



1. Introduction

In order to meet an increasing demand for a lighter colored tackifier resin in a current hot melt and pressure-sensitive adhesive industry, Arakawa Chemical Industries, Ltd. have successfully improved Gardner color specifications of SUPER ESTER A series by 2 to 4 degrees, and placed them on the market both home and abroad.

SUPER ESTER W series are characterized by its lighter color, excellent heat stability, widely ranged solubility and compatibility, and well-balanced adhesion properties for use in formulation of hot melt and pressure-sensitive adhesive.

2. Typical Properties

<u>SUPER ESTER</u>	<u>Appearance</u>	<u>Color max. (G)</u>	<u>Color typical (G)</u>	<u>Softening point</u>	<u>Acid value max.</u>
W-100	Flake	7	4	95 – 100	10.0
W-115	Flake	7	5	108 – 120	20.0
W-125	Flake	7	5	118 - 130	20.0

3. Solubility

n-Hexane	:	Soluble
Petroleum benzine	:	Soluble
Toluene	:	Soluble
tri-Chloroethylene	:	Soluble
Ethyl acetate	:	Soluble
Acetone	:	Soluble
Ethanol	:	Insoluble

4. Compatibility

<u>SUPER ESTER</u>	<u>ELASTOMER</u>					
	<u>NR</u>	<u>SBR</u>	<u>SIS</u>	<u>SBS</u>	<u>ACRYL</u>	<u>EVA</u>
W-100	A	A	A	A	A	A
W-115	A	A	A	A	B	A
W-125	B	C	C	C	C	A

Note :

1. Ratio Super Ester / Elastomer = 100 / 50 PHR
2. Elastomer SIS : TR-1107
 SBS : TR-1102
 Acryl : ARON-S
 EVA : #220
3. Compatibility A : Completely clear
 B : Clear
 C : Slightly haze
 D : Haze

5. Test Report

A) EVA Base Hot Melt Adhesive

Formulation

Resin	40 Parts by wt.
EVA #220	40 Parts by wt.
Micro Wax.	20 Parts by wt.

<u>Super Ester</u>	<u>Heat Stability at 180°C for 72 hr.</u>	<u>Adhesion Strength T-Peel AI/AI (g/25mm)</u>	<u>Heat resistance AI/AI Separation temp. (°C)</u>	<u>Cold resistance K. liner/K. liner at 5°C</u>
A-100	"	1,230	51.5	"
W-100	"	1,210	52.3	"
A-115	"	1,220	54.5	"
W-115	"	1,210	55.5	"
A-125	"	1,050	61.5	"
W-125	"	1,050	60.5	"