WHAT EVERY CHEMICAL TECHNOLOGIST WANTS TO KNOW ABOUT...

Volume IV

CONDITIONERS, EMOLLIENTS AND LUBRICANTS

Compiled by Michael and Irene Ash

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

Conditioners, Emollients and Lubricants Volume 4

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PREFACE

This reference book is the fourth volume in the set of books entitled WHAT EVERY CHEMICAL TECHNOLOGIST WANTS TO KNOW ... SERIES. This compendium serves a unique function for those involved in the chemical industry—it provides the necessary information for making the decision as to which trademark chemical product is most suitable for a particular application.

The chemicals included in this fourth book of the series have their major function as conditioners, emollients, and lubricants, however, complete cross-referencing is provided for the multiple functions of all the chemicals.

The first section which is the major portion of each volume contains the most common generic name of the chemicals as the main entry. All these generic entries are in alphabetical order. Synonyms for these chemicals are then listed. The CTFA name appears alongside the appropriate generic name. The structural and/or molecular formula of the chemical is listed whenever possible. The generic chemical is sold under various tradenames and these are listed here in alphabetical order for ease of reference along with their manufacturer in parentheses. The *Category* subheading lists all the possible functions that the chemical can serve. Because of differences in form, activity, etc., individual tradenames of the generic chemical are used in particular applications more frequently. These are delineated in the *Applications* section. The differences in properties, toxicity/handling, storage/handling, and standard packaging are specified in the subsequent sections wherever distinguishing characteristics are known.

The second section of the volume TRADENAME PRODUCTS AND GENERIC EQUIVALENTS helps the user who only knows a chemical by one tradename to locate its main entry in section 1. The user can look up this tradename in this section of the book and be referred to the appropriate, main-entry, generic chemical name.

The third section GENERIC CHEMICAL SYNONYMS AND CROSS REFER-ENCES provides a way of locating the main entries by knowing only one of the synonyms. If the generic chemical is not in the volume, it will refer you to the volume in which it is contained.

The fourth section TRADENAME PRODUCT MANUFACTURERS lists the full addresses of the companies that manufacture or distribute the tradename products found in the first section. The following is a list of the six volumes that comprise this series:

Volume I	Emulsifiers and Wetting Agents
Volume II	Dispersants, Solvents and Solubilizers
Volume III	Plasticizers, Stabilizers and Thickeners
Volume IV	Conditioners, Emollients and Lubricants
Volume V	Resins
Volume VI	Polymers and Plastics

This series has been made possible through long hours of research and compilation and the dedication and tireless efforts of Roberta Dakan who helped make this distinctive series possible. Our appreciation is extended to all the chemical manufacturers and distributors who supplied the technical information.

M. and 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.

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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

What Every Chemical Technologist Wants to Know About... Volume I—Emulsifiers and Wetting Agents

