



Technical Data Sheet

Techniset 6414 UNB Part 2 Resin

Part 2 Phenolic Urethane No Bake Resin for reduced lustrous carbon and reduced smoke at pouring, cooling, and shake out.

PERFORMANCE FEATURES

Techniset 6414 UNB Part 2 Resin has been designed for general foundry use, particularly when the sand is reclaimed. Techniset 6414 was designed for use with Techniset Part 1 Urethane Resins, and is suitable for ferrous and non-ferrous applications. Features available when using Techniset 6414 Pt2 with the appropriate Part 1 component include the following:

- High Tensile Strength
- Improved Hot Strength
- Reduced Gas Defects
- Reduced Lustrous Carbon
- Reduced Smoke
- Good Performance on Wide Range of Sands

PRODUCT DESCRIPTION

Techniset 6414 UCB Pt2 is a polymeric MDI-type isocyanate resin that is used in conjunction with a phenolic resin, such as Techniset 6000, for ferrous and non-ferrous nobake applications. Typically, the Part 1 and Part 2 resin components are mixed with a suitable new sand, normally a silica or lake sand, or a reclaimed sand, in ratios ranging from 50/50 to 60/40, and at a total resin level in the range 0.8 to 2.0%, based on the weight of the sand. The sand mix also includes an amine catalyst, which is typically pumped into the Part 1 resin stream just prior to discharge into the sand. This catalyst is typically used at a level of from 2- 10% based on the Part 1 resin and is used to accelerate the formation of a urethane bond. A broad range of catalysts are available. The selection of an appropriate catalyst will allow a wide range of strip times to be achieved.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION BY SELLER, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States patent. The information provided herein was believed by Seller to be accurate at the time of preparation or prepared from sources believed to be reliable but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyers exclusive remedy shall be for damages and no claim of any kind, whether to product delivered or for non-delivery of product and whether based on contract, breach of warranty, negligence or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

PHYSICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES	
Refractive Index	1.576
Viscosity (cps)	20
Flash Point (°F TCC)	109
Specific Gravity	1.08
NCO (%)	22

STORAGE GUIDELINES

Recommended storage temperature is between 60 - 90 ° F. At lower temperatures, viscosity will increase, making pumping and mixing more difficult. At high temperatures, solvent loss can occur. Drum storage should be in a dry area, out of direct sunlight. Partially used drums should be tightly closed, to prevent contamination, primarily from water, which can adversely affect performance.

SAFE HANDLING

Chemically resistant gloves and eye protection should be used when handling or using chemical binders. Material Safety Data Sheets are available for all products. Drum labels also contain handling information. This material will react with the Part 1 component, without catalyst, in an exothermic reaction, to give a solid polymer. Do not mix Part 1 and Part 2 except on sand during use.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION BY SELLER, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States patent. The information provided herein was believed by Seller to be accurate at the time of preparation or prepared from sources believed to be reliable but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether to product delivered or for non-delivery of product and whether based on contract, breach of warranty, negligence or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

TECHNICAL SERVICE

Proper selection of a binder system that meets your specific needs is key to achieving maximum performance benefits. HA International, LLC provides in-depth technical assistance and a wide range of urethane no-bake binder systems. Both our in-house and field experts are available to assist you in your most challenging foundry applications. Please contact your HA International, LLC representative so that we may assist you in putting together a binder system and foundry team that will help you.

DJH 1/24/11

HA International LLC

“The Best Total Solution”

630 Oakmont Lane
Westmont, IL 60559

Telephone (630) 575-5700 Fax (630) 575-5800