

# LABSA

Safety data sheet in the 16-section GHS format · CAS No single CAS - LABSA is a mixture

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## 1. Identification of the substance and of the supplier

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name      | LABSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Synonyms          | linear alkyl benzene sulphonic acid, LABSA 90, acid slurry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| C.A.S. number     | No single CAS - LABSA is a mixture (UVCB) of alkyl chain lengths, so any CAS quoted is representative. The three in commercial use are: 27176-87-0, dodecylbenzenesulfonic acid, EC 248-289-4 (the single-component surrogate that most Indian and Gulf datasheets quote); 85536-14-7, benzenesulfonic acid 4-C10-13-sec-alkyl derivs., EC 287-494-3 (the EU/REACH substance identity used by producers such as Sasol); and 68584-22-5, benzenesulfonic acid mono-C10-13-alkyl derivs. State on the SDS that the product is a mixture and that the CAS given is representative.                                                                                                                      |
| Molecular formula | $\text{CH}_3(\text{CH}_2)_{11}\text{C}_6\text{H}_4\text{SO}_3\text{H} = \text{C}_{18}\text{H}_{30}\text{O}_3\text{S}$ for the C12 representative; the commercial product is a blend of C10-C13 homologues                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Grade supplied    | 90% linear alkyl benzene sulphonic acid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product group     | Surfactants & Oleochemicals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Identified uses   | Detergent powder, Dishwash liquid, Liquid detergent, Floor & surface cleaners, Industrial cleaners, Emulsifiers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Supplier          | Velora Chemicals Private Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Emergency contact | Medical, fire or spill emergency — call the emergency services first: 112 (all-India), 101 fire, 108 ambulance. Velora Chemicals Private Limited does not at present operate a 24-hour chemical emergency advice line, and this sheet does not pretend otherwise. Every consignment despatched by road carries an emergency information panel under rule 134 of the Central Motor Vehicles Rules 1989 bearing a number from which expert advice on this material can be obtained, and the producer's safety data sheet issued with the consignment carries the producer's own 24-hour number where one is operated. For product, grade and documentation queries in business hours: +91 99255 22674. |

## 2. Hazards identification

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GHS signal word       | Danger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Hazard classification | Acute Tox. 4 (oral) - H302; Skin Corr. 1C - H314; Aquatic Chronic 3 - H412 (Sasol Marlon AS3 N, a major-producer CLP SDS). This is supplier self-classification - there is no EU harmonised CLP Annex VI entry for LABSA - and the skin-corrosion sub-category varies between suppliers (1A, 1B and 1C are all in use). H314 and the signal word Danger are consistent across suppliers. Be aware that many Indian and Gulf LABSA datasheets in circulation are still written with the superseded EU risk phrases (R22 'Harmful if swallowed', R34 'Causes burns') and carry no GHS classification at all; those cannot be reused on a GHS Section 2. |

## 3. Composition / information on ingredients

|           |       |
|-----------|-------|
| Substance | LABSA |
|-----------|-------|

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C.A.S. number</b>    | No single CAS - LABSA is a mixture (UVCB) of alkyl chain lengths, so any CAS quoted is representative. The three in commercial use are: 27176-87-0, dodecylbenzenesulfonic acid, EC 248-289-4 (the single-component surrogate that most Indian and Gulf datasheets quote); 85536-14-7, benzenesulfonic acid 4-C10-13-sec-alkyl derivs., EC 287-494-3 (the EU/REACH substance identity used by producers such as Sasol); and 68584-22-5, benzenesulfonic acid mono-C10-13-alkyl derivs. State on the SDS that the product is a mixture and that the CAS given is representative. |
| <b>Molecular weight</b> | About 320 +/- 2 for the commercial C10-13 blend (two producer datasheets give this figure); 326.5 g/mol for the pure C12 representative, dodecylbenzenesulfonic acid. Because it is a mixture, quote it as an average.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Composition</b>      | 90% linear alkyl benzene sulphonic acid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

