

CHONSiS ATU6903 Resin

1. INTRODUCTION

The ATU6903 is a thermoplastic acrylic copolymer that has a low molecular weight and good compatibility with most acrylate monomers, prepolymerized acrylates syrup and general organic solvents as Acetone, Heptane, EA, Toluene & MEK. It shows an outstanding resistance and stability against oxidation and discoloration caused by sunlight, heat and other aging at severe environmental conditions. Because it doesn't contain any reaction retardant agent as inhibitor and CTA(Chain Transfer Agent) that can be the main cause for poor curing, it is very charmingful to use as an effective additive to enhance initial tack and adhesion performance in adhesive resin.

2. APPLICATIONS

Functional Additives for Polymer & Film Modification, Bond, Solvent based adhesive and Specialty PSA tapes to control thermal characteristics as glass transition temperature and modulus

3. FEATURES

Low molecular weight, Medium softening point, Wide solubility and compatibility range, Excellent resistance to oxidation and discoloration, Medium softening point and No curing retardation while bulk polymerization.

4. TYPICAL PROPERTIES

TEST	UNIT	RESULT
Appearance	-	Clear, pale yellow
Glass Transition Temperature(T_g)	°C	97
Average Molecular Weight ^{a)}		<17,000
Density(@ 25°C)	g/cm ³	1.07
Melt Viscosity (@150°C)	cP	180~250
(@170°C)		<120

a) Average Molecular Weight: Measured by GPC (Standard master curve by Polystyrene solved in Tetrahydro Furan)

5. DESCRIPTION

This product is a pale yellow color, low Mw acrylic resin synthesized by copolymerization of specially formulated (meth)acrylate monomers and contains some carboxylic groups. It works well to promote initial adhesion with an excellent tack and wetting performance on applied substrates. It doesn't show any yellowing, whitening & other discolorization phenomena and also no significant physical/ chemical changes as resin degradation against severe environmental conditions. Its wide solubility and compatibility with general organic liquid medias including most acrylate monomers and bulk viscous acrylates syrup are another attractiveness of this product.

6. Compatibility and Solubility

The ATU6903 is quite well compatible with most polymeric resins for adhesives and PSA, waxes, plasticizers, natural and synthetic rubbers, chlorinated rubber, EVA copolymers, SBS and SIS block copolymers, acrylic resins, general polyamide resins and polyurethane compounds.

It shows good solubility in esters; ketones; higher alcohols; glycol ethers; and aliphatic/ aromatic and chlorinated hydrocarbons. Most common acrylate monomers as MA, EA, BA, 2-EHA, IOA, AA, HEA, CHA, MMA, BMA and all ratios, or in limited but practically useful proportions, with acrylate monomers solution and/ or polymeric syrup(included with monomers, oligomers and polymers) are also good to solve it.

This product is insoluble in methanol, ethanol, IPA and water.

7. HANDLING PRECAUTIONS

ATTENTION: All hazard precautions on label must be observed when handling this product.

DO NOT TOUCH THE CONTENTS OF POUCH WITHOUT PERSONAL PROTECTIVE EQUIPMENTS.

Product safety information (as MSDS) required for safe use is not included. Before handling, please read product and safety data sheets and container labels for safe use, physical and health hazard information.

If you need Material Safety Data Sheet or other handling information, Please contact to CHONSiS Inc.

8. STORAGE

When the contents of film pouch is not opened to the air and it is stored in the original box or container at RT(below 27°C) & mild humidity(below 60%) condition without sun, UV light exposure and others, the general shelf life of product itself is 18 months from the date of production.

9. PACKAGING INFORMATION

Normal packaging size of the product : 20kg/ Box(M), 240kg/ Box(L) & 1,000kg/ Ton bag