

Origins of Fritware

Fritware emerged as an innovative Islamic ceramic art form developed to rival Chinese porcelain. Fritware established a unique ceramic tradition inspired by porcelain, but adapted to local materials and techniques. Namely, raw materials like quartz, glass and white clay. Fritware is also fired at lower temperatures (1000 C) and still has the strength and semi white translucent quality similar to porcelain.

Definition and Composition:

Fritware is a ceramic material made from ground quartz, white clay, and glassy flux, resulting in a smooth white body ideal for decoration.

Abu'l Qasim Kashani's treatise on ceramics:

Abu'l Qasim Kashani was a historian of the reign of the Il-khan Oljāytū (r. 703-16/1304-16) and member of the Abū Tāher family of potters. His treatise on ceramics is the only written account of how fritware paste was supposedly made. He also included glaze recipes, pigments and firing techniques.

Follow this link to find J.W. Allen's English translation from Abu'l-Quasim's Treatise on Ceramics
<https://web.archive.org/web/20150313123951/http://islamicceramics.ashmolean.org/Glossary/abulqasim.htm>

To make Fritpaste according to J.W. Allen's English translation from Abu'l-Quasim's Treatise on Ceramics:

"The Combinations of all these components is the sum of the aforementioned substances, each one according to a determined measure. Thus if they want to compound a body out of which to make pottery objects and vessels such as dishes, basins, jugs, and house tiles, they take ten parts of the aforementioned white shukar-i sang, ground and sieved through coarse silk, and one part of ground glass frit [114] mixed together and one part of white Luri [or: Warkani] clay dissolved in water. This is kneaded well like dough [with Luri clay] and left to mature for one night. In the morning it is well beaten by hand and the master-craftsman makes it into fine [or: vessels of all attractive design] on the potter's wheel; these are left standing till they are half dry. They are scraped down on the wheel and the feet are added, and when they are dry they [or: the tile surfaces] are washed with a damp linen cloth in order to smooth over the lines on them so that they disappear. When they are dry again, they are rubbed with a wool cloth until they are clean and smooth."

Recipe from translation:

10 parts Shukari-sang -Flint/Quartz/Silica

1 part ground glass frit

1 part of white Luri (Bentonite) clay.

Screen and mixed together. Add water and knead like dough and leave to mature overnight.

In the morning, beat by hand and throw on potter's wheel.

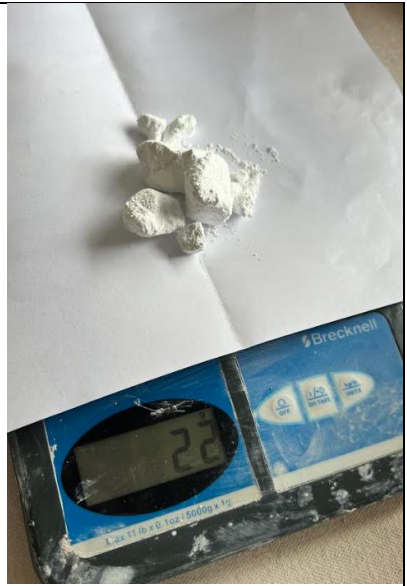
Making fritware paste, throwing, molding and firing:



Safety first! Mask up.



10 parts Silica



1 part ground glass frit



1 part Bentonite clay



Screened and mixed together



Add water



Mix with water.



Kneading like dough.



Formed into a ball and left overnight in plastic bag.



Shrinkage test tile.



Cup thrown on wheel. Was like throwing soft butter.



fired at 04. Shrinkage 8%



Fired tile, cup and press
molded green man head.



**Most fritware items
in period were
molded. I can see
where that was
optimal.**

**Throwing was very
difficult while the
press molded item
was wonderful and
showed great detail.**