

INTRODUCTION

SETALUX 27-1590 is a fast curing hydroxyl-functional acrylic oligomer for 2K high solids air dry, force dry and bake applications. Coatings formulated with SETALUX 27-1590 exhibit excellent overall performance properties. Key properties include fast cure, good pot-life, high solids, and low VOC formulation potential. It also exhibits excellent flow and leveling, good flexibility and early water resistance.

TYPE

Acrylic polyol

FORM OF DELIVERY (F.O.D.)

80% non-volatile in methyl n-amyl ketone

PRODUCT DATA

Non-Volatile, by wt.:	80 ± 1.0 %
Viscosity 73° F:	Z2 – Z4 Gardner Holdt
Acid value, on solids:	4 maximum mg KOH/g
Color:	100 maximum APHA
Appearance:	Clean, clear and free from extraneous matter
Density:	8.58 ± 0.10 lbs/gal
Flash Point:	102° F Setaflash
Non-volatile, by vol:	74.8%
HEW on n.v.:	400
Reduced viscosity:	N – R Gardner – Holdt @ 70% in MAK

PERFORMANCE HIGHLIGHTS

- Ability to formulate low VOC coatings (2.5 – 3.5 lbs/ gal)
- Fast cure with good pot-life
- Excellent flow, DOI and overall appearance properties
- Very good exterior durability and gloss retention
- Very good modifier to reduce VOC of higher VOC systems

SUGGESTED USES

- Topcoats and single coat enamels for VR and Industrial applications
- Maintenance and Marine coatings
- Coatings for metal and plastics
- Modifier for both acrylic and

STORAGE

In the original sealed containers, this product is stable for 3 years at temperatures up to 100°F

CURING WITH POLYISOCYANATES

Based on 100% conversion of reactive groups the following equation can be used to calculate the quantity of polyisocyanate needed for crosslinking 100 parts (Setalux 27-1590) (on solids):

$$\text{Polyisocyanate (f.o.d.)} = \frac{42 \times 100 \times \text{OH\% (solid resin)}}{17 \times \text{NCO\% (f.o.d.)}}$$

42 = molecular weight of the NCO-group

17 = molecular weight of the OH-group

Anhydrous solvents as well as solvents free of hydroxyl functional groups should be used in the presence of polyisocyanates, as dilution solvents.

PRECAUTIONS

Before using SETALUX 27-1590, see the Safety Data Sheet (SDS) for information on the identified hazards of the material and the recommended personal protective equipment and procedures.

STORAGE AND HANDLING

Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation. See the SDS for the recommended storage temperature range for SETALUX 27-1590.