

**ENCYCLOPEDIA OF
SURFACTANTS**

VOLUME IV

Compiled by

Michael and Irene Ash

*Chemical Publishing Co.
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Encyclopedia of Surfactants

Volume 4

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PREFACE

Volume IV of this Encyclopedia of Surfactants serves as a supplement to the original set published four years ago. All the surfactant products in this edition are new. This supplement therefore serves as an update for new surfactant products in a continued effort to present comprehensive coverage of national and international surfactants in industry.

Information from thousands of brochures, technical bulletins, and data sheets has been gleaned in order to make a complete profile on each surfactant product. Though sometimes limited by the information provided by the manufacturers, in most instances, the chemical ingredients, properties, form, applications, etc., of each product are discussed in detail.

The use of surfactants pervades almost every chemical industrial concern—including textiles, paints, pesticides, foods, cosmetics, pharmaceuticals, etc. We hope that because of the universality of surfactants, this reference work will be able to serve as a useful tool to the many chemical engineers and salespeople here and abroad.

We want to extend our thanks to Roberta Dakan for her dedication and tireless efforts in helping make this encyclopedia as accurate and consistent as possible.

When the temperature at which properties such as viscosity, density, surface tension, solubilities, etc., is not included, a standard temperature of 25 C is to be assumed. The information in this publication is reliable to the best of our knowledge. We would appreciate being informed of any errors or omissions so that these can be integrated into subsequent editions of this encyclopedia.

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ABBREVIATIONS

@	at
aq.	aqueous
avg	average
Bé	Baumé
BHA	butylated hydroxyanisole
B.P.	.....	boiling point
C	.....	degrees Centigrade
cc.	.....	cubic centimeter(s)
CC	.....	Closed cup
cm	.....	centimeter(s)
COC	.....	Cleveland open cup
conc	.....	concentration, concentrated
cps	.....	centipoise(s)
cs or cst	.....	centistoke(s)
disp	.....	dispersion, dispersible
dist	.....	distilled
EO	.....	ethylene oxide
esp	.....	especially
ETO	.....	ethylene oxide
F	.....	degrees Fahrenheit
F.P.	.....	freezing point
ft ³	.....	cubic feet
g	.....	gram(s)
gal	.....	gallon(s)
HLB	.....	hydrophilic lipophilic balance
ingred	.....	ingredient(s)
insol	.....	insoluble
IPA	.....	isopropyl alcohol
kg.	.....	kilogram(s)
l.	.....	liter(s)
lb	.....	pound(s)
max	.....	maximum
min.	.....	minimum
ml	.....	milliliter(s)
mm.	.....	millimeter(s)
mN	.....	millinewton
M.P.	.....	melting point
m.w.	.....	molecular weight

no	number
OC	Open cup
O/W	oil in water
PEG	polyethylene glycol
pH	hydrogen ion concentration
PM	Pensky-Martens
PMCC	Pensky-Martens closed cup
POE	polyoxyethylated
pt.	point
ref	refractive
sapon	saponification
SBR	styrene-butadiene resin
sol	soluble
solid	solidification
sol'n.	solution
sp. gr.	specific gravity
Stod	Stoddard
STPP	sodium tripolyphosphate
SUS	Saybolt Universal Seconds
T/C	tankcar
TCC	Taggart closed cup
tech	technical
TGA	triglycollamic acid
T/L	tank load
TOC	Taggart open cup
TSP	trisodium phosphate
T/T	tank truck
T/W	tank wagon
USP	United States Pharmacopeia
visc.	viscosity
W/O	water in oil
wt	weight
%	percent
≈	approximately
<	less than
>	greater than
≤	less than or equal to
≥	greater than or equal to
#	number

A

Abalyn. Hercules Inc.

Chem. Descrip.: Methyl ester of rosin

Category/Applications: Resin with wide compatibility, excellent surface-wetting properties, viscosity, and tack for use in lacquers, inks, paper coatings, varnishes, adhesives, sealing compounds, plastics, wood preservatives, and perfumes

Form: Viscous liquid; Color: Amber

Gen'l. Prop.: Sol.: Sol. in esters, ketones, alcohols, ethers, coal tar, petroleum hydrocarbons, and veg. and min. oils; insol. in water; Sp. Gr.: 1.03; Density: 1.03 kg/l; Visc. (Gardner-Holdt): Z₁; B.P.: 352-356 C; Acid No.: 6; Sapon. No.: 160; Stability: Good thermal stability
Ref. Index: 1.5300 (20 C); Flash Pt.: 180 C (COC)

Std. Pkgs.: 205-kg metal drums (net), and in tank cars, tank trucks

Ref.: Product data No. 742-9

Abex 23 S, 33 S, 36 A, 1404. Alcolac Inc.

