

Anionic Surfactant - Alkaline

Linear Alkylbenzene Sulphonate (LAS) · Industrial Surfactant Base

KEY BENEFITS

— Linear Alkylbenzene Sulphonate (LAS) 30–35% w/w	the most widely used anionic surfactant active in institutional and industrial cleaning — biodegradable, cost-effective, and effective across a broad range of grease and particulate soiling types.
— Alkaline carrier pH 10–12	enhances saponification of fatty soils and improves surfactant performance in hard water conditions by sequestering divalent calcium and magnesium ions that reduce anionic surfactant efficacy.
— Formulation-ready concentration	designed as a base input for in-house blending of floor cleaners, general-purpose detergents, laundry concentrates, and industrial surface cleaners — verified active content and consistent lot-to-lot specification.
— Standalone high-dilution cleaner	at 1:50 to 1:100 dilution in water, suitable as a direct industrial surface and floor cleaner in applications where residue is tolerable and rinsing is available.
— Biodegradable active	LAS degrades rapidly in aerobic wastewater treatment systems — relevant for institutional facilities operating under effluent discharge compliance requirements.
— Incorporation rate	5–15% by weight into cleaning formulations depending on target application and required active level. Consult TDS for blending guidance.

AT A GLANCE

pH	10.0–12.0 (alkaline)
Pack size	5 Litres / Bulk on request
Shelf life	24 months from date of manufacture, unopened
Rinse after use	Yes — when used as direct cleaner

HOW TO USE

- 1 General surface cleaning**
Dilute 10–20 ml per litre of water (1:50 to 1:100). Apply with mop, sponge, or spray. Agitate. Rinse with clean water.
- 2 Industrial floor cleaning**
Dilute 20–30 ml per litre for heavily soiled industrial floor surfaces. Rinse required after application.

WHY IT WORKS

What is LAS, how does anionic surfactant cleaning work, and why does alkalinity enhance it? Linear Alkylbenzene Sulphonate is an anionic surfactant — each molecule carries a negatively charged sulphonate head group attached to a linear alkyl chain of 10–13 carbons. The sulphonate head is hydrophilic (water-attracted); the alkyl chain is hydrophobic (oil-attracted). At a soil interface, LAS molecules orientate with their hydrophobic tails into grease deposits and their charged heads facing into the water phase, forming micelles that encapsulate grease particles and hold them in suspension for rinsing. Alkalinity at pH 10–12 enhances this mechanism in two ways. First, it performs saponification — converting triglyceride fats and oils to soluble glycerol and fatty acid salts before the surfactant mechanism is required, reducing the total surfactant load needed to emulsify the remaining soil. Second, the alkaline environment reduces the concentration of free divalent calcium and magnesium ions in hard water that would otherwise complex with the anionic sulphonate groups and precipitate them out of solution, effectively reducing active concentration at the cleaning surface. LAS biodegrades through beta-oxidation in aerobic bacterial environments, producing sulphophenyl carboxylic acids that are further mineralised to carbon dioxide, water, and inorganic sulphate. Biodegradation is greater than 90% in standard aerobic wastewater treatment, making it compliant with most industrial effluent discharge standards.

DID YOU KNOW

Fact LAS is produced globally at over 3.5 million tonnes per year — making it the single highest-volume synthetic surfactant manufactured. The cleaning product in virtually every Indian institutional kitchen, laundry, and floor maintenance operation is built on this chemistry. Procurement teams who understand the active are buying the mechanism, not the marketing.

FULL PRODUCT SPECIFICATIONS

Active	Linear Alkylbenzene Sulphonate (LAS) 30–35% w/w
Active class	Anionic surfactant
pH	10.0–12.0 (alkaline)
Formulation type	Aqueous concentrate
Appearance	Amber to brown viscous liquid
Foam profile	High foam — not suitable for machine washing without defoamer
Biodegradability	>90% aerobic biodegradation
Dilution — formulation	5–15% w/w incorporation
Dilution — direct use	10–30 ml per litre depending on soiling level
Rinse after use	Yes — when used as direct cleaner
PPE	Gloves recommended — alkaline concentrate
Shelf life	24 months from date of manufacture, unopened
Pack size	5 Litres / Bulk on request
MSDS / TDS	QR code on label · Available on request

CAUTION & STORAGE

Handle with care.

For professional and industrial use. Avoid contact with eyes and prolonged skin contact with concentrate. In case of eye contact, rinse immediately with copious clean water for 15 minutes and seek medical advice. Do not mix with cationic surfactants or quaternary ammonium compounds — ion exchange neutralises both actives. Keep out of reach of children. Store in original sealed container below 30°C, away from direct sunlight, acids, and heat sources. Keep container tightly closed when not in use. Shelf life 24 months from manufacture date, unopened.

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Industrial floor cleaning

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BEFORE YOU START — PPE REQUIRED

- ✓ Chemical-resistant gloves (nitrile)
- ✓ Safety goggles / eye protection

QUICK REFERENCE

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HAZARD ! MODERATE

DO

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- ✓ Store in original sealed container below 30°C, away from direct sunlight, acids, and heat sources.
- ✓ Keep container tightly closed when not in use.

DON'T

- ✗ Avoid contact with eyes and prolonged skin contact with concentrate.
- ✗ Do not mix with cationic surfactants or quaternary ammonium compounds — ion exchange neutralises both actives.
- ✗ Keep out of reach of children.

Emergency / questions: care@allesclinx.com · allesclinx.com · National Poison Control (India): 1800-116-117