

# Do it Right

# *First Time.....Every Time*



**AARTI INDUSTRIES LIMITED**

(Surfactant Specialities Division)

**Leading Manufacturer of Surfactants &  
Speciality Chemicals**

**AARTI INDUSTRIES LIMITED** has world class expertise in development & manufacturing of several Basic chemicals, Agrochemicals, Surfactants, Speciality chemicals and intermediates for Pharmaceuticals, Dyes, Pigments & Agro chemicals.

**AARTI GROUP** has attained a total turnover of US \$ 500 million in the year 2008-09 with flagship companies AARTI INDUSTRIES LIMITED (AIL) and AARTI DRUGS LIMITED (ADL) listed on the stock exchange.

**AARTI** has manufacturing sites in india at Gujrat ( Vapi, Sarigam, Jhagadia & Bhachau), at Maharastra (Tarapur, Dombivali), at M.P. (Pithampur) & at U.T. of Dadra & Nagar Haveli (Silvassa).

**AARTI GROUP** is doing research in various areas with special emphasis on Pharmaceuticals, Agrochemicals, Surfactants and in Speciality Chemicals.

**AARTI** is sourcing global partners and strategic alliances in areas of mutual interest viz.

- Development of International market for AARTI's products.
- Exchange of Information and Technology.

**AARTI INDUSTRIES LIMITED (Surfactant Specialities Division)** is engaged in the manufacturing of Surfactants and Speciality Chemicals with a vision of " TO BE DEPENDABLE SOURCE FOR QUALITY SURFACTANTS FOR THE PERSONAL CARE, ORAL CARE & HOME CARE INDUSTRIES".

AIL (SSD) attaches highest priority to the "CUSTOMER SATISFACTION" in terms of Quality, Innovation, Cost Effectiveness, Timely Deliveries on continuous basis.

**AIL (SSD)'s State-Of-Art manufacturing facilities Includes :**

- World class FALLING FILM CONTINUOUS SULFONATION AND SULFATION TECHNOLOGY
- TURBO TUBE DRYING TECHNOLOGY (Only at AIL-SSD in INDIA) for High Active Surfactants .
- MULTI PRODUCT FLEXIBILITY
- AUTOMATED PROCESSES through DCS controlled plant
- SPECIALITY CHEMICAL PLANT with Pilot Reactor
- SPRAY DRYING FACILITIES
- ZERO DISCHARGE Effluent Treatment
- Well Equipped Laboratory

**AIL (SSD) offers Surfactant Actives for**

- ✓ **Personal Care:** Hair Shampoos, Hand Wash, Shaving Creams, Bathing Soaps, Baby Soaps etc.
- ✓ **Oral Care :** Toothpaste, Tooth Powder, Mouth Wash Liquid etc.
- ✓ **Home Care :** Detergent Powder & Bar, Liquid Detergents, Dish Wash Liquid & Bar, Floor Cleaners , Toilet Bowl Cleaners etc.
- ✓ **Industrial Applications:** Agro Chemicals, Metal Treatment Chemicals, Oil Well Chemicals, Construction Chemicals, Emulsion Polymerization, Leather and Textile Auxiliaries, Paper & Pulp Chemicals, Paints, Pharmaceuticals, Fire Fighting Chemicals etc.

# Product Specification



## SODIUM LAURYL ETHER SULFATE (SLES-LIQUID)

(This liquid product is based on thin film continuous Sulfation of medium chain C12-C14 natural primary ether alcohol, neutralized with sodium ion)