#### 4. First-aid measures

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| <b>Eye contact</b>  | Flush immediately with plenty of gently running water for at least 15 minutes, holding the eyelids apart, and remove contact lenses if easy to do. Get medical attention immediately - the acid is corrosive and can cause permanent eye damage.                                   |
| <b>Skin contact</b> | Remove contaminated clothing and footwear immediately and wash the affected skin with plenty of water and soap for at least 15 minutes. Do not attempt to neutralise the acid on the skin. Get medical attention for any burn or if discomfort continues.                          |
| <b>Inhalation</b>   | Remove the person from exposure to fresh air and let them lie down and rest. Give oxygen if breathing is difficult; give artificial respiration if breathing is irregular or has stopped. Refer for medical attention - the mist irritates the nose, throat and respiratory tract. |
| <b>Ingestion</b>    | Do NOT induce vomiting. Rinse the mouth with water. If the person is fully conscious, give water (or milk) to drink to dilute. Give nothing by mouth to an unconscious person. Call a physician immediately.                                                                       |

#### 5. Fire-fighting measures

|                                                   |                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flash point</b>                                | About 210 degC (Sasol Marlon AS3 N); greater than 200 degC (Transmare Chemie); greater than 90 degC by DIN 51758 on one 96-97% grade. Not a flammable liquid but combustible - quote your own supplier's measured figure rather than picking one of these.                 |
| <b>Suitable extinguishing media</b>               | This material has a flash point and burns. Use alcohol-resistant foam, dry chemical powder or carbon dioxide; water spray or fog to cool surrounding surfaces and containers. Confirm the medium against the producer's safety data sheet for the grade supplied.          |
| <b>Unsuitable extinguishing media</b>             | Do not use a high-pressure water jet: it will spread the material and the fire. A vapour flash-back to the source and re-ignition of cooled but still-hot material are both foreseeable; do not approach a container that may be pressurised or a pool fire without cover. |
| <b>Special hazards arising from the substance</b> | Hazardous gases and decomposition products may be formed in a fire, from this substance or from its packaging and the materials stored with it. Packaging and pallets are themselves a substantial fire load.                                                              |
| <b>Advice for fire-fighters</b>                   | Fire-fighters must wear self-contained breathing apparatus and full protective clothing. Keep unnecessary personnel away and upwind. Prevent firefighting run-off from entering drains, surface water or groundwater.                                                      |

#### 6. Accidental release measures

Keep unnecessary personnel away and upwind, and ventilate. Wear the protective equipment in section 8 before approaching. Stop the leak if it is safe to do so, then bund or dike the spill and prevent entry to drains, surface water and groundwater. Absorb with an inert absorbent and collect into labelled, closable containers for disposal under section 13. Do not return spilled material to the original container.

## 7. Handling and storage

- LABSA is viscous and gets much thicker in cold weather. Winter drums often need warming before they will pump. A warm store, or a drum heater, saves a great deal of trouble in December and January.
- It is a strong organic acid and corrosive — store in HDPE or lined drums, not mild steel, and use acid PPE when transferring.
- Neutralising LABSA with caustic is strongly exothermic. Add the acid into the caustic charge slowly, with agitation and cooling, and keep the batch below about 55 °C. This is the step that hurts people in small detergent plants, and rushing it darkens the finished product as well.
- Colour drifts darker with age and heat. If your finished product is colour-sensitive, buy against consumption and store cool rather than holding stock through a hot season.

**Storage:** Store below 50 degC (one producer limits handling to 50 degC max 55 degC; colour darkens above this) in closed containers of 316 stainless steel, polyester/GRP, or HDPE, in a bunded area with an acid-resistant floor. Protect from frost, direct sunlight and heat. Never use galvanised steel, mild steel, aluminium or copper alloys. Segregate from alkalis and oxidising agents. EU storage class 8AL (combustible corrosive liquid).

## 8. Exposure controls / personal protection

Engineering controls. Enclose every transfer, tipping, bag-slitting and sampling point and fit local exhaust extraction at each, and keep airborne concentrations below the limit in force at the place of use. Provide an eyewash within reach of the working position, and a safety shower wherever the material is classified corrosive or irritant or is handled in quantity. Do not eat, drink or smoke in the handling area; wash before breaks. Where no limit is stated above, occupational exposure limits vary by jurisdiction: check the limit in force at the place of use and the producer's sheet for the grade supplied, and record which value your assessment adopted. Select eye, skin and respiratory protection on the strength of a measured or modelled exposure assessment, not on this sheet alone.

