



# Technical Data Sheet

## PLASTIFLAKE 1118

### Product Features:

Plastiflake 1118 Flake Shell Resin is a high melt point resin developed for use in those situations where peel back is a problem. Because of the high melt point, the tendency for peel back is greatly reduced. The following product features also characterize this flake resin;

- Reduced Tendency for Peel back
- Produces Coated Sand with Maximum Flowability
- Ideal for Intricate Core Designs
- Contains an Internal Release Agent
- More Readily Produces Hollow Cores

### Product Description:

Plastiflake 1118 is a high 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 sand using the hot coating process. In general terms, this process involves the following steps;

- a) Sand is heated to 280 – 310 ° F.
- b) Flake resin is added and mulled for 60 – 90 seconds.
- c) The heated sand and resin mix is quenched with a water solution of hexamethylenetetramine (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.

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### **Typical Properties**

<b>Typical Properties – Plastiflake 1118 Shell Flake Resin</b>	
<b>Appearance</b>	Tan solid
<b>Melt Point, deg. F</b>	232 *
<b>Hot Tensiles, 3 min.</b>	390 *

\* 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 obtained may vary from these values, dependent upon the procedures and equipment used.

### **Storage Guidelines**

Borden #1118 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.

### **Technical Service**

Proper selection of a binder system that meets your specific needs is key to achieving maximum performance benefits. HA International 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 HA International representative so that we may assist you in putting together a binder system and foundry team that will help you achieve your goals.

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**HA International LLC**

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