PRODUCT	SULFOLON LME 28/A	SULFOLON LME 28	SULFOLON LME 28/C
Form	Colorless to Pale Yellow Liquid	Colorless to Pale Yellow Liquid	Colorless to Pale Yellow Liquid
Active Matter,%	27 ± 1	28 ± 1	28 ± 1
pH*	6.0 – 8.0	6.0 -8.0	6.0 -8.0
Mean Molecular Mass	340 ~ 343	386	430
Un-Sulfated Matter, %	1.2 Max	1.2 Max	1.2 Max
Sodium Sulfate + Sodium Chloride, % Max	3.5 (Combined)	3.5 (Combined)	3.5 (Combined)
Brookfield Viscosity, cps*	< 1000	< 500	< 1000
Packing	Tanker & 50/235 kg drum	Tanker & 50/235 kg drum	Tanker & 50/235 kg drum
General Applications	Hair shampoo, Bubble bath, Foam bath, Liquid soap, Creams / Lotions Fire Fighting Foam, Construction Chemicals		

\*pH & viscosity can be adjusted as per customer requirements.

## SODIUM LAURYL ETHER SULFATE (SLES-PASTE)

(High active paste based on thin film continuous Sulfation of medium chain C12- C14 natural primary ether alcohol neutralized with sodium ion.)

PRODUCT	SULFOLON LME 70/A	SULFOLON LME 70	SULFOLON LME 70/C
Form	Off White to Faint Yellow Homogenous Viscous Paste	Off White Flowable Paste	Off White To Faint Yellow Paste
pH@% Aqueous	6.0 – 9.0	7.0 - 10.0	6.5 -9.0
Anionic Active Matter %	70 ± 2	70 ± 2	70 ± 2
Mean Molecular Mass	340 ~ 343	386	430
Un-Sulfated Matter, %	3.0 Max	3.0 Max	3.0 Max
Sodium Sulfate + Sodium Chloride, % Max	4.0 Max (Combined)	3.5 Max 0.5 Max	4.0 Max (Combined)
1,4 - Dioxane, ppm	30 Max	-	50 Max
Packing	210 kg Drum	210 kg Drum	210 kg Drum
General Applications	Hair shampoo, Bubble bath, Foam bath, Liquid soap, Creams / Lotions Fire Fighting Foam, Construction Chemicals		



# Product Specification



## SODIUM LAURYL SULFATE (SLS)

(Based on Medium chain C12- C14 natural primary alcohol)

PRODUCT	SULFOLON LML 30	SULFOLON LMC 70	SULFOLON LMN 94	SULFOLON LMP 95
Appearance	Colorless to Pale Yellow Liquid	Off White to Creamy Paste	Off White to White Needle	Off White to White Powder
pH ##	7.5 -9.5*	-	7.5 – 9.5	7.5 - 9.5
Alkalinity as NaOH, %	-	0.7 Max	-	-
Active Matter,%	30 ± 2	68 Min	92 Min	93 Min
MOL. WT.	299	299	299	299
Unulfated Matter,% Max	1.0 Max	3.0 Max	1.25 Max	1.25 Max
Sodium Sulfate + Sodium Chloride, % Max	2.0 Max	4.0 Max	6.0 Max	5.0 Max
Packing	Tanker & 50/235 kg drum	200 kg Drum	25 kg Bag	20 kg Bag
General Applications	Toothpaste / Tooth Powder Hair Shampoo Foam Bath Liquid Soap Creams / Lotions Agrochemicals			

\* pH can be adjusted as per Customer requirement  
## 5% Aqueous for Liquid, 1% Aqueous for powder /needle



**AARTI INDUSTRIES LIMITED**  
(Surfactant Specialities Division)

# Product Specification



## ALFA OLEFIN SULFONATE (AOS)

(Alfa Olefine Sulfonate based on thin film continuous Sulfonation of high purity C14 olefin, neutralized with sodium ion.)