## 9. Physical and chemical properties

|                                              |                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance</b>                            | Brown to dark brown viscous liquid ('acid slurry') with a sharp, pungent sulphonic odour                                                                                                                                                                                                                 |
| <b>Physical state</b>                        | Liquid (viscous; viscosity falls sharply on warming)                                                                                                                                                                                                                                                     |
| <b>Melting / freezing point</b>              | About -10 degC pour point for the roughly 96% acid (Sasol Marlon AS3 N; Transmare Chemie LABSA 96). For the 90% grade specifically: Not available.                                                                                                                                                       |
| <b>Boiling point</b>                         | About 315 degC is quoted for the 96% grade (Transmare Chemie), but the acid decomposes rather than boiling cleanly. For the 90% grade: Not available.                                                                                                                                                    |
| <b>Relative density</b>                      | 1.03 g/cm <sup>3</sup> at 20-25 degC (Sasol Marlon AS3 N and Transmare Chemie, 96% grade); 1.04-1.05 g/mL at 20 degC and 1.01 g/mL at 25 degC reported by other producers of 96-97% material. For the 90% grade: Not available - expect a slightly different figure because of the higher water content. |
| <b>Solubility in water</b>                   | Completely miscible/soluble in water. Dissolution is strongly exothermic and the resulting solution is strongly acidic - add the acid to water, never water to the acid.                                                                                                                                 |
| <b>pH</b>                                    | About 1 measured on a 10 g/L (1%) aqueous solution at 20 degC (Sasol Marlon AS3 N); about 1.5 on a 1% solution (two other producer datasheets); about 2 measured on the neat 96% acid (Transmare Chemie). The number is meaningless without the dilution, so always print the dilution with it.          |
| <b>Flash point</b>                           | About 210 degC (Sasol Marlon AS3 N); greater than 200 degC (Transmare Chemie); greater than 90 degC by DIN 51758 on one 96-97% grade. Not a flammable liquid but combustible - quote your own supplier's measured figure rather than picking one of these.                                               |
| <b>Auto-ignition / ignition temperature</b>  | Not available                                                                                                                                                                                                                                                                                            |
| <b>Explosive / dust-explosion properties</b> | Not available                                                                                                                                                                                                                                                                                            |

|                                        |                                                                                                                                                                                                                        |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Vapour pressure</b>                 | Not available                                                                                                                                                                                                          |
| <b>Vapour density</b>                  | Not available                                                                                                                                                                                                          |
| <b>Partition coefficient (log Pow)</b> | Not available                                                                                                                                                                                                          |
| <b>Particle characteristics</b>        | Not available                                                                                                                                                                                                          |
| <b>Molecular weight</b>                | About 320 +/- 2 for the commercial C10-13 blend (two producer datasheets give this figure); 326.5 g/mol for the pure C12 representative, dodecylbenzenesulfonic acid. Because it is a mixture, quote it as an average. |

## 10. Stability and reactivity

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Incompatible materials</b> | Alkalis and strong bases (sodium hydroxide, carbonates, amines) - violent exothermic neutralisation with heat generation; strong oxidising agents; strong acids; cyanides and sulphides (toxic gas evolution); water added to the neat acid (exotherm/spattering). Corrodes galvanised steel, mild steel, aluminium and copper alloys, generating hydrogen.                                                                                  |
| <b>Conditions to avoid</b>    | Store below 50 degC (one producer limits handling to 50 degC max 55 degC; colour darkens above this) in closed containers of 316 stainless steel, polyester/GRP, or HDPE, in a bunded area with an acid-resistant floor. Protect from frost, direct sunlight and heat. Never use galvanised steel, mild steel, aluminium or copper alloys. Segregate from alkalis and oxidising agents. EU storage class 8AL (combustible corrosive liquid). |

## 11. Toxicological information

The health hazards classified for this substance are listed in section 2, and the corresponding first-aid measures in section 4. Numerical toxicological endpoints are not reproduced here: refer to the producer's safety data sheet for the grade supplied, and to the ECHA and PubChem entries for the substance.

## 12. Ecological information

Where section 2 or section 14 classifies this substance as hazardous to the aquatic environment, prevent any release to drains, surface water or groundwater and treat aqueous effluent before discharge. Otherwise, refer to the producer's sheet.

