

Products Manufactured and Sold*

Chicago Fire Brick Company (CFB) has no records of the first date of manufacture of products that contained asbestos. CFB's records indicate a purchase of asbestos from Philip Carey Manufacturing Company in 1952. A limited introduction of asbestos into a limited number of CFB's products originated with CFB's former Director of Research, Joseph Parsons, in or around 1952. None of CFB's products was manufactured with asbestos after December 31, 1972. For the products listed below, CFB possesses certain formula cards dated prior to December 31, 1972, listing asbestos as an ingredient. CFB also possesses pre-December 31, 1972 formula cards for some of these same products, which do not list asbestos as an ingredient. It was CFB's practice to prepare a formula card both for products that entered the stream of commerce as well as for mixes that were merely experimental. Thus, many of the below-listed products had more than one formulation and may have never been commercially manufactured, marketed or sold with asbestos as a constituent ingredient. This possibility is all the more likely because asbestos actually detracts from refractoriness. This investigation is ongoing.

The following is a list of products that contained asbestos (according to CFB's formula cards), dates asbestos was part of the formula for the product (according to CFB's formula cards), and last year these products appear on price sheets:

Product	Dates - asbestos was part of formula	Last date on price sheet
Fu Fu Seal	Between 03/31/66 and 01/23/70; no later than 12/72	Current
Chico 19	05/03/66; no later than 12/72	10/01/78
Carbon Gun	Between 05/27/66 and 02/07/67; no later than 11/72	Current
#23 Expansion Joint Sealer	Between 05/03/66 and 11/20/72; no later than 12/72	01/01/73
#28 Expansion Joint Sealer	05/03/66-12/05/66	Discontinued 12/05/66
Super Brik Patch	05/03/66-12/05/66	Discontinued 12/05/66
Brikmix Gun	06/01/65-05/01/67	Discontinued 05/01/67
K-18 Lite Kastite Lite Kastite-18 (previously Chico 19)	09/15/62; no later than 12/72	Current
Runner Patch	05/27/66-11/24/72; no later than 12/72	03/15/74
Carbon Patch	05/66-12/68; no later than 04/29/70	Current

Product	Dates - asbestos was part of formula	Last date on price sheet
Lite Kastite K-12	09/15/62; no later than 12/72	Current
Duro Seal Gasket Cement	05/66-11/66	Product was listed on price sheets from 08/56-11/61, but formula cards only specify asbestos as an ingredient from 05/66-11/66

Packaging for and Types of Products:

<u>Name</u>	<u>Type</u>	<u>Package</u>
Fu Fu Seal	Mortar	Drums
Chico 19	Castable	Dry in Bags
Carbon Gun	Gun Mix	Dry in Bags
#23 Expansion Joint Sealer	Castable	Dry in Bags
#28 Expansion Joint Sealer	Castable	Dry in Bags
Super Brik Patch	Mortar	Drums
Brikmix Gun	Gun Mix	Dry in Bags
K-18 Lite Kastite/Lite Kastite 18 (previously Chico 19)	Castable	Dry in Bags
Runner Patch	Plastic	Boxes
Carbon Patch	Plastic	Boxes
Lite Kastite K-12	Castable	Dry in Bags
Duro Seal Gasket Cement	Cement	Dry in Bags

Percentage of Asbestos By Product per Formula Cards:

Fu Fu Seal	1.0%
Chico 19	12.7%
Carbon Gun	1.4%
#23 Expansion Joint Sealer C-611	12.5%
#23 Expansion Joint Sealer C-710	13.8%
#28 Expansion Joint Sealer C-615	7.1%
Super Brik Patch	2.0%
Brikmix Gun	2.0%
K-18 Lite Kastite/Lite Kastite 18 (Previously Chico 19)	4.9%
Runner Patch	2.0%
Carbon Patch	2.0%
Lite Kastite-12	12.7%
Duro Seal Gasket Cement	26.2%

Type of Asbestos was Carey 7M 90

Product Description and Service Temperature

Fu Fu Seal	High duty fireclay air-setting mortar; troweled or hand-dipped Maximum service temperature: 3000°F
Chico 19	Lightweight insulating castable; poured, vibrated, troweled, tamped into place Maximum service temperature: 1800°F
Carbon Gun	Graphitic refractory gunning mix for veneering and maintaining cupola wells Maximum service temperature: 1800°F
#23 Expansion Joint Sealer	Expansion joints in furnace walls Maximum service temperature: 2300°F
#28 Expansion Joint Sealer	Expansion joints in furnace walls Maximum service temperature: 2800°F
Super Brik Patch	Super duty high strength bonding and patching mortar (for tile and tangent tubes) Maximum service temperature: 3100°F-3200°F
Brikmix Gun	Dry-gun pneumatic gunning material for patching and maintaining furnaces Maximum service temperature: 2500°F
K-18 Lite Kastite or Lite Kastite 18 (previously Chico 19)	Lightweight insulation castable; poured, vibrated, troweled or tamped into place Maximum service temperature: 1800°F
Runner Patch	Used in runner in open hearths and blast furnaces (for forming spouts in runners and in ladles); Maximum service temperature: 2900°F-3000°F (non-oxidizing conditions)
Carbon Patch	High carbon plastic for blast furnace troughs and runners Maximum service temperature: 3000°F

Lite Kastite K-12	Very lightweight castable insulation (for backup insulation in furnaces) Maximum service temperature: 1200°F
Duro Seal Gasket Cement	Expansion joint compound; flexible and pliable material used as seal in furnaces Maximum service temperature: 2200°F (becomes non-resilient at 900°F)

Other Product Information

CFB was the Chicago warehouseman for Carey Canadian Asbestos from the mid-1960s until 1976. All Carey products were sold in original Carey packaging.

In addition to the products listed above, CFB purchased "CFB Super Insulating Cement" from Hoffman Manufacturing from 1952 to the 1980s. The product contained approximately 5.0% asbestos until February 12, 1973, when asbestos was removed from the formulation. CFB Super Insulating Cement was packaged dry in 50-pound bags.

* The information in this document was compiled from documents and from past and present CFB employees concerning events that occurred several years ago. CFB accordingly reserves the right to amend this document if new or more accurate information becomes available and/or errors are discovered.