



TALLICIN® 3000

Pot Life Extender for All Trimer-type Polyurethanes

TYPICAL CHARACTERISTICS

Appearance	Colorless Liquid
Weight Per Gallon, Lbs	8.2 - 8.3
Flash Point, °C (TCC)	>44

COMPATIBILITY

Tallicin® 3000 is a pot life extender for 2K polyurethane systems catalyzed with trimer type aliphatic polyisocyanates. Tallicin® 3000 is added to the polyol component and acts to temporarily "block" the hydroxyl groups from reacting too quickly with the trimer isocyanate. Among the trimer polyisocyanates evaluated with Tallicin® 3000 were Teracure® N-33 and Teracure® N-3390BA (Pflaumer), Desmodur® N-3300 and Desmodur N-3390BA® (Bayer Material Sciences) and Tolonate HDT® and Tolonate HDT 90B® (Vencorex). Tallicin® 3000 is used with hydroxyl functional polyester, polyether and polyacrylate resins in 2K systems.

APPLICATIONS

Tallicin® 3000 helps extend the working time for trimer-type 2K polyurethanes, and Tallicin® 3000 is designed to meet today's needs for high solids, high performance coatings. High performance coatings include automotive, transport, coil, plastics, industrial plus contractor-applied coatings and marine applications.

To illustrate the performance of Tallicin® 3000, two identical standard high solids white aliphatic topcoats were prepared, System I and System II, using Desmophen XP-631A-75 polyester® (Bayer Material Sciences) as the polyol and Desmodur N-3390BA® (Bayer Material Sciences) as the polyisocyanate. Tallicin® 3000 was incorporated in the grind portion of Part A in System II at a level of 1% based on the weight of the polyol. System I contains no Tallicin® 3000. Then Part B was mixed separately with both Systems by adding Desmodur® N-3390 at an NCO/OH ratio of 1.05/1.0.

SUMMARY: The use of Tallicin® 3000 at 1% by weight of the polyol extended the pot life of the 2K polyurethane by 2.25 hours, from 3.25 hours to 5.5 hours, an increase of almost 70%:

	SYSTEM I	SYSTEM II
PART A	DESMOPHEN® 631A-75	DESMOPHEN® 631A-75 TALLICIN® 3000
PART B	DESMODUR® N-3390	DESMODUR® N-3390

The information contained herein is to the best of our knowledge true and accurate and any suggestions are made without guarantee, express or implied, since the conditions of use are beyond our control. Pflaumer Brothers, Inc. disclaims any liability incurred in connection with the use of these data or suggestions.

Pot Life	3.25 Hours	5.5 Hours
Set-To-Touch	6 Hours	5 Hours
Surface Dry	10 Hours	9 Hours
Hard Dry	11 Hours	10 Hours

SYSTEM II (631A-75/N-3390/Tallicin® 3000):
White; P/B Ratio = 0.651;
0.00151 of Dabco Catalyst® T-12 (Air Products) on Resin Solids;
68% by Weight Solids.

FEATURES

Increases the pot life of trimer-type polyurethanes by about 50 - 100% Promotes wet edge and open time in clear and pigmented systems

PROUDCT USES (For professional use only. Not intended for retail sales.)

Tallicin® 3000 is added to the polyol component in the range of 1.0% to 1.5% by weight of the polyol. A higher level of Tallicin® 3000 may be required in systems having a relatively short pot life. The level of use and the corresponding effect of Tallicin® 3000 in a formulation should be evaluated thoroughly before commercial use.

OTHER PFLAUMER PRODUCTS FOR THE FORMULATOR

Pflaumer offers other products for formulating 2K coatings:

Terachem ® 53-Colorants	37 Ready-to-use pigment dispersions for 2K polyurethanes and polyaspartics, including color packs for on-site use
Teracure ® Aliphatic Polyisocyanates	Complete line of HDI-based trimer isocyanates
Teraspartic ®Polyaspartic Amines	For slow, medium, and fast curing
Terachem ®53-2242	Anti-sag additive for 2K polyaspartics
Terachem ®53-2371	Aluminum Oxide Nano-Dispersion for 2K polyaspartics
Tallicin ®1500	Flow and leveling modifier
Tallicin ®4000	Bubble-release, agent and flow/leveling modifier for high-solids polyurethanes
Tallicin ® 4040	Bubble-release, flow and leveling modifier for solvent-free polyaspartics and polyurethanes
Tallicin ®4600	Stabilized Tin Catalyst for Polyurethanes

SAFETY, STORAGE, AND HANDLING

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Consult MSDS before use. Store Tallicin® 3000 in tightly sealed containers. Prevent contact with moisture and excess humidity. Once opened, any remaining Tallicin® 3000 in the container is best stored under dry nitrogen blanketing. Store, transfer, and handle under a nitrogen blanket. Replace damaged gaskets. Keep storage temperatures at 15°C - 40°C (59°F - 104°F). Shelf life of product is 9 months from date product is shipped by Pflaumer and then maintained in original closed containers and stored in proper storage conditions at 25°C (75°F). If repackaging, use containers that will prevent moisture contamination. Avoid containers made with polyethylene, polystyrene, copper or tin.

CONTAINER SIZES

5 Gallon Pail (40 Lb/18 Kg)

55 Gallon Drum (441 Lb/200 Kg)

NOTE:

Dabco ® is a registered trademark of Air Products.

Desmodur ® and Desmophen® are registered trademarks of Bayer Material Sciences.

Teracure ® and Tallicin® are registered trademarks of Pflaumer Brothers.

Tolonate ® is a registered trademark of Vencorex®.