

The Condensed Encyclopedia of Surfactants

(With Chemical Component and
Manufacturer Cross Reference)

Compiled by

Michael and Irene Ash

*Contains over 12,000 entries
of currently marketed surfactant trademark products*

*Chemical Publishing Co., Inc.
New York, N.Y.*

The Condensed Encyclopedia of Surfactants

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PREFACE

This single-volume compendium fulfills the demand for a compact version of the widely acclaimed Encyclopedia of Surfactants and contains over 12,000 entries. The surfactant products included have been compiled with the cooperation of the major national and international surfactant manufacturers. The first section of this reference is a Trademark Dictionary that contains short entries for all tradename surfactants that appear in Volumes I—IV of the Encyclopedia plus all the new surfactant products that have become available since the publication of this set. Each tradename entry is followed by a number in brackets which refers to the manufacturer that is listed in Part III of this encyclopedia.

What makes this reference unique and especially useful for anyone doing chemical research is the addition of the Chemical Component-to-Tradename Cross Reference section. This provides the user with the capability of finding tradename surfactant products that contain specific chemical compounds. For example, by locating alphabetically the chemical *ammonium lauryl sulfate*, the user is able to retrieve a list of all the tradename products that contain that chemical. The user can then refer back to the first section for detailed descriptions of the specific tradename products listed here.

This section also includes the chemical compound synonyms for the surfactant components which are cross referenced in most cases to the alternate chemical names that contain the tradename product listings. Primary chemical component references are made to the CTFA (Cosmetic, Toiletry, and Fragrance Association) adopted names where possible. For many chemical entries the Chemical Abstract Service Registry Numbers (CAS) are given. This number ensures the unique identification of a chemical regardless of its multiplicity of synonyms. RD (Recognized Disclosure) reference numbers are included in some cases either in addition to the CAS number or because no CAS number has been assigned as yet.

The third section presents the names and addresses of the manufacturers of all of the products included in this compendium with their associated tradenames.

This book is a product of many years of research and we are particularly grateful to Roberta Dakan for her editorial suggestions, ideas, and hours dedicated to the project. We are also indebted to Nancy Roser for her ability to accurately enter relevant data. Their tireless efforts and energy have helped make this reference work possible.

M. & I. Ash

NOTE

The information contained in this series is accurate to the best of our knowledge; however, no liability will be assumed by the publisher for the correctness or comprehensiveness of such information. The determination of the suitability of any of the products for prospective use is the responsibility of the user. It is herewith recommended that those who plan to use any of the products referenced seek the manufacturer's instructions for the handling of that particular chemical.

Unless otherwise specified, when the temperatures are not given for properties such as viscosity, density, solubility, etc., a standard temperature of 25 C is to be assumed.

OTHER BOOKS BY MICHAEL AND IRENE ASH

- A Formulary of Paints and Other Coatings, Volumes I and II
- A Formulary of Detergents and Other Cleaning Agents
- A Formulary of Adhesives and Sealants
- A Formulary of Cosmetic Preparations
- The Thesaurus of Chemical Products, Volumes I and II
- Encyclopedia of Industrial Chemical Additives, Volumes I—IV
- Encyclopedia of Surfactants, Volumes I—IV
- Encyclopedia of Plastics, Polymers and Resins, Volumes I—IV
- Vol. I, What Every Chemical Technologist Wants to Know About...Emulsifiers and Wetting Agents
- Vol. II, What Every Chemical Technologist Wants to Know About...Dispersants, Solvents, and Solubilizers
- Vol. III, What Every Chemical Technologist Wants to Know About...Plasticizers, Stabilizers, and Thickeners

ABBREVIATIONS

@ .....	.....at
act. ....	.....active
agric. ....	.....agricultural
anhyd. ....	.....anhydrous
aq. ....	.....aqueous
aux. ....	.....auxiliary
avail. ....	.....available
avg. ....	.....average
BHA	butylated hydroxyanisole
BHT	butylated hydroxytoluene
biodeg. ....	.....biodegradable
blk. ....	.....black
b.p. ....	.....boiling point
br. ....	.....brown
brnsh. ....	.....brownish
C	degrees Centigrade
CC ....	.....Closed cup
char. ....	.....characteristic
cm....	.....centimeter(s)
COC ....	.....Cleveland Open Cup
compd. ....	.....compound
conc.	concentration, concentrated
cps ....	.....centipoise(s)
cs of cst .....	.....centistoke(s)
cryst. ....	.....crystalline
DEA ....	.....diethanolamine
decomp. ....	.....decomposes
dens. ....	.....density
deriv. ....	.....derivative(s)
disp. ....	.....dispersible, dispersion
dist. ....	.....distilled
dk. ....	.....dark
EO ....	.....ethylene oxide
EP ....	.....extreme pressure
esp. ....	.....especially
F ....	.....degrees Fahrenheit
flam. ....	.....flammable
f.p. ....	.....freezing point
ft ³ ....	.....cubic feet
g ....	.....gram(s)
gal. ....	.....gallon(s)
gr. ....	.....green

HCl	hydrochloric acid
HLB	hydrophilic lipophilic balance
hydrog.....	hydrogenated
ingred.....	ingredient(s)
insol.....	insoluble
IPA.....	isopropyl alcohol, isopropanol
IPM.....	isopropyl myristate
IPP.....	isopropyl palmitate
kg.....	kilogram(s)
l.....	liter(s)
lb.....	pound(s)
liq.....	liquid
lt.....	light
max.....	maximum
MEK.....	methyl ethyl ketone
mfg.....	manufacture
MIBK.....	methyl isobutyl ketone
min.....	mineral, minimum
misc.....	miscible
mixt.....	mixture(s)
ml.....	milliliter(s)
mm.....	millimeter(s)
mN.....	millinewton
m.p.....	melting point
m.w.....	molecular weight
no.....	number
nonflam.....	nonflammable
OC.....	Open cup
o/w.....	oil-in-water
org.....	organic
PEG.....	polyethylene glycol
pH.....	hydrogen ion concentration
pkg.....	packaging
PM.....	Pensky-Martens
PMCC.....	Pensky-Martens closed cup
PO.....	propylene oxide
POE.....	polyoxyethylene, polyoxyethylated
POP.....	polyoxypolypropylene
pt.....	point
powd.....	powder
quat.....	quaternary
redsh.....	reddish
ref.....	refractive

