



# **PRODUCT DESCRIPTION**

- Refractory dry ramming mix
- Replacement of safety bricks and/or castable linings
- Applied as a safety layer for steel ladles
- Delivered dry and ready to use
- Applicable <u>without</u> any addition of water or other binder





## **PRODUCT DESCRIPTION**

### Kerolan 880

Dry alumina ramming mix suitable as safety layer of ladle sidewalls

## Kerolan 780 SR

Dry alumina ramming mix enriched with silicon carbide, suitable as ladle safety layers in the slag area



**TECHNICAL DATA** 

#### **Typical chemical analysis**

	KEROLAN 880	KEROLAN 780 SR
Al <sub>2</sub> O <sub>3</sub>	82%	73%
SiO <sub>2</sub>	15%	1,5%
SiC		17%
Fe <sub>2</sub> O <sub>3</sub>	0,3%	0,3%

#### Main features

	KEROLAN 880	KEROLAN 780 SR
Size	0-6 mm	0-6 mm
Density	2700 Kg/m³	2750 Kg/m <sup>3</sup>



## **PRODUCT APPLICATION**

**Kerolan** is applied progressively while the installation of bricks wear layer takes place. **Kerolan** is dry rammed into the gap among the steel structure/insulation and the wear lining. When the ladle is heated up, **Kerolan** hardens and sinters ,achieving the required mechanical strength.





**PRODUCT APPLICATION** 

# Slag area:Kerolan 780 SRSidewalls:Kerolan 880





## **APPLICATION TOOLS**

- Two different kinds of ramming tools (forks) are used
- The first fork is operated by hand and it is used for the first manual ramming of the product till an height of abt 100-120mm
- The second fork is pneumatic.
   It is used to vibrate the product to the final consistency
   At the end of this operation
   Kerolan has already an initial strength even as a dry mass





## APPLICATION

#### Step one:

#### **Ramming with manual fork**

### Step two:

#### **Ramming with pneumatic fork**







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# KEROLAN ADVANTAGES VS BRICKS AND CASTABLES

	KEROLAN	BRICKS	CASTABLE
Time of installation	The product is used while the erection of wear bricks layer takes place	Manual installation of bricks	The installation of workfom is necessary
Drying	Not required	Drying is necessary	Drying is necessary
Cost in long term	The initial higher cost is offset by longer lining life expectancy	Lower initial cost does not compensate reduced life expectancy. The complete set of bricks has to be replaced as repairs are very seldom feasible	—
Repairs	Partial and local repairs are commonly performed	Often it is necessary complete demolition and reconstruction	=



# APPLICABLE WITH DIFFERENT STEEL GRADE

- INOX
- SPRING STEEL
- BAR ROD
- COILS







## **KEROLAN 880**

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refrac	ctories, e	ngineering a	nd auxili	aries tail	ored	to customer	s nee	ds	
Massa secc Vibrating d	ca da vibra <i>Iry mix</i>	zione		KER	<b>OL</b>	AN 88	<b>0</b>		
TEMP. DI CLASS CLASSIFICATIO	N TEMPERATUR	RE		In atmosfera In uncorrosiv	non cor e and n	rosiva e neutra eutral atmosphere	1740	*C.	
COMPOSIZIONE Chemical com	E CHIMICA MPOSITION					A1203 Si02 Fe203	82 15 0,3	% %	
PRESA SETTING	: CHIMICA - : CHEMICAL	CERAMICA - CERAMIC		GRANULOMET	RIA	STANDARD mm. STANDARD mm.	6	Variant	
RESISTENZA A COLD CRUSHIN (1 N/mm <sup>2</sup> = 10,2	LLA COMPRES NG STRENGTH 2 Kg./cm²)	SIONE A FREDDO		Precottura Prefiring	a at	650 °C. 1000 °C. 1300 °C. 1500 °C.	70 35 62 62	N/mm <sup>2</sup> N/mm <sup>2</sup> N/mm <sup>2</sup> N/mm <sup>2</sup>	
CONDUCIBILIT THERMAL CON (1 W/mk = 0,86	A' TERMICA DUCTIVITY Kcal/m h °C.)				at	400 °C. 800 °C. 1200 °C.	1,60 1,57 1,65	W/mk W/mk W/mk	
VARIAZIONE DI	IMENSIONALE SE OF DIMENS	ION		Precottura Prefiring	a at	815 °C. 1500 °C.	± 0 ± 0	% %	
CONFEZIONE	in sacchi di su pallet pla Imballi speci a richiesta.	carta da kg. 25 imb: stificati da kg. 1.60 iali e/o export	allati IO.	DENSITA' DENSITY	a at	650 °C.	2700	Kg/mc.	
PACKING	in 25 kg. pap shrink-wrapp Special and/ on request.	er bags packed on ped pallets of kg. 1. or export package	600.	MATERIALE N REQUIRED MA (senza scarto	ECESS/ TERIAL /withou	ARIO t allowance)	2700	Kg/mc.	
METODO DI AP	PLICAZIONE	APPLICATION ME	тнор	Prodotto pror	to all'u	s 0			
VIBRAZIONE A	SECCO	BY DRY VIBRATIC	DN .	Delivered rea	dy to us	se .			
CARATTERISTI Pigiata allumi rivestimenti di	CHE: inosa secca sicurezza sivi	particolarmente i ere acciaio.	indicata per	FEATURES: Dry ramming r	nix tailo	red for safety lining	of steel	ladles.	
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## **KEROLAN 780 SR**