Chem. Descrip.: Proprietary surfactants

Category/Applications: Surfactants for emulsion polymerization offering reduced coagulum, pH and temp. stability, particle size control, and controlled polarity; can be used with commonly used monomers incl. vinyl acetate, acrylic,

and methacrylic acids and their esters, styrene, butadiene, etc.; produces emulsion polymers with up to 65% solids for use in paints, paper coatings, textiles, adhesives, etc.

Form: Liquids

Composition: 60, 30, 58, and 42% active respectively

Ref.: Catalog

A-C Copolymer 400A. Allied Chem., Fibers & Plastics Co.

Chem. Descrip.: Low m.w. ethylene-vinyl acetate copolymer

Category/Applications: Pigment dispersant; polystyrene color concentrates

Form: Powder

Ref.: Tech. data bulletin

A-C Copolymer 540A. Allied Chem., Fibers & Plastics Co.

Chem. Descrip.: Low m.w. ethylene-acrylic acid copolymer

Category/Applications: Plastics lubricant and processing aid, pigment dispersant; for internal lubricant PVC, nylon 6 processing aid, nylon color concentrates

Form: Powder

Ref.: Tech. data bulletin

Acid Felt Scour. Hart Chem. Ltd.

Chem. Descrip.: Nonionic
Category/Applications: Felt cleaner for batch and continuous applications
Form: Liquid
Composition: 40% active
Ref.: Product catalog

Aconol X6. Hart Chem. Ltd.

Chem. Descrip.: Polyoxyethylene mono-tallate; nonionic
Category/Applications: Emulsifier for mineral oil
Form: Liquid
Composition: 100% active
Gen'l. Prop.: HLB: 10.5
Ref.: Product catalog

A-C Polyethylene 6, 6A, 8, 8A, 9, 9A, 617, 617A. Allied Chem., Fibers & Plastics Co.

Chem. Descrip.: Low m.w. polyethylene
Category/Applications: Processing lubricant, melt index modifier, pigment dispersant, mold release aid; for external lubricant PVC, color concentrates, polyolefin flow modifiers
Form: "A" designates powdered form; all others prilled or diced
Ref.: Tech. data bulletin

Adogen 184. Sherex Chem. Co., Inc.

Chem. Descrip.: C₁₄ ether amine
Category/Applications: Surfactant for enhanced oil recovery; 5 mol P.O. adducts used in water flooding operations
Form: Paste
Composition: 100% conc.
Gen'l. Prop.: Flash Pt. (CC): > 200 F
Ref.: Product listing

Adogen 185. Sherex Chem. Co., Inc.

Chem. Descrip.: C₁₂₋₁₅ ether amine
Category/Applications: See Adogen 184
Form: Liquid
Composition: 100% conc.
Gen'l. Prop.: Flash Pt. (CC): > 200 F
Ref.: Product listing

Adogen 442 H. Sherex Chem. Co., Inc.

Chem. Descrip.: Dihydrogenated tallow dimethyl ammonium chloride
Category/Applications: Viscosifier for the preparation of bentonite clay complexes for oil-based muds
Form: Paste
Composition: 75% conc.
Gen'l. Prop.: Flash Pt. (CC): 65 F
Ref.: Product listing

Adogen 461. Sherex Chem. Co., Inc.

Chem. Descrip.: Coco trimethyl ammonium chloride
Category/Applications: Foaming agent in air drilling operations; surfactant for stimulation fluids; hydraulic fracturing thickener and carbonate acidizing fluid
Form: Liquid
Composition: 50% conc.
Gen'l. Prop.: Flash Pt. (CC): 58 F
Ref.: Product listing

Adogen 471. Sherex Chem. Co., Inc.

Chem. Descrip.: Tallow trimethyl ammonium chloride
Category/Applications: Surfactant for stimulation fluids; hydraulic fracturing thickener and carbonate acidizing fluid
Form: Liquid
Composition: 50% conc.
Gen'l. Prop.: Flash Pt. (CC): 58 F
Ref.: Product listing

Adogen 472. Sherex Chem. Co., Inc.