## 13. Disposal considerations

Dispose of the substance and its container through an authorised facility under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 where the waste is scheduled under those Rules, and otherwise as non-hazardous industrial waste, in each case under the conditions of the State Pollution Control Board consent in force at the site. Whether a particular waste stream is scheduled depends on the substance and on what it has been mixed with, so classify the waste before consigning it. Do not reuse empty containers for any other purpose.

## 14. Transport information

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>            | UN 2586                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Class</b>                | 8 (Corrosive substances)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Packing group</b>        | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Proper shipping name</b> | ALKYLSULPHONIC ACIDS, LIQUID or ARYLSULPHONIC ACIDS, LIQUID with not more than 5% free sulphuric acid - declared in practice as 'ALKYLSULPHONIC ACIDS, LIQUID (alkylbenzenesulphonic acid)'. CRITICAL: this entry only applies if free sulphuric acid is not more than 5%. If the free sulphuric acid content exceeds 5%, the correct entry is UN 2584, ALKYLSULPHONIC ACIDS, LIQUID ... with more than 5% free sulphuric acid, Class 8, Packing Group II. Check the COA before raising the transport document. |

## 15. Regulatory information

Supply in India is subject to the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 where the substance is scheduled, and to any product-specific licensing named on the product page. Classification and labelling follow the GHS as adopted in the jurisdiction of use.

**Note:** LABSA is a mixture, not a pure compound: the CAS, the formula and the molecular weight are all representative values, and the SDS should say so. '90%' refers to active matter (sulphonic acid content) - the balance is water plus specification limits on free sulphuric acid (typically 1-2% max) and free oil (typically 2% max). Most published LABSA physical data, including everything in this record that is attributed to a named source, is measured on the 96% grade; where a figure for the 90% grade could not be confirmed it is marked Not available rather than interpolated. The free sulphuric acid figure is not just a quality parameter - above 5% it changes the UN number and the packing group, and under-declaring this is a genuine transport violation. Dilution and neutralisation are both strongly exothermic: always add LABSA to water with agitation and cooling, never the reverse. Trade names to expect on enquiries: acid slurry, LAS acid, DBSA, LABS acid.

## 16. Other information

|                                          |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version                                  | 1.0                                                                                                                                                                                                                                                                                                                    |
| Date of issue                            | 07 October 2026                                                                                                                                                                                                                                                                                                        |
| Supersedes                               | No previous version                                                                                                                                                                                                                                                                                                    |
| Regulatory basis as at the date of issue | EU CLP Regulation 1272/2008 as amended, including Annex VI harmonised classifications; UN Model Regulations and the IMDG Code Amendment 42-24, mandatory from 1 January 2026; ADR 2025; and, in India, the Manufacture, Storage and Import of Hazardous Chemical Rules 1989 and the Central Motor Vehicles Rules 1989. |

**How this sheet was compiled and what governs.** This sheet was prepared by Velora Chemicals Private Limited as the supplier, from PubChem, the ECHA CLP inventory including Annex VI harmonised classifications, ILO International Chemical Safety Cards and published producer safety data sheets. Values that could not be confirmed from those sources are shown as "Not available" rather than estimated. **The producer's safety data sheet for the specific grade and lot supplied is the governing document** and is issued with the consignment; where the two differ, the producer's sheet prevails. This sheet carries no warranty of the properties of any particular batch. Velora Chemicals Private Limited is a bulk supplier and trader, not a manufacturer.

**Sources consulted:** [https://sasoldcproducts.blob.core.windows.net/qadocuments/Safety%20Datasheets/128ef286-9214\\_EU\\_MARLON%20A S%203N\\_EN-GB.PDF](https://sasoldcproducts.blob.core.windows.net/qadocuments/Safety%20Datasheets/128ef286-9214_EU_MARLON%20A S%203N_EN-GB.PDF); <https://scl-group.com/wp-content/uploads/2023/06/Transmare-Chemie-LABSA-96-MSDS.pdf>; <https://ncsp.com.sa/wp-content/uploads/2023/01/LABSA-MSDS.pdf>; <https://www.ucf.ae/wp-content/uploads/2019/04/labsa-msds.pdf>; <https://adrdangerousgoods.com/eng/substances/0001803/un2586-alkylsulphonic-acids-liquid-or-arylsulphonic-acids-liquid-with-not-more-than-5-free-sulphuric-acid/>; <https://adr-tool.com/1799/un-2586>