resp.	.....	respectively
R.T.	.....	room temperature
sapon.	.....	saponification
SBR	.....	styrene/butadiene resin
sat.	.....	saturated
SE	.....	self-emulsifying
sec.	.....	secondary
sol.	.....	soluble, solubility
solid.	.....	solidification
sol'n.	.....	solution
solv(s).	.....	solvent(s)
sp.gr.	.....	specific gravity
Stod.	.....	Stoddard solvent
SUS	.....	Saybolt Universal Seconds
syn.	.....	synthetic
TCC	.....	Taggart closed cup
TEA	.....	triethanolamine
tech.	.....	technical
tert.	.....	tertiary
TOC	.....	Taggart open cup
typ.	.....	typical
unsat.	.....	unsaturated
USP	.....	United States Pharmacopeia
veg.	.....	vegetable
visc.	.....	viscous, viscosity
wh.	.....	white
w/o	.....	water-in-oil
wt.	.....	weight
yel.	yellow
ylsh.	yellowish
%	percent
≈	approximately
<	less than
>	greater than
#	number

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A

- AA-10.** [140] Detergent, wetting agent, emulsifier; wh. liq., flake; odorless; water sol.; dens. 2 lb/gal; sp.gr. 1/5 H₂O; 98% act.
- Abex 18-S.** [20] Anionic; emulsifier; pale yel. liq.; dens. 8.5 lb/gal; visc. 200 cps (15 C); surf. tens. 48 dynes/cm (1.0%); 35% act.
- Abex 22-S.** [20] Anionic; emulsifier; pale yel. liq.; dens. 8.7 lb/gal; visc. 1000; surf. tens. 40 dynes/cm; 25% act.
- Abex 23 S.** [20] Used in emulsion polymerization; paints, paper coatings, textiles, adhesives; liq.; 60% act.
- Abex 26-S.** [20] Anionic; emulsifier; pale yel. liq.; dens. 8.8 lb/gal; visc. 100 cps; surf. tens. 55 dynes/cm; 33% act.
- Abex 33 S.** [20] See Abex 23 S; liq.; 30% conc.
- Abex 36A.** [20] See Abex 23 S; liq.; 58% conc.
- Abex 1404.** [20] See Abex 23 S; liq.; 42% conc.
- Abex JKB.** [20] Anionic; emulsifier, surfactant for highly carboxylated acrylic monomers, latex thickeners, alkali-sol. resins; clear liq.; 30% act.
- Abex VA-40.** [20] Anionic; emulsifier, surfactant for highly carboxylated acrylic monomers, high solids vinyl acetates, latex thickeners, alkali-sol. resins; pale yel. liq.; visc. 600 cps; 40% act.
- Abex VA-50.** [20] Anionic; emulsifier, surfactant for high solids vinyl acetates; pale-yel. liq.; visc. 400 cps; surf. tens. 47.4 dynes/cm (0.01%); 46% act.
- Abil 281.** [258; 259] Polysiloxane polyether copolymer; nonionic; silicone surfactant used in personal care products; liq.; sol. in water; 100% conc.
- Abil B 8842, B 8843, B 8847, B 8851, B 8852,**
- B 8873.** [258; 259] Polysiloxane polyether copolymer; nonionic; surfactant used in personal care products; liq.; water-sol.; 100% conc.
- Ablunol 200ML.** [588] PEG monolaurate; nonionic; emulsifiers, lubricants, dispersing and leveling agents used in cosmetic, textile, paint and other industrial uses; liq.; HLB 9.5; 100% conc.
- Ablunol 200MO.** [588] PEG 200 monooleate; nonionic; see Ablunol 200ML; liq.; HLB 7.9; 100% conc.
- Ablunol 200MS.** [588] PEG 200 monostearate; nonionic; see Ablunol 200ML; solid; HLB 8.0; 100% conc.
- Ablunol 400ML.** [588] PEG 400 monolaurate; nonionic; see Ablunol 200ML; liq.; HLB 13.1; 100% conc.
- Ablunol 400MO.** [588] PEG 400 monooleate; nonionic; see Ablunol 200ML; liq.; HLB 11.5; 100% conc.
- Ablunol 400MS.** [588] PEG 400 monostearate; nonionic; see Ablunol 200ML; solid; HLB 11.6; 100% conc.
- Ablunol 600ML.** [588] PEG 600 monolaurate; nonionic; see Ablunol 200ML; liq.; HLB 1.48; 100% conc.
- Ablunol 600MO.** [588] PEG 600 monooleate; nonionic; see Ablunol 200ML; liq.; HLB 13.5; 100% conc.
- Ablunol 600MS.** [588] PEG 600 monostearate; nonionic; see Ablunol 200ML; solid; HLB 13.6; 100% conc.
- Ablunol 1000MO.** [588] PEG 1000 monooleate; nonionic; see Ablunol 200ML; solid; HLB 15.2; 100% conc.

Ablunol 1000MS. [588] PEG 1000 mono-stearate; nonionic; see Ablunol 200ML; solid; HLB 15.2; 100% conc.

Ablunol CO5. [588] Castor oil, ethoxylated; nonionic; emulsifier, lubricant, antistat; liq.; HLB 4.0.

Ablunol CO10. [588] Castor oil, ethoxylated; nonionic; emulsifier, lubricant, antistat; liq.; HLB 6.4.

Ablunol CO15. [588] Castor oil, ethoxylated; nonionic; emulsifier, lubricant, antistat; liq.; HLB 8.5.

Ablunol CO30. [588] Castor oil, ethoxylated; nonionic; emulsifier, lubricant, antistat; liq.; HLB 11.8.

Ablunol CO45. [588] Castor oil, ethoxylated; nonionic; emulsifier, lubricant, antistat; liq.; HLB 13.6.

Ablunol NP4. [588] Nonoxynol-4; nonionic; detergent and dispersant for use in petroleum oils; intermediate for mfg. of surfactants and antistatic agents; co-emulsifier for fats, oils and waxes; liq.; oil-sol.; HLB 8.8; 100% conc.