Chem. Descrip.: Dioleyl dimethyl ammonium chloride
Category/Applications: Drilling aid and emulsifier; antishwelling agent for clay drilling
Form: Liquid
Composition: 75% conc.
Gen'l. Prop.: Flash Pt. (CC): 65 F
Ref.: Product listing

Adogen 473. Sherex Chem. Co., Inc.

Chem. Descrip.: Oleyl imidazoline methyl sulfate

Category/Applications: Emulsifier for oil-based drilling fluids

Form: Liquid

Composition: 75% conc.

Gen'l. Prop.: Flash Pt. (CC): 66 F

Ref.: Product listing

Adol 42. Sherex Chem. Co., Inc.

Chem. Descrip.: Unsaturated fatty alcohol

Category/Applications: Fatty alcohols and their derivatives used as coemulsifiers, lubricants, foam control agents, cosolvents, plasticizers, stabilizers, emollients, intermediates; used in metal rolling oils and lubricants, gas scrubbing processes, printing and stencil inks, auto antifreeze, textile dyeing and finishing, emulsion systems, paper pulping, cosmetics, cationic surfactants, mineral processing/oil field chemicals, fabric softeners, cream rinse concentrates, etc.; its ethoxylates and propoxylates are used as biodegradable nonionic surfactants; its sulfates and alkyl ethoxy sulfates are used as biodegradable anionic surfactants

Form: Color (Lovibond): 5Y/0.5R (5¼ in. max.)

Gen'l. Prop.: M.W.: 258; Sol.: Fatty alcohols sol. at R.T. in isopropyl alcohol, benzene, trichlorethylene, ethyl ether, acetone, turpentine, VMP naphtha, kerosene, light min. oil; Sp. Gr.: 0.814 (60/25 C); Cloud Pt. (AOCS): 36 C max.; Acid No.: 1.5 max.; Iodine No.: 45-55; Sapon. No.: 3.5 max.; Hyd. No.: 210-225

Toxicity/Handling: Not considered hazardous; should be kept as dry as possible; blanket the storage tank with inert gas

Ref.: Product literature 21-1

Adol 52 NF. Sherex Chem. Co., Inc.

Chem. Descrip.: Saturated fatty alcohol derived from natural fats and oils

Category/Applications: See Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼")

Gen'l. Prop.: M.W.: 247; Sol.: See Adol 42; Sp. Gr.: 0.815 (60/25 C); M.P.: 45-50 C (closed tube); Acid No.: 1.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 3.0 max.; Hyd. No.: 220-235

Toxicity/Handling: See Adol 42

Ref.: Product literature 21-1

Adol 54. Sherex Chem. Co., Inc.

Chem. Descrip.: Saturated fatty alcohol derived from natural fats and oils

Category/Applications: See Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼")

Gen'l. Prop.: M.W.: 249; Sol.: See Adol 42; Sp. Gr.: 0.816 (60/25 C); Solid. Pt.: 46-50 C; Acid No.: 1.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 3.0 max.; Hyd. No.: 220-230

Toxicity/Handling: See Adol 42

Ref.: Product literature 21-1

Adol 61 NF. Sherex Chem. Co., Inc.

Chem. Descrip.: Stearyl alcohol (97% C₁₈ content) meeting NF spec.

Category/Applications: Used in emulsifiers, surfactants, cosmetics, wax formulations; see also Adol 42

Form: Crystalline solid; Color: Bright white; Odor: Practically odorless

Gen'l. Prop.: M.W.: 272; Sol. (per 100 g solvent): 30 g in isopropyl alcohol, 29 g in ethyl ether, 27 g in SDA Formula 30, 7 g in acetone, 3 g in VMP naphtha, 1 g in light min. oil; Sp. Gr.: 0.817 (60/25 C); M.P.: 56-60 C (closed tube); Acid No.: 0.5 max.; Iodine No.: 2 max.; Sapon. No.: 1.0 max.; Hyd. No.: 200-212

Toxicity/Handling: See Adol 42

Std. Pkgs.: 50 lb paper bags, fiber drums

Ref.: Product literature 21-1, data sheet

Adol 62 NF. Sherex Chem. Co., Inc.

Chem. Descrip.: Stearyl alcohols (typically 93% C₁₈ content) meeting NF spec.