PRODUCT	SULFODET L-38	SULFODET P-70	SULFODET N-91	SULFODET N-94	SULFODET P-93/C	SULFODET P-95
Appearance	Straw Yellow Liquid	Pale Yellow Paste- Flowable At 70-80 °C	Pale Yellow Noodle	Cream To Yellow Needles	Coarse Creamy Powder	Cream To Off White Powder
Color Klett,	80 Max	100 Max	100 Max	100 Max	-	100 Max
pH#	7.0 -12.0*	-	-	-	9.5 - 11.5	7.0 - 10.0
Alkalinity,% Max	0.5 Max*	0.5 Max	0.7 Max	0.7 Max	-	0.7
Active Matter,%	38 ± 1	70 ± 2	89 Min	92 Min	93 Min	94 Min
Free Alfa Olefin, % Max (NDOM)	1.5 Max	2.5 Max	2.5 Max	2.0 Max	1.5 Max	2.0 Max
Inorganic Salts % Max	2.0 Max	5.0 Max	5.0 Max	7.0 Max	6.0 Max	6.0 Max
Moisture %	-	-	9.0 Max	-	-	-
Viscosity, cps	Typically 500 Max*	-	-	-	-	-
Packing	Tanker & 50/235 kg drum	200 kg Drum	25 kg Bag	25 kg Bag	30 kg Bag	25 kg Bag
General Applications	Hair Care Shampoo Toilet bar / Detergents / Liquid Detergents Home Care Formulations Textiles / Leather / Agrochemicals / Construction Polymers / Fire-fighting					

\* pH, Alkalinity, Viscosity can be adjusted as per Customer requirement

# 5% Aqueous for Liquid, 1% Aqueous for powder / needle / noodle



**AARTI INDUSTRIES LIMITED**  
(Surfactant Specialities Division)

# Product Specification



## QUATERNARY AMMONIUM COMPOUNDS

### Benzalkonium Chloride (BKC)

(A broad spectrum cationic surfactant and exhibits excellent antimicrobial activity)

PRODUCT	SULFOCAT BK 50	SULFOCAT BK 80	SULFOCAT BK 90
Appearance	Colorless Clear Liquid	Colorless to Off White Viscous Liquid	Colorless to Pale Yellow High Viscous Gel
Odor	Characteristic, slightly aromatic	Characteristic, slightly aromatic	Typical Aromatic
pH@5% Aqueous	6.0 – 10.0	6.0 – 10.0	6.0 - 9.0
Active Matter %	50 ± 1	80 ± 2	90 ± 1
Free Amine %	1 Max	1 Max	1 Max
Packing	50 / 220 kg Drum	50 / 220 kg Drum	50 / 220 kg Drum
General Applications	Water Treatment, Sugar Industry, Dairy and Pulp Industry Paper and Pulp Industry, General Industrial Usages		



## BETAINES (Quaternary Amphoteric Compounds)

(CAPB / CAPB-HA / CB)

PRODUCT	SULFOTAIN CAP	SULFOTAIN CAP / HA	SULFOTAIN CB
Appearance	Pale Yellow Liquid	Clear to Slightly Hazy Pale Yellow	Colorless to Pale Yellow
Odor	Mild aromatic	Mild aromatic	Mild aromatic
pH@5% Aqueous	4.0 – 7.0	4.0 - 7.0	6.0 -8.0
Active Matter %	29 ± 1	32 Min	29 ± 1
Free Amido Amine %	1 Max	-	-
Free Fatty Acid %	1.0 Max	-	-
Sodium Chloride %	4.0 - 6.0	7.5 Max	6.0 - 8.0
Packing	50 / 235 kg Drum	50 / 235 kg Drum	50 / 235 kg Drum
General Applications	Hair Shampoo, Shower Gel, Bubble Bath, Face Wash Detergents / Soaps, Fire Fighting Foam		



# Product Specification



## FATTY ALKANOLAMIDES (CMEA / CDEA)

(Condensation product of coconut fatty acid with alkanolamine)

PRODUCT	SULFONON CM	SULFONON CD
Appearance	White To Pale Yellow Flakes / Waxy Solid	Yellow Viscous Liquid
Odor	Characteristic	Characteristic AMINE
pH@1% Aqueous	9.0 - 10.5	9.0 - 11.0
Purity %	96 Min	88 Min
Free Amine %	1 Max	9.0 Max
Free Fatty Acid %	0.5 Max	-
Solubility in water	-	Turbid, Opaque Solution
Packing	25 kg Bag	50 / 200 kg Drum
General Application	Hair Shampoo, Shaving Cream, Detergents Textile Processing, Hand Wash, Liquid Detergents, Scrub Soaps, Cosmetic Creams & Lotions	



## FATTY AMINE OXIDES

(N,N - Dimethyl Lauryl / Myristyl amine N-oxide, This is amphoteric surfactant. This is used as excellent foam stabilizer and viscosity builder.)