Ablunol NP6. [588] Nonoxynol-6; nonionic; emulsifier or coemulsifier; coupling agent; intermediate for mfg. of surfactants; emulsifier for silicone and min. oil; liq.; HLB 10.8.

Ablunol NP8. [588] Nonoxynol-8; nonionic; detergent for formulating household and industrial cleaning compounds; liq.; water-sol.; HLB 12.2; 100% conc.

Ablunol NP9. [588] Nonoxynol-9; nonionic; detergent used in textile, paper, and leather industries; metal processing as a wetting agent with mineral acid; liq.; water-sol.; HLB 13.0; 100% conc.

Ablunol NP15. [588] Nonoxynol-15; nonionic; surfactant used in alkaline metal cleaners and bottle washing formulations; liq.; HLB 15.0; 100% conc.

Ablunol S-20. [588] Sorbitan monolaurate; nonionic; emulsifier for oils and fats in cosmetic and industrial oil products; liq.; water-disp.; HLB 8.6; 100% conc.

Ablunol S-60. [588] Sorbitan monostearate; nonionic; preparation of silicone defoamer emulsions; textile process lubricant; solid; HLB 4.7; 100% conc.

Ablunol S-80. [588] Sorbitan monooleate; nonionic; emulsifier for oils, fats and waxes; wet processing of syn. PU leather; liq.; HLB 4.3; 100% conc.

Abluphat LP. [588] Phosphate ester; anionic; antist for syn. fibers; liq.; 30% conc.

Ablusol C-78. [588] Sodium dioctyl sulfosuccinate; anionic; wetting agent for textile, PU leather; emulsion polymerization, agric. emulsion, and other industrial applications; liq.; 70% conc.

Ablusol DBC. [588] Calcium alkylaryl sulfonate; anionic; emulsifier; liq.; 70% conc.

Ablusol NL. [588] Sodium naphthalene sulfonate formaldehyde condensate; anionic; dye dispersant and antiagglomerant; used in the process of polyester and acetate fabrics; liq.; 40% conc.

A.B.S.87%. [610] Alkylbenzene sulfonic acid; detergent intermediate; liq.; 87% conc.

Accobetaine CL. [66] Complex coco betaine; detergent, wetting agent, emulsifier, high foaming agent, solubilizer, household and cosmetic uses; yel. liq.; pleasant odor; water-sol.; f.p. 0 C; 35% act.

Accomeen C2. [66] PEG-2 cocamine; nonionic; emulsifier, antistat, surfactant; Gardner 4 liq., amine odor; sol. in org. solv., water-insol.; dens. 7.25 lb/gal.; sp.gr. 0.87; 99% act.

Accomeen C5. [66] PEG-5 cocamine; nonionic; emulsifier, surfactant; antistat; Gardner 4 liq., amine odor; sol. in org. solv., water; dens. 8.15 lb/gal.; sp.gr. 0.98; 99% act.

Accomeen C10. [66] PEG-10 cocamine; nonionic; emulsifier, antistat, surfactant; Gardner 6 liq., amine odor; sol. in org. solv., water; dens. 8.3 lb/gal.; sp.gr. 1.0; 99% act.

Accomeen C15. [66] PEG-15 cocamine; nonionic; emulsifier, antistat, surfactant; Gardner 6 liq., mild amine odor; dens. 8.7 lb/gal.; sp.gr. 1.04; 99% act.

Accomeen S2. [66] PEG-2 soyamine; nonionic; emulsifier, antistat, surfactant; Gardner 5 liq.; amine-type odor; sol. in org. solv.; water insol.; dens. 7.6 lb/gal; sp.gr. 0.91; surf. tens. 31.3 (0.1%); 99% act.

Accomeen S5. [66] PEG-5 soyamine; nonionic; emulsifier, antistat, surfactant; Gardner 10 liq.; amine-type odor; sol. in org. solv., water disp.; dens. 7.9 lb/gal; sp.gr. 0.95; 99% act.

Accomeen S10. [66] PEG-10 soyamine; nonionic; emulsifier, surfactant, antistat; Gardner 10 liq.; amine-type odor; sol. in water, org. solv.; dens. 8.5 lb/gal; sp.gr. 1.02; surf. tens. 43 (0.1%); 99% act.

Accomeen T2. [66] PEG-2 tallow amine; nonionic; emulsifier, antistat, surfactant; Gardner 3 paste.; amine-type odor; sol. in org. solv., insol. in water; dens. 7.7 lb/gal;

