



Technical Data Sheet

PLASTIFLAKE 1160

Product Features:

Plastiflake 1160 Flake Shell Resin is a low free phenol, low melt point resin developed for use in general purpose applications. The following product features characterize this resin;

- Environmentally Friendly
 - Low Free Phenol
 - Lower Emissions
 - Lower Odors Emitted During Coating
 - Lower Odors Emitted During Core and Mold Making
- Fast Cycle Times / High Buildup Rate
- Contains an Internal Release Agent

Product Description:

Plastiflake 1160 is a low free phenol, low melt point flake resin developed for use in the shell process (Croning Process) for producing foundry cores and molds. This resin is used to coat shell sand using the hot coating process. In general terms, this process involves the following steps;

- a) Heat sand to 280 – 310 ° F.
- b) Add flake resin and mull for 60 – 90 seconds.
- c) The heated sand and resin mix is quenched with a water solution of hexamethylene tetramine (hexa).
- d) The hexa level used may be varied to impart specific properties to the coated sand, but is typically about 15% based on resin weight.
- e) Mull until sand dries out and breaks down.
- f) Discharge after breakdown. Normal discharge temperature is 150 – 170 ° F.

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.

Typical Properties

Typical Properties Plastiflake 1160 Shell Flake Resin	
Appearance	Opaque Yellow-amber Solid
Free Phenol, %	<1.0
Melt Point, deg. F	203 *
Hot Tensiles, 3 min.	430 *

* Marked properties are tested on coated sand, using 3.0% resin on round grain, washed and dried silica sand. Results are obtained using Borden Chemical's equipment and test procedures. Actual results may vary from these values, dependent upon the procedures and equipment used.

Storage Guidelines

Borden #1160 Shell Flake Resin has indefinite storage life when stored properly. Care should be taken to avoid high temperature and humidity in order to minimize caking during storage.

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

Technical Service

Proper selection of a binder system that meets your specific needs is key to achieving maximum performance benefits. Borden Chemical, Inc. provides in-depth technical assistance and a wide range of shell flake resins for your use in a variety of applications. Both our in-house and field experts are available to assist you with your most challenging foundry applications. Please contact your Borden Chemical, Inc. representative so that we may assist you in putting together a binder system and foundry team that will help you achieve your goals.

Plastiflake1160/ 7_00

HA International LLC

“The Best Total Solution”

630 Oakmont Lane
Westmont, IL 60559

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