



FOUNDRY PRODUCTS: Technical Data Sheet

PRODUCT: Polyurethane Cold Box System *Rapidcure™*

DESCRIPTION :

This is a three part binder system, composed of:

Part A: A low free-formaldehyde (less than 0.1%) phenolic resin in solvent, often including proprietary release additives

Part B: An isocyanate solution based on polymeric MDI; often containing a variety of additives to allow for extended bench life or for use with water core wash/oven baking operations

Part C: An amine based catalyst (typically Catalyst TEA or DMEA)

Optional Part: Third Part Additives for better release from tooling and increased strength recovery when cores placed through a drying oven.

It is a cold curing system that allows for fast, continuous production.

FIELD OF APPLICATION :

Large or small quantities of cores and moulds for steel, cast iron, or light alloy castings (although the **Aluset** CB binder may be more appropriate for these types of operations). The Rapidcure CB binder system are known for developing very high front end strengths, low odour, and low lustrous carbon. Cores and Molds will exhibit good resistance to humid conditions. Most Rapidcure CB binders contain proprietary additives that will result in cleaner tooling and lower amine usage. Most products have been designed to be used in both high productivity operations (such as automotive OEM and aftermarket) as well as being suited to large core making operations that demand a rapid strength development. Most systems are designed to have lower hot strengths than standard iron/steel cold box products.

METHOD OF APPLICATION (standard):

100 parts in weight silica sand AFS 50 – 55

0.4 – 0.8 " " " RAPIDCURE A – 3 Major products are available

0.4 – 0.8 " " " RAPIDCURE B – over 10 different Part B's available depending on the type of core making operation

The RAPIDCURE A and RAPIDCURE B products are designed to be used at a 55/45 ratio of A to B but can cover a range of 60:40 to 45:55. Curing depends on the strength of the catalyst used, sand temperature and quality of reclaimed sand. Bench life of up to 6 hours are available.

HANDLING:

Rapidcure A and Rapidcure B contain ingredients which could be harmful if not handled properly. Please see details in MSDS.

Packaging: binder components are available in bulk, totes, 45 Gallon drums or small containers.



FOUNDRY PRODUCTS: Technical Data Sheet

Storage: Optimum storage temperature is between 15°C - 30°C. Water can react with CB - B products to form a sludge as well as producing carbon dioxide gas.

SHELF LIFE:

Can be stored in steel containers at temperatures not lower than -7 °C for no longer than 6 months. Do Not store in direct sunlight.

SAFETY MEASURES:

Safety glasses and rubber gloves must be used when transferring. Consult MSDS for further information.

** The information presented, while not guaranteed, it is to the best of our knowledge true and accurate. No warranty or guarantee, express or implied, is made regarding the performance or stability of any product, since the manner of use and conditions of storage and handling are beyond our control. No suggestions for product use are intended as and nothing herein shall be construed as a recommendation to infringe any existing patents or to violate any government laws.