- sp.gr. 0.92; 99% act.
- Accomeen T5.** [66] PEG-5 tallow amine; nonionic; emulsifier, dispersant; paste; 100% conc.
- Accomeen T15.** [66] PEG-15 tallow amine; nonionic; emulsifier, dispersant, surfactant; Gardner 5 liq.; amine-type odor; sol. in org. solv., insol. in water; dens. 8.1 lb/gal; sp.gr. 0.97; 99% act.
- Accomid C.** [66] Coconut oil diethanolamide; nonionic; detergent, stabilizer, visc. improver, foam booster for shampoos and dish-washes; Gardner 4 liq.; mild odor; completely sol. in water at low conc.; dens. 8.3 lb/gal; sp.gr. 0.99; 98% act.
- Accoron 300 MO.** [66] PEG 300 monooleate; nonionic; emulsifier, lubricant, chemical intermediate; for cosmetics, food, agriculture, plastics; Gardner 6 liq.; sol. in org. solv.; dens. 8.3 lb/gal; sp.gr. 0.99; m.p. <-5 C; 99% act.
- Accoron 400 MO.** [66] PEG 400 monooleate; nonionic; see Accoron 300 MO; Gardner 6 liq.; sol. in org. solv.; dens. 8.4 lb/gal; sp.gr. 1.01; m.p. < 10 C; 99% act.
- Accoron 1300.** [66; 579] PPG-3-laureth-9; lt. yel., Gardner 3 max. liq.; dens. 8.35-8.45 lb/gal; sp.gr. 1.016-1.019; cloud pt. 135-145 F.
- Accoron TGH.** [66; 579] PEG-20-PPG-10 glyceryl stearate; nonionic; wetting agent, foaming agent, surfactant; yel. liq., mild odor; 100% conc.
- Accoquat 2C-75.** [66] Dicoco dimethyl ammonium chloride; cationic; emulsifier, coupling agent; amber liq., mild odor; dens. 7.2 lb/gal; sp.gr. 0.86; 75% act. in IPA.
- Accoquat 2C-75H.** [66] Dicoco dimethyl ammonium chloride, high flash; cationic; emulsifier, coupling agent; amber liq., mild odor; 75% act. in hexylene glycol.
- Accosoft 550, 620.** [66] Tallow amido amine quat. compd.; cationic surfactant used in household and industrial fabric softener, fabric antistat; Gardner 6 liq., gel; flam.; dens. 8.0; sp.gr. 0.96; 75 or 90% act. in IPA.
- Accosoft 707.** [66] Dimethyl dihydrog. tallow ammonium chloride; cationic surfactant used in household and industrial fabric softener, fabric antistat; Gardner 3 paste; flam.; dens. 7.3; sp.gr. 8.7; 75% act.
- Accosoft 748.** [66] Dimethyl dihydrog. tallow ammonium methyl sulfate; cationic surfactant used in household and industrial fabric softener or antistat esp. suited to dryer use; Gardner 4 paste, solid; m.p. 125-135 C; biodeg.; flam.; 90% act. in IPA.
- Accosoft 808.** [66] Tallow imidazoline quat.; cationic; fabric softener and antistat for household and commerical laundries; liq.; 75% conc.
- Accosoft A-155.** [66] Tallow amido amine quat. compd.; cationic surfactant, household fabric softener base, dispersion, antistat agent; Gardner 7 gel; biodeg.; 75 or 95% act.
- Accosoft M 1154.** [66] Tallow amine quat. deriv.; cationic; fabric softener for detergent softener systems; liq.; 98% conc.
- Accosperse 20.** [66] PEG-20 sorbitan monolaurate; nonionic; emulsifier, solubilizer; liq.; 100% conc.
- Accosperse 60.** [66] PEG-20 sorbitan mono-stearate; nonionic; emulsifier, solubilizer; amber liq.; sp.gr. 1.1; visc. 500-600 cps; HLB 14.9-15.0; sapon. no. 45-55; 98% act.
- Accosperse 80.** [66] PEG-20 sorbitan monooleate; nonionic; emulsifier, solubilizer; amber liq.; sp.gr. 1.1; visc. 400-450 cps; HLB 15.0; sapon. no. 45-55; 98% act.
- Accosperse TGH.** [66] Alkoxylated mono-diglyceride; nonionic; emulsifier, foaming and wetting agent; yel. liq.; mild odor; f.p. 30 F; cloud pt. 140-146 F (1% aq.); biodeg.; 98-100% act.
- Acetamide MEA.** [650] Acetamide MEA; nonionic; solvent, humectant used in personal care products; liq.; 70-100% conc.
- Acetamide MEA-70.** [515] Acetamide MEA; humectant for hand and body lotions; liq.; dens. 9.1 lb/gal; visc. 30 cps; pH 7.0; 70% solids.
- Acetamide MEA-100.** [515] Acetamide MEA; humectant for hand and body lotions; liq.; dens. 9.3 lb/gal; visc. 150 cps; pH 7.0; 95% solids.
- Acetamin 24, 86.** [341] *n*-Alkylamine acetate; cationic; surface coating agent for pigments, anticaking agent for fertilizer; emulsifier, dispersant, and softening agent for textiles; mineral flotation reagent; solid; 100% conc.
- Acetamin C.** [561] *n*-Cocoamine acetate; cationic; flotation of minerals, anticaking agents, emulsifier bactericide; paste, solid; 100% conc.
- Acetamin HT.** [561] *n*-Hyd. tallow amine acetate; cationic; see Acetamin C; solid.
- Acetamin T.** [561] *n*-Tallow amine acetate; cationic; see Acetamin C; solid.
- Acetoquat CPB.** [4] Cetyl pyridinium bromide; cationic; germicide, sanitizing agent; powd.; 95% act.