Category/Applications: Uses incl. emol-

lients, glass frit binders, waxes, emulsion stabilizers, esters, tertiary amines, surfactants, polymers, chemical intermediates; esp. suited for cosmetic formulations; see also Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼"); Odor: Practically odorless

Gen'l. Prop.: M.W.: 272; Sol.: See Adol 61 NF; Compat.: Compatible with fats, fatty acids, waxes, and petroleum oils; Sp. Gr.: 0.817 (60/25 C); Visc.: 42 SSU (210 F); M.P.: 56-60 C (closed tube); B.P.: 337-360 C (760 mm, 90%); Acid No.: 1.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 3.0 max.; Hyd. No.: 200-212

Toxicity/Handling: See Adol 42

Std. Pkgs.: 50 lb multiwall paper bags, fiber drums

Ref.: Product literature 21-1, data sheet

Adol 63. Sherex Chem. Co., Inc.

Chem. Descrip.: Stearyl-cetyl alcohol; composed of alcohols from whole, hydrog. tallow

Category/Applications: Prime base for detergents; also used in plasticizers, tertiary amines, lube oil additives, textile auxiliaries, mold lubricants, polymers, organic synthesis, chemical intermediates; see also Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼"); Odor: Practically odorless

Gen'l. Prop.: M.W.: 268; Sol. (per 100 g solvent): 80 g in isopropyl alcohol, 50 g in ethyl ether, 47 g in SDA Formula 30, 14 g in VMP naphtha, 12 g in acetone, 2 g in light min. oil; Compat.: See Adol 62 NF; 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%); Acid No.: 1.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 3.0 max.; Hyd. No.: 206-218

Toxicity/Handling: See Adol 42

Std. Pkgs.: 50 lb multiwall paper bags, fiber drums

Ref.: Product literature 21-1, data sheet

Adol 64. Sherex Chem. Co., Inc.

Chem. Descrip.: Tech. stearyl alcohol; fractionated specialty with typically 68% C₁₈ content

Category/Applications: Uses incl. detergents, plasticizers, tertiary amines, lube oil additives, textile auxiliaries, mold lubricants, polymers, organic synthesis, chemical intermediates; see also Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼"); Odor: Practically odorless

Gen'l. Prop.: M.W.: 269; Sol. (per 100 g solvent): 66 g in isopropyl alcohol, 44 g in SDA Formula 30, 40 g in ethyl ether, 10 g in acetone, 8 g in VMP naphtha, 1 g in light min. oil; Compat.: See Adol 62 NF; Sp. Gr.: 0.817 (60/25 C); Visc.: 44 SSU (210 F); Solid. Pt.: 51-54 C; Acid No.: 1.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 3.0 max.; Hyd. No.: 204-216

Toxicity/Handling: See Adol 42

Std. Pkgs.: 50 lb multiwall paper bags, fiber drums

Ref.: Product literature 21-1, data sheet

Adol 66. Sherex Chem. Co., Inc.

Chem. Descrip.: Saturated fatty alcohol derived from natural fats and oils

Category/Applications: See Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼")

Gen'l. Prop.: M.W.: 295; Sol.: See Adol 42; Sp. Gr.: 0.861; Cloud Pt. (AOCS). 8.0 C max.; Acid No.: 1.0 max.; Iodine No.: 1.2 max.; Sapon. No.: 2.0 max.; Hyd. No.: 180-200

Toxicity/Handling: See Adol 42

Ref.: Product literature 21-1

Adol 80. Sherex Chem. Co., Inc.

Chem. Descrip.: Unsaturated fatty alcohol

Category/Applications: See Adol 42

Form: Color (Lovibond): 5Y/0.5R max. (5¼")

Gen'l. Prop.: M.W.: 263; Sol.: See Adol 42; Sp. Gr.: 0.840; Cloud Pt. (AOCS):

13 C max.; Acid No.: 1.0 max.; Iodine No.: 82-92; Sapon. No.: 3.0 max.; Hyd. No.: 205-222
Toxicity/Handling: See Adol 42
Ref.: Product literature 21-1

Adol 85 NF. Sherex Chem. Co., Inc.
Chem. Descrip.: Unsaturated fatty alcohols
Category/Applications: See Adol 42
Form: Color (Lovibond): 3Y/0.3R max. (5¼")
Gen'l. Prop.: M.W.: 267; Sol.: See Adol 42; Sp. Gr.: 0.840; Cloud Pt. (AOCS): 10 C max.; Acid No.: 1.0 max.; Iodine No.: 85-95; Sapon. No.: 2.0 max.; Hyd. No.: 205-215
Toxicity/Handling: See Adol 42
Ref.: Product literature 21-1