Volume II—Dispersants, Solvents and Solubilizers

Volume III—Plasticizers, Stabilizers and Thickeners

Chemical Products Desk Reference

ABBREVIATIONS

@	at
anhyd	anhydrous
АРНА	American Public Health Association
approx	approximately
an	aqueous
ASTM	American Society for Testing and Materials
avo	average
R P	boiling point
Rtı	British thermal unit
С	
CAS	
	cubic centimeter(s)
\sim	closed cup
~~~	
cm ³	
	cubic centimeter(s)
	Cleveland Open Cup
compd	compound, compounded
	concentrated, concentration
	centipoise
cs, cSt	centistokes
CTFA	Cosmetic, Toiletry and Fragrance Association
	diethanolamine
disp	dispersible, dispersion
dist	distilled
DOT	Department of Transportation
DW	distilled water
EO	ethylene oxide
equiv.	equivalent
F	degrees Fahrenheit
F.P	freezing point
FDA	
ft ³	
Ø	
	gallon(s)
HI B	hydrophile-lipophile balance
insol	insoluble
TD A	isopropyl alcohol
к <u>у</u>	kilogram(s)
اله الله من الله الله الله الله الله الله الله الل	liter(s)
	pound(s)
M.P	melting point
	molecular weight
max	maximum
MEA	monoethanolamine
MEK	methyl ethyl ketone
	manufacture
MIBK	methyl isobutyl ketone
min	minute(s)
min	mineral, minimum
MIPA	monoisopropanolamine

misc	
ml	
mm	millimeter(s)
NF	
no	
o/w	
OC	
PEG	polyethylene glycol
рН	hydrogen-ion concentration
PMCC	
POE	
POP	polyoxypropylene
PPG	
pt	
R&B	
RD	
ref	refractive
rpm	revolutions per minute
Ř.T	
S	second(s)
sol	
sol'n	
sp.gr	specific gravity
\$\$	
std	
SUS	Saybolt Universal seconds
TCC	
TEA	
tech	
temp	temperature
theoret	theoretical
TLV	
TOC	
UL	
USP	
uv, UV	
veg	vegetable
visc	
w/o	water-in-oil
wt	weight
≈	approximately equal to
<	less than
>	greater than
≤	less than or equal to
٤	greater than or equal to

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### Acetylated lanolin (CTFA)

SYNONYMS: Lanolin, acetates CAS No.: 61788-48-5 **TRADENAME EQUIVALENTS:** Acylan [Croda] Lanacet 1705 [Henkel/Emery] Ritacetyl [RITA] **CATEGORY:** Emollient, conditioner **APPLICATIONS:** Cosmetic industry preparations: (Ritacetyl); baby cosmetics (Acylan); hair preparations (Lanacet 1705); hypoallergenic cosmetics (Acylan); skin preparations (Lanacet 1705) **PROPERTIES:** Form: Paste (Acylan) Solid (Lanacet 1705; Ritacetyl) Color: Yellow (Acylan) Composition: 100% active (Acylan; Lanacet 1705; Ritacetyl) **Ionic Nature:** Nonionic (Acylan; Lanacet 1705; Ritacetyl)

### Acetylated lard glyceride (CTFA)

SYNONYMS: Glycerides, lard mono-, acetates CAS No.: 8029-92-3 TRADENAME EQUIVALENTS: Grindtek AMOS 90 [Grindsted] Tegin E 66 [Goldschmidt AG] **CATEGORY:** Lubricant, emollient, plasticizer, cosolvent, emulsifier **APPLICATIONS:** Cosmetic industry preparations: (Tegin E 66) Food applications: food additives (Tegin E 66) Industrial applications: (Tegin E 66); coatings (Grindtek AMOS 90); plastics (Grindtek AMOS 90) Industrial cleaners: metal processing surfactants (Grindtek AMOS 90) **PROPERTIES:** Form: Liquid (Grindtek AMOS 90; Tegin E 66) Color: Yellow (Grindtek AMOS 90) **Composition:** 100% conc. (Tegin E 66) Solubility: Sol. in ethanol (Grindtek AMOS 90) Sol. in paraffin oil (Grindtek AMOS 90) Sol. in peanut oil (Grindtek AMOS 90) Partly sol. warm in propylene glycol (Grindtek AMOS 90) Sol. in white spirit (Grindtek AMOS 90) **Ionic Nature:** Nonionic (Tegin E 66) HLB: 1.8 (Grindtek AMOS 90) 2-3 (Tegin E 66)

#### Acetyl monoethanolamide

#### SYNONYMS:

Acetamide MEA (CTFA) Acetamide, N-(2-hydroxyethyl)-N-Acetyl ethanolamine N-(2-hydroxyethyl) acetamide

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EMPIRICAL FORMULA:
  C<sub>4</sub>H<sub>0</sub>NO<sub>2</sub>
STRUCTURE:
      0
  CH,C-NH-CH,CH,OH
CAS No.:
   142-26-7
TRADENAME EQUIVALENTS:
  Incromectant AMEA-70 [Croda]
  Lipamide MEAA [Lipo]
   Schercomid AME, AME-70 [Scher]
CATEGORY:
  Conditioner, solvent, humectant, clarifying agent, intermediate, coupling agent, dis-
     persant
APPLICATIONS:
  Cosmetic industry preparations: (Incromectant AMEA-70); beauty masks (Lipamide
     MEAA); conditioners (Incromectant AMEA-70; Schercomid AME, AME-70);
     creams and lotions (Incromectant AMEA-70; Lipamide MEAA); hair preparations
     (Schercomid AME, AME-70); shampoos (Incromectant AMEA-70); skin prepara-
     tions (Schercomid AME, AME-70); wave sets (Lipamide MEAA)
   Industrial applications: pigments (Schercomid AME, AME-70)
   Pharmaceutical applications: antiperspirant/deodorant (Lipamide MEAA); depilato-
     ries (Lipamide MEAA)
PROPERTIES:
Form:
   Liquid (Incromectant AMEA-70)
   Clear liquid (Schercomid AME, AME-70)
Color:
   Gardner 2.0 max. (Schercomid AME, AME-70)
Odor:
   Mild organoleptic (Schercomid AME, AME-70)
Composition:
   70% active in water (Incromectant AMEA-70; Schercomid AME-70)
   95% active min. (Schercomid AME)
Solubility:
   Sol. in alcohols (Schercomid AME, AME-70)
   Sol. in diols (Schercomid AME, AME-70)
   Sol. in glycol ethers (Schercomid AME, AME-70)
   Sol. in glycols (Schercomid AME, AME-70)
   Sol. in ketones (Schercomid AME)
   Sol. in polyols (Schercomid AME, AME-70)
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