- Acetoquat CPC.** [4] Cetyl pyridinium chloride; cationic; germicide, sanitizing agent; powd.; 100% act.
- Acetoquat CTAB.** [4] Cetyl trimethyl ammonium bromide; cationic; germicide, sanitizing agent; powd.; 95% act.
- Acldan.** [273] Monoglyceride citric acid ester; anionic; emulsifier, surfactant; used in food industry; powd., flakes; HLB 11.0; 100% act.
- Acid Felt Scour.** [283] Nonionic; felt cleaner for batch and continuous applications; liq.; 40% act.
- Acid Foamer.** [608] Quat. ammonium chloride; cationic; aluminum trailer cleaner, brightener, acid inhibitors and cleaners, chrome plating baths; liq.; 100% conc.
- Acofor.** [505] Dist. tall oil fatty acids; latex stabilizer, dispersant (as soap) for pigments and fillers; Gardner 3 color; sp.gr. 0.903; flash pt. 400 C (COC).
- Aconol X6.** [283] POE monotallowate; nonionic; emulsifier for min. oil; liq.; 100% act.
- Aconol X10.** [283] Tall oil ethoxylate; nonionic, emulsifier, low-foaming surfactant for built detergent systems; clear liq.; clear sol.; dens. 1.039; visc. 140 cps; 90% act.
- Acra-500.** [608] Fatty amine complex; cationic; asphalt wetting and antistripping agent; paste; 100% conc.
- Acrilev AM.** [237] Phosphate ester, potassium salt; anionic; detergent, wetter, dye leveler used in textiles; liq.; 35% conc.
- Acrilev AM-Special.** [237] Phosphate ester, potassium salt; anionic; detergent, wetter, dye leveler used in textiles; liq.; 65% conc.
- Actiflo 68, 70.** [121] Natural lecithin; amphoteric; emulsifier, wetting agent, dispersant; used in the food industry; liq.; 66-72% act.
- Acto 450.** [230] Alkylaryl sodium sulfonate; anionic; detergent, wetting agent, emulsifier, rust preventative; reddish-amber liq.; alcohol odor; flam.; m.w. 470; oil sol., slight sol. in water but readily disp.; dens. 8.24 lb/gal; sp.gr. 0.99; 44% act.
- Acto 500.** [230] Alkylaryl sodium sulfonate; anionic; see Acto 450; amber, visc. liq.; petroleum odor; m.w. 460; oil sol., slight sol. in water but readily disp.; dens. 8.33 lb/gal; sp.gr. 1.00; 50% act.
- Acto 630.** [230] Alkylaryl sodium sulfonate; anionic; see Acto 450; amber visc. liq.; bland, petroleum odor; flam.; m.w. 470; oil sol., slight sol. in water but readily disp.; dens. 8.41 lb/gal; sp.gr. 1.01; 63% act.
- Acto 632.** [230] Alkylaryl sodium sulfonate; anionic; see Acto 450; reddish-amber liq.; alcohol odor; flam.; m.w. 430; oil sol., slight sol. in water but readily disp.; dens. 8.41 lb/gal; sp.gr. 1.01; 63% act.
- Acto 636.** [230] Alkylaryl sodium sulfonate; anionic; see Acto 450; orange, visc. liq.; alcohol odor; flam.; m.w. 470; oil sol., slight sol. in water but readily disp.; dens. 8.5 lb/gal; sp.gr. 1.02; 63% act.
- Acto 639.** [230] Alkylaryl sodium sulfonate; anionic; see Acto 450; reddish-amber liq.; alcohol odor; flam.; m.w. 520; oil sol., slight sol. in water but readily disp.; dens. 8.5 lb/gal; sp.gr. 1.02; 63% act.
- Actrabase 31-A.** [568] Soap sulfonate; anionic; primary emulsifier for oil systems; liq.; HLB > 10; 100% conc.
- Actrabase 163.** [568] Soap sulfonate; anionic; emulsifier base for sol. oils; liq.; 100% conc.
- Actrabase PS-470.** [568] Petroleum sulfonate; anionic; emulsifier and rust inhibitor for cutting and lube oils; visc. liq.; 100% conc.
- Actrafos 161.** [568] Phosphate ester; anionic; lubricant and emulsifier for use in cutting oils; liq.; sol. in water and oil; 100% conc.
- Actrafos 186.** [568] Aliphatic alcohol phosphate ester; anionic; lubricant and emulsifier for use in cutting oils; liq.; oil and water sol.; 100% conc.
- Actrafos 822.** [568] Complex aliphatic alcohol phosphate ester; anionic; lubricant and emulsifier for use in cutting oils; liq.; oil and water sol.; 100% conc.
- Actrafos S-104, S-109.** [568] Phosphate ester; anionic; used in syn. and semisynthetics; solubilizer for nonionic surfactants in alkaline cleaning systems; liq.; 100% conc.
- Actrafos SA-208.** [568] Linear alcohol phosphate ester; anionic; lubricant and emulsifier in cutting oils; liq.; oil and water sol.; 100% conc.
- Actrafos SA-216.** [568] Phosphate ester; anionic; lubricant and emulsifier for cutting oils; liq.; sol. in oil and water; 100% conc.
- Actrafos SN-306.** [568] Phosphate ester; anionic; used in liq. cleaners; liq.; water-sol.; 100% conc.
- Actrafos SN-314.** [568] Phosphate ester; anionic; used in waterless hand cleaners and solv. cleaners; liq.; 100% conc.
- Actrafos SN-315.** [568] Phosphate ester; anionic; lubricant, emulsifier for metal working; liq.; 100% conc.

- Actralube SOS.** [568] Ester; nonionic; emulsifier and lubricity additives; substitute for sperm oil; liq.; 100% conc.
- Actramide 189.** [568] Alkanolamide; nonionic; foam stabilizer for cleaners and shampoos; liq.
- Actramide 202.** [568] Alkanolamide; nonionic; emulsifier for sol. oils and metalworking fluids and emulsion cleaners; liq.
- Actramide 410, 420, 499.** [568] Alkanolamide; nonionic; sec. emulsifier with lubricating properties; liq.; 100% conc.
- Actramide 840.** [568] Alkanolamide; nonionic; foam booster and thickener; liq.; 100% conc.
- Actramide 933.** [568] Alkanolamide; nonionic; visc. builder and foam stabilizer; liq.; 100% conc.
- Actramide 938.** [568] Alkanolamide; nonionic; foam stabilizer for cleaners and shampoos; liq.
- Actrasol 167A.** [568] Sulfated castor oil, sodium neutralized; anionic; acid etching additive; liq.; 80% conc.
- Actrasol C50.** [568] Sulfated castor oil; anionic; pigment wetting and dispersion; liq.; 50% conc.
- Actrasol C75.** [568] Sulfated castor oil; anionic; pigment wetting and dispersion; liq.; 70% conc.
- Actrasol C85.** [568] Sulfated castor oil; anionic; pigment wetting and dispersion; liq.; 75% conc.
- Actrasol CS75.** [568] Sulfonated soya bean oil; anionic; liq.; water disp.; 65% conc.
- Actrasol EO.** [568] Sulfated glycerol trioleate; anionic; shampoos, metal working; liq.; 75% conc.
- Actrasol KAP.** [568] Sulfated sperm oil substitute; anionic; fat liquor for leather, metal working; liq.; 75% conc.
- Actrasol MY75.** [568] Sulfated soyabean oil; anionic; liq.; water-disp.; 75% conc.
- Actrasol OY75.** [568] Sulfated soya bean; anionic; liq.; water-disp.; 75% conc.
- Actrasol PSR.** [568] Sulfated castor oil; anionic; pigment wetting and dispersion; liq.; 75% conc.
- Actrasol SP.** [568] Sulfonated TOFA; wet process phosphoric acid defoamer; liq.; 50% conc.
- Actrasol SP175K.** [568] Sulfated tall oil; anionic; liq.; water-disp.; 75% conc.
- Actrasol SR 75, SRK 75.** [568] Sulfated oleic acid; anionic; liq.; water-disp.; 75% conc.
- Actrol 4DP.** [568] PEG diester; nonionic; emulsifier and lubricity additive for metalworking fluids; liq.; HLB < 5; 95% conc.
- Actrol 4MP, 628.** [568] PEG ester; nonionic; see Actrol 4DP; liq.; HLB > 10; 95% conc.
- Acylglutamate CS-11.** [9] Monosodium N-cocoyl-L-glutamate; anionic; detergent, emollient for personal care products; bacteriostatic effect; powd.; biodeg.; 100% act.
- Acylglutamate CT-12.** [9] Monotriethanolamine N-cocoyl-L-glutamate; see Acylglutamate CS-11, liq.; 20% act.
- Acylglutamate GS-11.** [9] Sodium hydrog. tallow glutamate and sodium cocoyl glutamate; see Acylglutamate CS-11; powd.; 100% conc.
- Acylglutamate HS-11.** [9] Monosodium N-hydrog. tallowyl-L-glutamate; see Acylglutamate CS-11; powd. 100% conc.
- Acylglutamate LS-11.** [9] Monosodium N-lauroyl-L-glutamate; see Acylglutamate CS-11; powd.; 100% conc.
- Acylglutamate MS-11.** [9] Sodium myristoyl glutamate; anionic; see Acylglutamate CS-11; powd.; 100% conc.
- Adinol CT95.** [159] Sodium N-methyl-N-cocoyl taurate; anionic; cosmetic and pharmaceutical detergent/emulsifier; wh. powd.; 95% min. conc.
- Adinol T.** [159] Sodium N-methyl-N-oleoyl taurate; detergent, wetting agent, emulsifier, dispersant, foaming agent; liq., paste, gel, powd.; good sol. in hard water.
- Adinol T35.** [159] Sodium N-methyl-N-oleoyl taurate; anionic; surfactant having detergent, wetting, emulsifying, foaming and dispersant properties used in cosmetic and industrial applications esp. textile processing; liq.; 16% min. conc.
- Adma 2.** [227] Dodecyldimethylamine; cationic; intermediate for quat, ammonium compds., amine oxides, and betaines; liq.; 100% conc.
- Adma 4.** [227] Tetradecyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma 6.** [227] Hexadecyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma 8.** [227] Octadecyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma 24.** [227] C_{12}/C_{14} alkyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma 46.** [227] C_{14}/C_{16} alkyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma 246-451, 246-621.** [227] $C_{12}/C_{14}/C_{16}$ al-

- kyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma C8.** [227] Octyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Adma C10.** [227] Decyldimethylamine; cationic; see Adma 2; liq.; 100% conc.
- Admul 1405.** [482] Sat. polyglycerol ester; nonionic; emulsifier for margarines and shortenings; powd.; 100% conc.
- Admul 1411.** [482] Unsat. polyglycerol ester; nonionic; aerating agent in syn. creams; paste; 100% conc.
- Admul CSL.** [482] Stearyl-2-lactylates; anionic; food emulsifier for starch-complexing agent; dough conditioner in breads; flake, powd.; HLB 8.0; 100% conc.
- Admul CSL 2007.** [482] Calcium stearoyl lactylate; anionic; bread improver; flake.; 100% conc.
- Admul CSL-2008.** [482] Calcium stearoyl lactylate; anionic; antistaling agent; powd.; 100% conc.
- Admul Data.** [482] Monoglyceride diacetylated tartaric acid esters; food emulsifier used as dough conditioners in baked products; paste, powd., microbead; HLB 8.0; 100% conc.
- Admul GLP, GLS.** [482] Monoglyceride lactic acid ester; nonionic; food emulsifier for shortenings, toppings and desserts; flake; HLB 3.5; 100% conc.
- Admul MG 4103, 4123, 4143, 4163, 4203, 4223, 4304, 4404, 5103, 6103, 6404, 6504.** [482] Monodiglycerides; nonionic; used in bakery products, margarines, shortenings, creams, desserts, ice cream; microbead; HLB 4.0; 100% conc.
- Admul PGMP, PGMS.** [482] Palmitic and stearic acids propylene glycol ester acids; nonionic; food emulsifier for toppings, desserts, cake improvers; solid; HLB 2.0; 100% conc.
- Admul SSL.** [482] Stearyl-2-lactylates; anionic; food emulsifier for starch complexing agent and dough conditioning in bread products; flake, powd.; HLB 8.0; 100% conc.
- Admul SSL 2003.** [482] Sodium stearoyl lactylate; anionic; o/w emulsifier; bread improver; flake; 100% conc.
- Admul SSL 2004.** [482] Sodium stearoyl lactylate; anionic; antistaling agent; powd.; 100% conc.
- Admul WOL 1403.** [482] Polyglycerol polyricinoleate; nonionic; visc. modifier in chocolate; liq.; 100% conc.
- Admul WOL 1405, 1411.** [482] Polyglycerol ester; nonionic; food emulsifier; microbead; HLB 5-6; 100% conc.
- Adogen 415.** [559] Trimethyl soya quat. ammonium chloride; cationic; emulsifier, dispersant; liq.; 50% act.
- Adogen 432.** [559] Dialkyl dimethyl ammonium chloride; cationic; softener; used in retail, commerical laundry and textile mill formulations; liq.; 68% conc.
- Adogen 432 CG.** [559] Dicetyl dimonium chloride, cationic; conditioner, cream rinse base; lt.-colored clear to hazy liq.; disp. in water; pour pt. < 50 F; 74% conc. in aq. IPA.
- Adogen 441.** [559] Hydrag. tallow trimethyl ammonium chloride; specialty quat.; liq.; Gardner 5 max.; m.w. 341; flash pt. 58 F (PM); 49-52% quat.
- Adogen 442.** [559] Quaternium-18; cationic; softening agent for textiles, commerical laundries; paste; 75% conc.
- Adogen 442 H.** [559] Quaternium-18; viscosifier for Bentonite clays for oil-based muds in petroleum industry; paste; flash pt. 65 F (CC); 75% conc.
- Adogen 444.** [559] Palmityl trimethyl ammonium chloride; cationic; specialty quat.; emulsifier, dispersant, creme rinse, fermentation aid; liq.; Gardner 6 max.; m.w. 319; flash pt. 58 F (PM); 49-52% quat.
- Adogen 461.** [559] Trimethyl coco quat. ammonium chloride; cationic; emulsifier, dispersant; liq.; 50% conc.
- Adogen 462.** [559] Dicocodimonium chloride; cationic; emulsifier, dispersant for oilfield chemicals; paste; 75% conc.
- Adogen 464.** [559] Trimethyl C_8-C_{10} quat. ammonium chloride; cationic; flotation agent, emulsifier for solv. extraction of metal; liq.; 90% conc.
- Adogen 470.** [559] Ditallow dimethyl ammonium chloride; specialty quat.; liq.; Gardner 6 max.; m.w. 564; flash pt. 65 F (PM); 74-77% quat.
- Adogen 471.** [559] Tallow trimethyl ammonium chloride, cationic; dispersant, antistat, emulsifier; Gardner 6 max. liq.; m.w. 339; flash pt. 58 F (PM); 49-52% quat.
- Adogen 477.** [559] N-tallow pentamethyl propane diammonium dichloride; cationic; emulsifier, dispersant; liq.; Gardner 11 max.; m.w. 463; flash pt. 47 F (PM); 49-52% quat.
- Adogen 560, 570-S, 572.** [559] Fatty aminopropylamine; cationic; emulsifier; intermediate