PRODUCT	SULFOMINE DML	SULFOMINE DMM
Appearance	Faint Yellow to Colorless Liquid	Faint Yellow to Colorless Viscous Liquid
Colour	Characteristic	Characteristic
pH@10% Aqueous	6.0 - 8.0	6.0 - 8.0
Active Matter % by wt	27 Min	24 Min
Free Amine, % by wt	1.0 Max	1.0 Max
Peroxide, %	-	0.5 Max
Packing	50/235 kg Drum	50/235 kg Drum
General Applications	Shampoos, Detergents / Textiles Rubber / Polymerization, Lime Soap Dispersants	



**AARTI INDUSTRIES LIMITED**  
(Surfactant Specialities Division)

# Product Specification



## LAURETH CARBOXYLATE

(Alkyl ether carboxylate based on medium cut ethoxylated C12 - C14 alcohol. This is high foaming mild anionic surfactant ideal for Metal cleaning. Toilet Bowl Cleaning acid formulation.)

PRODUCT	SULFOXYLATE HLC 7
Appearance	Colorless Liquid
Odor	Characteristic
pH@5% aqueous	4.0 - 6.0
Solids, % by wt	30 Min
Packing	50 / 235 kg Drum
General Applications	Metal Cleaning Formulations Toilet Bowl Cleaners Floor Cleaning Formulations Mild Co-surfactants Emulsifiers, Solubilizers Hard water softeners



## AMINE ETHOXYLATE

(Ethoxylated speciality product intended to be used as Acid Thickener. This product provides added benefits like Wetting, Foam, Emulsification, etc)

PRODUCT	SULFONON AT/B
Appearance	Light Brown Oily Semi-clear Liquid
Odor	Characteristic
pH@5% aqueous	10 - 12
Viscosity, CPS	< 150
Specific gravity	0.88 ± 0.03
Cloud Point, °C	30 Min
Packing	50 / 200 kg Drum
General Applications	Acid thickening Agent Emulsifier Corrosion Inhibitor





# Product Specification



## MILD SURFACTANTS

### ◆ SULFOSUCCINATES

(Mono ester based on medium cut C-1214 normal / ethoxylated alcohol. This group of product is versatile and used in wide range of applications including bath products, shampoo and skin cleansers. This is an anionic surfactant.)

PRODUCT	SULFOCCINATE LSS	SULFOCCINATE LES
Appearance	Colorless To Faint Yellow Get To Soft Paste	Clear Liquid
Odor	Characteristic	-
pH@5% Aqueous	6.0 – 7.0	5.0 - 7.0
Solids % by wt	38 Min	38 Min
Sulfite %	-	0.3 Max
Packing	50 / 100 kg Drum	50 / 100 kg Drum
General Applications	Shower Gels, Facial Cleansers, Shaving Creams, Feminine Hygienic Products, Baby Wash Products	



### ◆ CARBOXYLATES

(Sodium laureth carboxylate based on medium cut ethoxylated C-1214 alcohol. This is high foaming mild anionic surfactant)

PRODUCT	SULFOXYLATE SLC 7
Appearance	Colorless Liquid
Odor	Characteristic
pH@5% Aqueous	6.0 - 8.5
Solids % by wt	32 - 35
Sulfite % Max	0.3
Chloride as NaCl, % by wt.	4 Max
Packing	50 / 100 kg Drum
General Applications	Shampoos, Mild Co-surfactants, Emulsifiers, Solubilizers, Hard water softeners



