



ELSURFAC - AOS38™ (Alpha Olefin Sulfonate (AOS))

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Clear to slightly turbid pale yellow powder
Physical Form	Powder
Odor	Mild odor
Molecular Weight (g/mol)	300.44
Density or Specific Gravity	1.054 g/cm ³ at 20°C
Viscosity	40 mPa·s (liquid)
pH (if aqueous solution)	7-9
HLB Value	11
Thermal Properties	
Melting Point	140°C to 580°C
Boiling Point	> 100 °C
Flash Point	>100°C

2. Processing Methods

Laundry Detergents

When incorporating Alpha Olefin Sulphonate (AOS) into laundry detergent formulations, add it to the water phase with gentle stirring to avoid excessive foaming. Use it as a primary or secondary surfactant for excellent cleansing and foaming properties, especially in hard water. Maintain the formulation pH between 7-9 to ensure AOS stability and effectiveness. Avoid high shear mixing after addition to preserve its foaming characteristics.

Key Ingredients	Indicative Dosage (% w/w)
Alpha Olefin Sulphonate (AOS)	10-25%
Alkali Pentavalent Phosphoric Acid Salt	10-30%
Sodium Silicate	2-10%
Alkanol	0.4-8%
Sodium Sulfate	5-20%
Water	10-20%



Hair Shampoo

When adding Alpha Olefin Sulphonate (AOS) to hair shampoo formulations, incorporate it into the aqueous phase under gentle stirring to minimize foaming during mixing. AOS provides strong cleansing and foaming, so it's often blended with milder surfactants (e.g., betaine) to reduce potential irritation. Maintain the formulation pH between 5.5 and 6.5 for scalp compatibility.

Key Ingredients	Indicative Dosage (% w/w)
Alpha Olefin Sulphonate	3-13%
Amphoteric or zwitterionic surfactant	1 to 6%
Cationic conditioning polymer	0.05 to 0.9%
Silicone emulsion	0.05 to 10%
Water	50-60%

Cleanser

When formulating with Alpha Olefin Sulphonate (AOS), pre-dilute it before adding to the formulation to reduce viscosity shocks and avoid lump formation. Always add AOS slowly under gentle stirring to maintain clarity and stability.

Key Ingredients	Indicative Dosage (% w/w)
Alpha Olefin Sulphonate	4-30%
Cocamidopropyl Betaine	2-8%
Glycerin	1-5%
Water	60-70%

3. Products

Products	Authorized dosage
Cosmetics and personal care: Shampoos	4-16%
Body Washes	4-30%
Laundry Detergents	10-25%

The information and data contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof.

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