for corrosion inhibitors; emulsifier for asphalt; liq.; 100% conc.

Adogen R-6. [559] 1:1 blend tallow trimethyl and dicoco dimethyl ammonium chloride; specialty quat.; liq.; Gardner 6 max.; m.w. 389; flash pt. 58 F (PM); 49–52% quat.

Adol 42. [559] Unsat. fatty alcohol; coemulsifier, lubricant, foam control agent, cosolvent, plasticizer, stabilizer, emollient, intermediate; used in metal rolling oils and lubricants, gas scrubbing, printing inks, auto antifreeze, textile dyeing and finishing, emulsion systems, paper pulping, cosmetics, cationic surfactants, min. processing/oil field chemicals, fabric softeners; Lovibond 5Y/0.5R color; m.w. 258; sol. in fatty alcohols, IPA, benzene, trichlorethylene, acetone, turpentine, VMP naphtha, kerosene, lt. min. oil; sp.gr. 0.814 (60/25 C); cloud pt. 36 C max.; sapon. no. 3.5 max.

Adol 52 NF. [559] Cetyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 247; sol. see Adol 42; sp.gr. 0.815 (60/25 C); m.p. 45–50 C; sapon. no. 3.0 max.

Adol 54. [559] Cetyl alcohol; see Adol 42; L C; sol. see Adol 42; solid. pt. 46–50 C; sapon. no. 3.0 max.

Adol 61 NF. [559] Stearyl alcohol; used in emulsifiers, surfactants, cosmetics, wax formulations; see also Adol 42; wh. cryst. solid; odorless; sol. in IPA, acetone, naphtha, lt. min. oil; m.w. 272; sp.gr. 0.817 (60/25 C); m.p. 56–60 C; sapon. no. 1.0 max.

Adol 62 NF. [559] Stearyl alcohol; emollient, glass frit binders, waxes, emulsion stabilizers, esters, tertiary amines, surfactants, polymers, chemical intermediate; cosmetic formulations; see also Adol 42; Lovibond 5Y/0.54 max; odorless; m.w. 272; sol. see Adol 61NF; sp.gr. 0.817 (60/25 C); visc. 42 SSU (210 F); m.p. 56–60 C; b.p. 337–360 C (760 mm, 90%); sapon. no. 3.0 max.

Adol 63. [559] Stearyl alcohol; prime base for detergents; used in plasticizers, tert. amines, lube oil additives, textile auxiliaries, mold lubricants, polymers, org. synthesis, chemical intermediates; see also Adol 42; Lovibond 5Y/0.5R max.; m.w. 268; sp.gr. 0.816 (60/25 C); visc. 44 SSU (210 F); solid pt. 48–53 C; b.p. 312–344 C (760 mm, 90%); sapon. no. 3.0 max.

Adol 64. [559] Stearyl alcohol; see Adol 63, Adol 42; Lovibond 5Y/0.5R max.; odorless; m.w. 269; sol. in IPA, acetone, naphtha, lt. min. oil; sp.gr. 0.817 (60/25 C); visc. 44 SSU

(210 F); solid. pt. 51–54 C; sapon. no. 3.0 max.

Adol 66. [559] Isostearyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 295; sol. see Adol 42; sp.gr. 0.861; cloud pt. 8.0 C max.; sapon. no. 2.0 max.

Adol 80. [559] Oleyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 263; sol. see Adol 42; sp.gr. 0.840; cloud pt. 13 C max.; sapon. no. 3.0 max.

Adol 85 NF. [559] Oleyl alcohol; see Adol 42; Lovibond 3Y/0.3R max.; m.w. 267; sol. see Adol 42; sp.gr. 0.840; cloud pt. 10 C max.; sapon. no. 2.0 ,max.

Adol 320. [559] Oleyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 261; sp.gr. 0.845; cloud pt. 19 C max.; sapon. no. 3.0 max.

Adol 330. [559] Oleyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 261; sp.gr. 0.845; cloud pt. (AOCS) 22 C max.; sapon. no. 3.0 max.

Adol 340. [559] Oleyl alcohol; see Adol 42; Lovibond 5Y/0.5R max.; m.w. 261; sp.gr. 0.845; cloud pt. (AOCS) 28 C max.; sapon. no. 3.0 max.

Adol 520 NF. [559] Cetyl alcohol; see Adol 42; APHA 50 max.; m.w. 246; sol. see Adol 42; sp.gr. 0.815 (60/25 C); m.p. 45–50; solid pt. 48–53 C; sapon. no. 2.0 max.

Adol 620 NF. [559] Sat. fatty alcohol; see Adol 42; APHA 50 max.; m.w. 267; sol. see Adol 42; sp.gr. 0.817 (60/25 C); m.p. 55–60 C; sapon. no. 2.0 max.

Adol 630. [559] Sat. fatty alcohol; see Adol 42; APHA 100 max.; m.w. 265; sol. see Adol 42; sp.gr. 0.816 (60/25 C); solid pt. 48–53 C; sapon no. 2.0 max.

Adsee 775. [650] POE ethers and special resins; nonionic; spreader sticker and penetrant for agric. spray; surfactant for monosodium methane arsonate formulations; liq.; 100% conc.

Adsee 799. [650] Alkyl POE ether; nonionic; agric. surfactant; soil penetrant; liq.; 100% conc.

Adsee 801. [650] Nonionic; agric. surfactant; liq.

