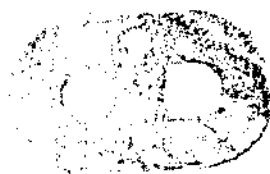


THE VANDERBILT LATEX HANDBOOK



INTI-CID
INTI



INTI-CID
BIBLIOTECA DELEGADA
LABORATORIO - MIGUELETE

Edited by

GEORGE G. WINSPEAR

Published by

R. T. VANDERBILT CO., INC.

230 PARK AVENUE

NEW YORK 17, N. Y.

Copyright
R. T. VANDERBILT CO., Inc.
1954
All Rights Reserved

106564

Printed in U.S.A.
By Bryant Press, Inc.
New York, N. Y.

CONTENTS

	Pages
I. Introduction to Latex Compounding.....	10- 12
II. Commercial Latices	
Natural Rubber (Hevea) Latex.....	15- 35
GR-S Latices	36- 41
Neoprene Latices	42- 47
Nitrile Latices	48- 59
Resin Latices	60- 73
Reclaim Dispersions	74- 76
III. Vanderbilt Materials for Latex Compounding and Processing	78- 93
IV. Dispersions and Emulsions	
Preparation of Materials for Compounding.....	96- 99
Dispersions of Individual Materials.....	100-106
Vanderbilt Composite Dispersions.....	107-110
V. Laboratory Preparation and Evaluation of Latex Compounds	
Vanderbilt Laboratory Procedures.....	112-118
Latex Laboratory Equipment.....	119-126
Basic Compound Design.....	127-131
Compounding Studies	
Precuring Effects	132-133
Room-temperature Curing Combinations.....	134
SETSIT Accelerators in Natural Rubber.....	135
Dithiocarbamate and Thiuram Accelerators in Natural Rubber	136
TELLOY-Low Sulfur in Natural Rubber.....	137
Sulfurless Heat Resisting Rubber with TUADS.....	138
Ultra Accelerators Compared in GR-S.....	139
Ultra Accelerators Compared in Neoprene.....	140-141
AGERITE Antioxidants Compared in Natural Rubber..	142-143
Antioxidant Combinations in Natural Rubber.....	144
AGERITE Antioxidants Compared in GR-S.....	145
AGERITE Antioxidants Compared in Neoprene.....	146-147
Aging Protection for Uncured Latices.....	148
AGERITE WHITE, Copper Inhibitor.....	149
DIXIE and McNAMEE CLAY Loadings.....	150-151
Nytal 300 in Latex Foam Rubber.....	152
VI. Chemical Examination of Latex Products and Compounding Materials	153-163
VII. Commercial Compounding and Processing	
Reception and Storage of Latex.....	166-175
Compounding Operations	176-178

	Pages
Dipped Goods Production Methods and Operations.....	179-183
Footwear	184
Household and Surgeons Gloves.....	184-185
Balloons	186
Transparent Drug Sundries.....	186
High Modulus Drug Sundries.....	187
Flexible Squeeze Toys.....	187
Ebonite	188
Neoprene Metal Coating.....	188
Work Gloves	189
Extruded Latex Thread.....	189-193
Paper Reinforcing and Impregnating.....	194-196
Adhesives	197-198
Spreading Applications. Rug and Upholstery Backing..	199-206
Rubberized Fiber Cushions.....	207
Molding and Casting.....	208-209
Kaysam Process	210-211
Decorative and Protective Finish Applications.....	212-214
VIII. Latex Foam Rubber.....	216-227
IX. Articles of Theoretical Interest	
Vulcanization	230-236
Aging	237-243
Design of Experiments.....	244-257
X. General Information	
U. S. Latex Consumption Statistics.....	260
ASTM Specifications (D 1076) for Natural Rubber	
Latex	261-274
R.M.A. Specification for Latex Foam.....	275-281
Specific Gravity and Specific Volume Calculations.....	282-285
Specific Gravities and Volumes of Latex Compounding	
Materials	286-289
Properties of Various Latices.....	290
Baumé and Specific Gravity Conversion Table.....	291
Common and Chemical Names of Various Materials.....	292-296
Properties of Various Liquids.....	297-298
Temperature Conversion Table.....	299-302
Temperature-Pressure Equivalents of Saturated	
Steam	303-305
Tensile Strength Conversion Table.....	306-308
Oz./Gal.—Grams/Liter Conversion Table.....	309
Standard Sieves	310
Wire and Sheet Metal Gauges.....	311
Relative Humidity Table.....	312-313
Circumferences and Areas of Circles.....	314-315
Common Fractions of an Inch in Decimals and	
Millimeters	316
Mensuration Formulas	317
Useful Factors and Constants.....	318
Interconversion Tables of Weights and Measures.....	319-320
Miscellaneous U. S. Units.....	321
Latex Literature References.....	322
Index	323