Adol 320, 330, 340. Sherex Chem. Co., Inc.
Chem. Descrip.: Unsaturated fatty alcohols
Category/Applications: See Adol 42
Form: Color (Lovibond): 5Y/0.5R max. (all, 5¼")
Gen'l. Prop.: M.W.: 261 (all); Sp. Gr.: 0.845 (all); Cloud Pt. (AOCS): 19, 22, and 28 C max. respectively; Acid No.: 1.0 max. (all); Iodine No.: 75-85, 72-82, and 60-70 respectively; Sapon. No.: 3.0 max. (all); Hyd. No.: 205-225 (all)
Toxicity/Handling: See Adol 42
Ref.: Product literature 21-1

Adol 520 NF, 620 NF. Sherex Chem. Co., Inc.
Chem. Descrip.: Saturated fatty alcohols, petro-derived
Category/Applications: See Adol 42
Form: Color (APHA): 50 max. (both)
Gen'l. Prop.: M.W.: 246 and 267 respectively; Sol.: See Adol 42; Sp. Gr.: 0.815 and 0.817 respectively (60/25 C); M.P.: 45-50 and 55-60 C respectively (closed tube); Acid No.: 1.0 and 2.0 max. respectively; Iodine No.: 1.0 max. (both); Sapon. No.: 2.0 max. (both); Hyd. No.:

221-235 and 200-220 respectively
Toxicity/Handling: See Adol 42
Ref.: Product literature 21-1

Adol 630. Sherex Chem. Co., Inc.
Chem. Descrip.: Saturated fatty alcohol, petro-derived
Category/Applications: See Adol 42
Form: Color (APHA): 100 max.
Gen'l. Prop.: M.W.: 265; Sol.: See Adol 42; Sp. Gr.: 0.816 (60/25 C); Solid. Pt.: 48-53 C; Acid No.: 2.0 max.; Iodine No.: 2.0 max.; Sapon. No.: 2.0 max.; Hyd. No.: 205-218
Toxicity/Handling: See Adol 42
Ref.: Product literature 21-1

Adsee 815. Witco Chem./Organics Div.
Chem. Descrip.: Surfactant blend; non-ionic
Category/Applications: Agricultural surfactant; spray tank adjuvant; penetrant; wetting agent
Form: Liquid
Ref.: Catalog

Advawax 240. Cincinnati Milacron Chem.
Chem. Descrip.: N,N'-ethylene bisoleamide
Category/Applications: Synthetic wax for use as plastics processing lubricant and release agent, antistatic agent for Cellophane, melting point modifier for other waxes and wax-resin blends and in industrial asphalts and tar, pigment dispersing agent for resin systems, polyamide-paraffin coupling agent; used on adhesive tapes to allow slip and prevent blocking; adds chemical resistance to coatings; improves heat-aging stability in talc-filled polypropylene; also used in food packaging materials in accordance with the appropriate FDA regulations
Form: Small beads; Color: 3 (D1500)
Gen'l. Prop.: Sol. (> 10% with heat): Sol. in ethyl alcohol, 1,3 butylene glycol, Cellosolve, MEK, methyl isobutyl ketone, benzene, xylene, kerosene, hep-

tane, dimethylformamide, carbon tetrachloride, naphtha, α -pinene; Density (bulk): 5 lb/gal; M.P.: 113–118 C; Acid No.: 10; Stability: Good chemical resistance to practically all solvents, acids, and alkalis

Therm. Prop.: Flamm.: Fine powder in air may be combustible or explosive; Flash Pt.: 270 C (COC); Fire Pt.: 310 C (COC)

Std. Pkgs.: 200 lb fiber drums

Ref.: Tech. bulletin

Advawax 275. Cincinnati Milacron Chem.