Adsee 815. [650] Nonionic; agric. surfactant, spray tank adjuvant; penetrant; wetting agent; liq.

Adsee 2096. [650] Nonionic; agric. surfactant, spreader penetrant for wetting of pesticide formulations, adjuvant for spray-tank mixts.

Adsee 2141. [650] Anionic/nonionic; agric.

- surfactant, premix surfactant for monosodium methyl arsonate formulations; liq.; 100% conc.
- Adsee AC62-38.** [650] Anionic/nonionic; agric. surfactant, premix surfactant for monosodium methylarsonate formulations.
- AE-3.** [489] Ethoxylated fatty alcohol; nonionic; detergent, emulsifier; liq.; 100% conc.
- AE-7.** [489] Ethoxylated fatty alcohol; nonionic; textile lubricants, textile wetting; solid; 100% conc.
- AE-1214/3.** [489] Laureth-3; nonionic; detergent, emulsifier; liq.; 100% act.
- AE-1214/6.** [489] Ethoxylated linear alcohols; nonionic; lubricant, wetting agent, used in textiles; solid; 100% act.
- AEPD.** [52; 323] 2-Amino-2-ethyl-1,3-propanediol; anionic; emulsifier, catalyst; Gardner 2; m.w. 119.17; dens. 9.15 lb/gal; sp.gr. 1.101 (40/40 C); m.p. 38 C; b.p. 152 C; 100% conc.
- Aerosol 18.** [43; 167] Disodium stearyl sulfosuccinate; anionic; emulsifying, dispersing, foaming power, detergency and solubilizing on soaps and surface active agents; emulsion polymerization of vinyl chloride and SBRs; foamer for foamed latexes and plastics; Gardner 10 creamy paste; water sol.; dens. 8.9 lb/gal; sp.gr. 1.07; f.p. solid paste < 21 C; surf. tens. 41 dynes/cm; biodeg.; 35% act.
- Aerosol 19.** [43] Disodium N-alkyl sulfosuccinamate; emulsifier, foaming and wetting agent; 10 Gardner clear liq.; water sol.; dens. 8.9 lb/gal; sp.gr. 1.07; surf. tens. 41 dynes/cm; biodeg.; 35% act.
- Aerosol 22.** [43] Tetrasodium N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate; anionic; emulsifier, dispersant, surfactant; Gardner 8, clear to cloudy liq.; water sol.; dens. 9.4 lb/gal; sp.gr. 1.12; visc. 53 cps; f.p. separates < 10 C; m.p. > 200 C; surf. tens. 41 dynes/cm; biodeg.; 35% act.
- Aerosol 22 N.** [167] Tetrasodium N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate; anionic; emulsion polymerization, latex foam stabilization; antigelling agent; industrial, household and cosmetic cleaners; metal cleaners; liq.; 35% conc.
- Aerosol 30.** [43] Cocoamidopropyl betaine; amphoteric surfactant, foam booster, visc. builder; Gardner 4 max., clear yel. liq.; water sol.; sp.gr. 1.04; f.p. 0 C; surf. tens. 35 dynes/cm; partially biodeg.; 35% act.
- Aerosol 200.** [43] Disodium (ethoxylated alkylamide) sulfosuccinate; emulsifier, foaming agent, dispersant; Gardner 7 max. clear yel. liq.; mild odor; water sol.; dens. 8.93 lb/gal; sp.gr. 1.07; visc. 200 cps max.; cloud pt. < 0 C; surf. tens. 35 dynes/cm; biodeg.; 30% act.
- Aerosol 413.** [43] Disodium ethanol alkyl (C₁₈) amide sulfosuccinate; emulsifier, foaming agent, dispersant, wetting agent; Gardner 5-7 clear yel. liq.; water sol.; dens. 8.95 lb/gal; visc. 70-90 cps; surf. tens. 38 dynes/cm; biodeg.; 35% act.
- Aerosol 501.** [43] Disodium alkyl sulfosuccinate; anionic-nonionic; emulsifier, wetting agent, dispersant, foaming agent; APHA 60 clear liq.; water sol.; dens. 9.66 lb/gal; sp.gr. 1.16; visc. 260 cps; f.p. -3 C; surf. tens. 28 dynes/cm; 50% act.
- Aerosol A-102.** [43; 167] Disodium deceth-6 sulfosuccinate; anionic; emulsifier, solubilizer, foamer, and dispersant for emulsion polymerization of vinyl acetate and acrylic monomers; colorless to lt-yel. clear liq.; water sol.; dens. 9.01 lb/gal; sp.gr. 1.08; visc. 40 cps; f.p. -4 C; surf. tens. 29 dynes/cm; 30% act.
- Aerosol A-103.** [43; 167] Disodium nonoxynol-10 sulfosuccinate; anionic; emulsifier, wetting agent; emulsion polymerization of acrylic monomers; colorless to lt-yel. clear liq.; water sol.; dens. 9.1 lb/gal; sp.gr. 1.09; visc. 170-190 cps; f.p. -9 C; surf. tens. 34 dynes/cm; 35% act.
- Aerosol A-196, A-196-40.** [43; 167] Dicyclohexyl sodium sulfosuccinate; anionic; emulsifier, dispersant, stabilizer; for use in styrene butadiene emulsion polymerization; wh. pellets, clear to cloudy liq.; surf. tens. 39 dynes/cm; biodeg.; 85% act. pellets, 40% act. aq. sol'n. resp.
- Aerosol A-268.** [43; 167] Disodium isodecyl sulfosuccinate; anionic surfactant, sole emulsifier for PVC latexes-vinyl, vinylidene chloride, acrylics, surf. tens. depressant, solubilizer; clear liq.; water sol.; dens. 9.96 lb/gal; sp.gr. 1.19; visc. 150 cps; f.p. -5 C; surf. tens. 28 dynes/cm; 50% act.
- Aerosol AY.** [43] Sodium diamyl sulfosuccinate; anionic; emulsifier in emulsion polymerization; wetting agent; antigelling agent; used in electroplating, filtration, leaching ores, paint pigments, paper processing, soldering fluxes; APHA 100 max. hard, waxy solid; m.w. 360; sol. in polar org. solv.; sp.gr.