

NARCO CONFIDENTIAL-RESTRICTED



AERO GUN

Made at: Curwensville, PA

PRODUCT LIFE: JAN. 18, 1971 TO JAN. 17, 1986

ASBESTOS DATES: JAN. 18, 1971 TO Oct. 02, 1979

MIXES ATTACHED:

- 418
- 418A
- 418-02
- 418-03
- 418-04

CONFIDENTIAL — RESTRICTED

NORTH AMERICAN REFRACTORIES COMPANY

MIX SHEET

NARCO CONFIDENTIAL-RESTRICTED

BRAND AEROCAST 30 GUN

MIX NO. 418-04

PLANT Curwensville, PA

DATE November 30, 1985

MIX

BATCH

	RMS No.	Raw Material	Sizing	Wt. %	Batch
1	031	Mo. Plastic Clay	-20M	28.6	116#
2	073	High Early Portland Cement		71.4	3-94# bags
3				100.0	398#
4		To be added:			
5	060	Vermiculite		60.0*	9 1/2-25# bags
6					
7					
8					
9					
10					
11					
12					
13					
14					

MIXING INSTRUCTIONS *Add one three cu. ft. bag of vermiculite for every 42 lbs. of
batch weight. The vermiculite is added on a volume basis, therefore, the weight percent
shown is an approximation based on 25 lbs/bag. DO NOT mix more than 3 minutes.

IN-PROCESS CONTROL SPECIFICATIONS _____

SCRAP DISPOSITION/REWORKING

(1) Approved landfill

(2) 10% bled into virgin batch

BRAND AEROCAST 30 GUN

MIX NO. 418-04

PLANT Curwensville, PA

DATE November 30, 1985

FINISHED PRODUCT SPECIFICATIONS

PROPERTY	TEST METHOD	SPECIFICATIONS
Screen Analysis on +8M		
Screen Analysis on +35M		
Screen Analysis on +200M		
AFTER CASTING:		
Bulk Density (Dried at 230°F		
MOR for 24 hours)		
Water to Cast		
Time of Initial Set		
Working Time		

HANDLING, STORAGE, PACKAGING, ...

Shelf Life: 12 months in cool dry place

SAFETY PRECAUTIONS

Potential crystalline silica from clays

(approved dust respirator)

APPROVED J. C. Kanick RESEARCH
APPROVED OPERATING
APPROVED PLANT

REPLACES MIX SHEET DATED 8-24-85

REASON FOR CHANGE

Error in amount of Vermiculite

added

CONFIDENTIAL — RESTRICTED

NORTH AMERICAN REFRACTORIES COMPANY
MIX SHEET

NARCO CONFIDENTIAL-RESTRICTED

BRAND AEROCAST 30 GUN

MIX NO. 418-03

PLANT Curwensville, PA

DATE August 24, 1984

MIX

BATCH

	RMS No.	Raw Material	Sizing	Wt. %	Batch
1	031	Mo. Plastic Clay	-20M	28.6	116#
2	073	High Early Portland Cement		71.4	3-94# bags
3				100.0	398#
4		To be added:			
5	060	Vermiculite		60.0*	9½-25# bags
6					
7					
8					
9					
10					
11					
12					
13					
14					

MIXING INSTRUCTIONS *Add one three cu. ft. bag of vermiculite for every 80 lbs. of
batch weight. The vermiculite is added on a volume basis, therefore, the weight percent
shown is an approximation based on 25 lbs/bag. DO NOT mix more than 3 minutes.

IN-PROCESS CONTROL SPECIFICATIONS _____

SCRAP DISPOSITION/REWORKING

(1) Approved landfill

(2) 10% bled into virgin batch

BRAND AEROCAST 30 GUN

MIX NO. 418-03

PLANT Curwensville, PA

DATE August 24, 1984

FINISHED PRODUCT SPECIFICATIONS

PROPERTY	TEST METHOD	SPECIFICATIONS
Screen Analysis on +8M		
Screen Analysis on +35M		
Screen Analysis on +200M		
AFTER CASTING:		
Bulk Density (Dried at 230°F		
MOR for 24 hours)		
Water to Cast		
Time of Initial Set		
Working Time		

HANDLING, STORAGE, PACKAGING, ...

Shelf Life: 12 months in cool dry place

SAFETY PRECAUTIONS

Potential crystalline silica from clays

(approved dust respirator)

APPROVED [Signature] RESEARCH

APPROVED [Signature] OPERATING

APPROVED [Signature] PLANT

REPLACES MIX SHEET DATED 10-10-83

REASON FOR CHANGE

Name change

CONFIDENTIAL — RESTRICTED

NORTH AMERICAN REFRACTORIES COMPANY
MIX SHEET

BRAND AEROGUN
PLANT Curwensville

NARCO CONFIDENTIAL-RESTRICTED

DATE October 10, 1983

MIX

BATCH

	RMS No.	Raw Material	Sizing	Wt. %	Batch
1	031	Mo. Plastic Clay	-20M	28.6	116#
2	073	High Early Portland Cement		71.4	3-94# bags
3				100.0	398#
4					
5		To be added:			
6	060	Vermiculite		60.0*	9 $\frac{1}{2}$ -25" bags
7					
8					
9					
10					
11					
12					
13					
14					

MIXING INSTRUCTIONS *Add one three cu ft bag of vermiculite for every 80 lbs
of batch weight. The vermiculite is added on a volume basis, therefore
the weight percent shown is an approximation based on 25lbs. per bag. DO NOT
mix more than 3 minutes.

IN-PROCESS CONTROL SPECIFICATIONS _____

SCRAP DISPOSITION/REWORKING

1) Approved landfill

2) 10% bled into virgin batch

BRAND AEROGUN

MIX NO. 418-02

PLANT Curwensville

DATE October 10, 1983

FINISHED PRODUCT SPECIFICATIONS

PROPERTY	TEST METHOD	SPECIFICATIONS
Screen analysis on +8M		
Screen analysis on +35M		
Screen analysis on +200M		
AFTER CASTING:		
Bulk Density dried at 230°F		
MOR for 24 hours		
Water to Cast		
Time of Initial Set		
Working Time'		

HANDLING, STORAGE, PACKAGING, ...

Shelf life: 12 months in cool, dry place

SAFETY PRECAUTIONS

Potential crystalline silica from clays

(approved dust respirator)

APPROVED [Signature] RESEARCH
 APPROVED [Signature] OPERATING
 APPROVED [Signature] PLANT

REPLACES MIX SHEET DATED 10-2-79

REASON FOR CHANGE

Mix sheet updated

Change to Type III Portland
Cement

NORTH AMERICAN REFRACTORIES COMPANY

Mix Instructions

NARCO CONFIDENTIAL-RESTRICTEDPlant Curwensville, PaDate January 18, 1971Brand AerogumMix No. 418Process Vermiculite - base

Burn _____

insulating gun mix
and castable.

Shrinkage _____

Mix

Expanded Vermiculite [*]	Grade No. 3	40%
71405 Asbestos		10
Portland Cement, Type IA		50
		<u>100%</u>

* Trade name: "Zonolite", W.R. Grace Co.

Special Instructions If pressure-packed asbestos is
used precautions should be taken to break up
lumps and shred asbestos prior to batching

Control Specifications

Based on W.O. 583A

Replaces Sheet Dated

new mixApproved Robert F. Harn ResearchApproved R. F. Whiffel OperatingApproved R. W. Danielson Plant

12/18/71
12/22/71
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