Chem. Descrip.: N,N'-ethylene bis-stearamide

Category/Applications: Synthetic wax for use as plastics processing lubricant and release agent, melting point modifier for other waxes and wax-resin blends and in industrial asphalt and tar, pigment dispersing agent for resin systems, paper-making defoamer; used on adhesive tapes to allow slip and prevent blocking; adds chemical resistance to coatings; improves heat-aging stability in talc-filled polypropylene

Form: Small beads; Color: 3 (D1500)

Gen'l. Prop.: Sol. (> 10% with heat): Sol. in 1,3 butylene glycol, Cellosolve, methyl isobutyl ketone, benzene, xylene, kerosene, heptane, dimethylformamide, naphtha, α -pinene; Density (bulk): 5.3 lb/gal; M.P.: 134–137 C; Acid No.: 8

Therm. Prop.: Flamm.: Fine powder in air may be combustible or explosive; Flash Pt.: 280 C (COC); Fire Pt.: 302 C (COC)

Std. Pkgs.: 200 lb fiber drum, 50 lb paper bags (2000 lb palletized)

Ref.: Tech. bulletin

Advawax 280. Cincinnati Milacron Chem.

Chem. Descrip.: N,N'-ethylene bis-stearamide

Category/Applications: Synthetic wax for use as plastics processing lubricant and release agent, melting point modi-

fier for other waxes and wax-resin blends, pigment dispersing agent for resin systems, paper-making defoamer; used on adhesive tapes to allow slip and prevent blocking; adds chemical resistance to many coatings; improves heat-aging stability in talc-filled polypropylene; used in food packaging materials in accordance with appropriate FDA regulations

Form: Small beads; Color: 1½ (D1500)

Gen'l. Prop.: Sol. (> 10% with heat): Sol. in 1,3 butylene glycol, Cellosolve, methyl isobutyl ketone, benzene, xylene, kerosene, heptane, dimethylformamide, naphtha, α -pinene; Density (bulk): 4.9 lb/gal; M.P.: 139–143 C; Acid No.: 8

Therm. Prop.: Flamm.: Fine powder in air may be combustible or explosive; Flash Pt.: 280 C (COC); Fire Pt.: 315 C (COC)

Std. Pkgs.: 200 lb fiber drums; 50 lb paper bags (2000 lb palletized)

Ref.: Tech. bulletin

Advawax 290. Cincinnati Milacron Chem.

Chem. Descrip.: N,N'-ethylene bis-stearamide

Category/Applications: Synthetic wax for use as a plastics processing lubricant and release agent, melting point modifier for other waxes and wax-resin blends, pigment dispersing agent for resin systems, paper-making defoamer; used in adhesive tapes to allow slip and prevent blocking; adds chemical resistance to many coatings; improves heat-aging stability in talc-filled polypropylene; used in food packaging materials in accordance with appropriate FDA regulations

Form: Small beads; Color: 1½ (D1500)

Gen'l. Prop.: Sol. (> 10% with heat): Sol. in 1,3 butylene glycol, Cellosolve, methyl isobutyl ketone, benzene, xylene, kerosene, heptane, dimethylformamide, naphtha, α -pinene; Density (bulk): 4.75 lb/gal; M.P.: 143–146 C;

Acid No.: 8

Therm. Prop.: Flamm.: Fine powder in air may be combustible or explosive; Flash Pt.: 290 C (COC), Fire Pt.: 310 C (COC)

Std. Pkgs.: 200 lb net fiber drums; 50 lb paper bags (2000 lb palletized)

Ref.: Tech. bulletin

AF 10 FG. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoaming agent for general food, poultry, and meat processing applications; approved as strictly Kosher

Form: Liquid; Color: White

Composition: 10% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.00; Density: 8.3 lb/gal; Flash Pt. (PM-CC): > 212 F; Stability: Fails 3 freeze-thaw cycles; pH: 4-5 (1% aq.)

Ref.: Data sheet

AF 10 IND. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoam for agricultural, cutting oils, drilling muds, effluent, inks, chemicals, detergents, and textiles

Form: Liquid; Color: White

Composition: 10% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.00; Density: 8.3 lb/gal; Flash Pt. (PM-CC): > 212 F; Stability: Fails 3 freeze-thaw cycles; pH: 4-5 (1% aq.)

Ref.: Data sheet

AF 10 TF. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoam for drilling muds, effluent, cutting oils, agricultural formulations

Form: Liquid; Color: White

Composition: 10% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.00; Density: 8.3 lb/gal; Flash Pt. (PM-CC): > 212 F; Stability: Passes 3 freeze-thaw cycles; pH: 4-5 (1% aq.)

