

TECHNICAL DAVAGER

Liquid Coating Resins and Additives

CYCAT® 4040 Catalyst

COMPOSITION

Active catalyst, approx. 40 % by weight Isopropanol, approx. 60 % by weight

PRODUCT DATA

Appearance	clear liquid
Composition, % by weight, approx	
Active catalyst	40%
Isopropanol	60%
Acid number, solution	130 - 140
Pounds per gallon	8,0
Specific gravity	0,960
Flash point, Pensky-Martens, °F (°C)	57 (14)

SPECIAL PROPERTIES AND USE

CYCAT 4040 catalyst is a very versatile catalyst material especially formulated for consistency of strength for use in various solvent soluble and water-based thermosetting vehicles. It is especially recommended where a strong acid catalyst is desired to accelerate the cure of highly alkylated melamine-formaldehyde crosslinked systems and to reduce the curing temperature of urea resin systems.

SOLUBILITY

CYCAT 4040 catalyst is an alcohol soluble catalyst. It is insoluble in aliphatic and aromatic hydrocarbons and partially soluble in glycol ethers, esters and letters calvents.

In order to prevent recrystallization of the acid, a sufficiently high level of alcohol should be present in the total solvent system of a formulation. recrystallized acid can cause a reduction in cure response and may create local areas of high acidity which could cause the formation of gel structures. From 5 to 15 % of the total solvent should be primary alcohol; however, in high solids systems where the total solvents in the formulation may be only 20 % by volume or less, higher levels of alcohols might be necessary to maintain catalyst solubility.

RECOMMENDED LEVELS

While catalyst usage will be dependent upon resins, and cure time and temperature, generally 0.5 % catalyst solution, based on total resin solids, will be a satisfactory starting point. For low temperature cure schedules from 1 to 2.5 % or higher, levels of CYCAT 4040 catalyst are often required. The minimum level of catalyst to achieve the desired film properties should be used, however, since excessively high levels of catalyst can reduce the water resistance of a finish.

STORAGE

At temperatures from 5° C to 30° C storage stability packed in original containers amounts to at least 1095 days.

HEALTH AND SAFETY INFORMATION

CYCAT 4040 catalyst is a flammable liquid and vapor that can cause eye burns and skin irritation.

Before handling this material read the corresponding Cytec Industries Inc. Material Safety Data Sheet (MSDS) for safety, health and environmental data.

