety shower and eyewash equipment.
Eye/face protection	Tightly sealed goggles/chemical safety glasses.
Skin protection	Wear appropriate chemical resistant gloves.

Body protection	Full set of anti-chemical protective clothing.
Respiratory protection	Use self-contained breathing apparatus or suitable respirator for acid mist/vapour.
Thermal hazards	Not applicable

SECTION 9: Physical and chemical properties

Physical state	Viscous liquid
Colour	Brown
Odour	Slight, acidic odour
Melting point / freezing point	ca. 10 °C
Boiling point or initial boiling point and boiling range	> 100 °C (decomposes on strong heating above 205 °C)
Flammability	Nonflammable
Lower and upper explosion limit / flammability limit	Not applicable (non-flammable)
Flash point	> 100 °C (closed cup)
Auto-ignition temperature	Not applicable (nonflammable)
Decomposition temperature	205 °C (decomposes, releasing sulfur oxides and hydrogen sulfide)
pH	< 1 (strongly acidic)
Kinematic viscosity	ca. 700 - 900 mm2/s at 25 °C (dynamic viscosity: ca. 800 - 1,000 mPa·s)
Solubility	Soluble in water (heat evolved); partially soluble in ethanol
Partition coefficient n-octanol/water	log Pow: ca. 2 - 3 (estimated; surface-active substance, not directly measurable)
Vapour pressure	< 0.1 hPa at 20 °C (negligible)
Density and/or relative density	ca. 1.06 g/cm3 at 25 °C
Relative vapour density	1.1 (Air = 1)
Particle characteristics	Not applicable (liquid)

SECTION 10: Stability and reactivity

Reactivity	Decomposes above 205 °C producing toxic fumes including sulfur oxides and hydrogen sulfide. Reacts with bases and oxidants. Attacks metals.

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Exothermic neutralization with bases; decomposes on strong heating
Conditions to avoid	Heat, flames and sparks, extreme temperatures and direct sunlight.
Incompatible materials	Reducing agents, perchlorates, nitrates, metal powders, oxidizing agents, nitric acids and bases.
Hazardous decomposition products	Carbon oxides, sulfur oxides and hydrogen sulfide

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 650 mg/kg Inhalation/Dermal: not applicable (corrosive)
Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	Fish: LC50 - 1 - 10 mg/L - 96 h (anionic surfactant, acute aquatic toxicity); Daphnia: EC50 - 1 - 10 mg/L - 48 h; Algae: EC50 - 10 - 100 mg/L - 72 h
Persistence and degradability	Readily biodegradable (linear alkylbenzene sulfonic acid, OECD 301: > 60% in 28 d)
Bioaccumulative potential	Low bioaccumulation potential (readily biodegradable surfactant)
Mobility in soil	Adsorbs to sewage sludge and sediment; low mobility in soil
Other adverse effects	High concentrations may be harmful to aquatic organisms; foaming in surface waters

SECTION 13: Disposal considerations

Product disposal methods	Contact a qualified professional waste disposal service to dispose of this material. Dispose of in accordance with local environmental regulations.
Contaminated packaging	Dispose of as unused product in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	UN 2586
UN Proper Shipping Name	ALKYLSULPHONIC ACIDS, LIQUID with not more than 5% free sulphuric acid
Transport hazard class(es)	8
Packing group	III
Environmental hazards (Marine pollutant)	No
Special precautions for user	EmS Code: F-A, S-B

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS: Listed; TSCA: Listed; DSL: Listed; IECSC: Listed; GB 12268-2012 List of Dangerous Goods (China): Listed.

SECTION 16: Other information

Full text of H-Statements	H290 May be corrosive to metals H302 Harmful if swallowed H314 Causes severe skin burns and eye damage H318 Causes serious eye damage
Revision date	2026-10-29
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.