Ref.: Data sheet

AF 30 FG. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoam for general food, meat, and poultry processing; approved as strictly Kosher

Form: Liquid; Color: White

Composition: 30% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.01; Density: 8.4 lb/gal; Flash Pt. (PM-CC): > 212 F; Stability: Fails 3 freeze-thaw cycles; pH: 4-5 (1% aq.)

Ref.: Data sheet

AF 30 IND. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoam for effluent, agricultural formulations, anti-freeze, detergents

Form: Liquid; Color: White

Composition: 30% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.01; Density: 8.4 lb/gal; Flash Pt. (PM-CC): > 212 F; Stability: Fails 3 freeze-thaw cycles; pH: 4-5 (1% aq.)

Ref.: Data sheet

AF 100 FG. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam

Category/Applications: Antifoam for food, edible oils, meat and poultry processing, syrups, vegetables; approved as strictly Kosher

Form: Translucent liquid

Composition: 100% active

Gen'l. Prop.: Sol.: Water-insol.; Sp. Gr.: 1.01; Density: 8.4 lb/gal; Pour Pt.: < 0 F; Flash Pt. (PMCC): > 600 F; Stability: Passes 3 freeze-thaw cycles
Ref.: Data sheet

AF 100 IND. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam
Category/Applications: Antifoam for agricultural formulations, drilling muds, vacuum distillation
Form: Translucent liquid
Composition: 100% active
Gen'l. Prop.: Sol.: Water-insol.; Sp. Gr.: 0.92; Density: 8.4 lb/gal; Pour Pt.: < 0 F; Flash Pt. (PMCC): > 600 F; Stability: Passes 3 freeze-thaw cycles
Ref.: Data sheet

AF 112. Thompson-Hayward Chem. Co.

Chem. Descrip.: Nonsilicone antifoam
Category/Applications: Antifoam for solvents, adhesives, latex paints, inks
Form: Liquid; Color: Creamy yellow
Composition: 100% active
Gen'l. Prop.: Sol.: Water-insol.; Sp. Gr.: 0.92; Density: 7.7 lb/gal; Pour Pt.: 40 F; Flash Pt. (PMCC): > 200 F; Stability: Passes 3 freeze-thaw cycles
Ref.: Data sheet

AF 6035. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam
Category/Applications: Antifoam for delayed coker units
Form: Clear liquid
Composition: 35% active
Gen'l. Prop.: Sol.: Water-insol.; Sp. Gr.: 0.84; Density: 7.0 lb/gal; Pour Pt.: < 0 F; Flash Pt. (PMCC): 108 F; Stability: Passes 3 freeze-thaw cycles
Ref.: Data sheet

AF CM Conc. Thompson-Hayward Chem. Co.

Chem. Descrip.: Silicone antifoam; non-ionic

Category/Applications: Antifoam for carpet extraction machines; stable upon dilution

Form: Thick liquid; Color: White

Composition: 20% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 0.97; Density: 8.1 lb/gal; Flash Pt. (PMCC): > 212 F; Stability: Stable upon dilution; fails 3 freeze-thaw cycles, pH: 6-8 (1% aq.)

Ref.: Data sheet

AF GN-11-P. Thompson-Hayward Chem. Co.

Chem. Descrip.: Nonsilicone antifoam; nonionic

Category/Applications: Antifoam for fermentation, drilling muds, effluent, adhesives, gas treating

Form: Clear liquid

Composition: 100% active

Gen'l. Prop.: Sol.: Water-disp.; Sp. Gr.: 1.01; Density: 8.4 lb/gal; Pour Pt.: -50 F; Flash Pt. (PMCC): > 200 F; Stability: Passes 3 freeze-thaw cycles; pH: 5-7 (1% aq.)

Ref.: Data sheet

AF GN-46. Thompson-Hayward Chem. Co.

Chem. Descrip.: Nonsilicone antifoam; anionic

Category/Applications: Antifoam for solvent recovery, alcohol extraction

Form: Dark liquid

Composition: 100% active

Gen'l. Prop.: Sol.: Oil-sol.; Sp. Gr.: 0.90; Density: 7.5 lb/gal; Pour Pt.: 30 F; Flash Pt. (PMCC): > 250 F; Stability: Passes 3 freeze-thaw cycles; pH: 4-6 (1% in 15% IPA/water)

Ref.: Data sheet

AF HL-21. Thompson-Hayward Chem. Co.

Chem. Descrip.: Nonsilicone antifoam; nonionic

Category/Applications: Antifoam for