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retractories, engineering and auxili Massa secca da vibrazione <i>Vibrating dry mix</i>	KERO	LAN 780	) <b>SF</b>	R		
TEMP. DI CLASSIFICAZIONE - CLASSIFICATION TEMPERATURE	In atmosfera non In uncorrosive an	corrosiva e neutra d neutral atmosphere	1740	*C.		
COMPOSIZIONE CHIMICA CHEMICAL COMPOSITION		A1203 Si02 Fe203 SiC	73 1,5 0,3 17	% % %		
PRESA : CHIMICA - CERAMICA SETTING : CHEMICAL - CERAMIC	GRANULOMETRIA GRADING	STANDARD mm. STANDARD mm.	6	Variants		
RESISTENZA ALLA COMPRESSIONE A FREDDO COLD CRUSHING STRENGTH (1 N/mm² = 10,2 Kg./cm²)	Precottura Prefiring	a 650 °C. at 1000 °C. 1300 °C. 1500 °C.	60 45 60 60	N/mm² N/mm² N/mm² N/mm²		
CONDUCIBILITA' TERMICA THERMAL CONDUCTIVITY (1 W/mk = 0,86 Kcal/m h *C.)		at 400 °C. at 800 °C. 1200 °C.	3,07 2,64 2,75	W/mk W/mk W/mk		
VARIAZIONE DIMENSIONALE LINEAR CHANGE OF DIMENSION	Precottura Prefiring	a 815 °C. at 1500 °C.	± 0 ± 0	%		
CONFEZIONE in sacchi di carta da kg. 25 imballati su pallet plastificati da kg. 1.600. Imballi speciali e/o export a richiesta.	DENSITA' DENSITY	a 650 °C. at	2750	Kg/mc.		
PACKING in 25 kg. paper bags packed on shrink-wrapped pallets of kg. 1.600. Special and/or export package on request.	MATERIALE NECE REQUIRED MATER (senza scarto/w/f	SSARIO RIAL hout allowance)	2750	Kg/mc.		
METODO DI APPLICAZIONE APPLICATION METHOD	Prodotto pronto a	ll'uso				
VIBRAZIONE A SECCO BY DRY VIBRATION	Delivered ready t	ouse				
CARATTERISTICHE: Pigiata alluminosa secca particolarmente indicata per rivestimenti di sicurezza nella zona taglio scoria nelle siviere acciaio e per aree in condizioni severe.	FEATURES: Dry ramming mix free board of stee	tailored for safety linir I ladles.	ng of sla	g zone and		
Le caratterinitche tecneke indicate sono valor medi tippic eltenuit dai nosto isportario si controlli di produzione nel 12 mesi precedenti all'emissione della scheda tecnica. I dati riportati sono soggetti a ragionevoli variazioni (rferimento fami criteri di accittazione per non formati lico Saxo), non contrattuie e possono elifferire dai valori riscontrati in cantiere e sobrado. Non esite obsilgo di aggiornamento automatico dei dati esporti e scheda. Non esite obsilgo di aggiornamento automatico dei dati esporti e scheda. Non esite obsilgo di aggiornamento automatico dei dati esporti e scheda. Non esite obsilgo di aggiornamento automatico dei dati esporti e scheda. Non esite obsilgo di aggiornamento automatico dei dati esporti e scheda. Non esite obsilgo di aggiornamento automatico dei dati esporti e dei produtto pre gontaggio cono stremi ta provima pregnarati momento di modificare il produtto senza alcon preavvio. Varianti di produtto esempto: granomentria, produtti mattati en con marca clineto posiono applicabili ad ogni vendita dattati e con marca clineto posiono applicabili ad ogni vendita originata (downicat: www.ilincobaso.com/terms/).	The above data are a ob manufacturing spe- this data sheet. T (reference being form shall not be used for contractual guarantei at job site and are update any informati automatically invalid procedures and Exx applicable, are used product. Jow prese tare obtained by ram change without notice may find the standard of the product. Jow prese tare standard of the standard of the standard of the standard of the standard of the standard of the standard of the	verage values based on con- cimes over a period of 12. The data are subject to a acceptance citeria for L a sacjor warranty and may only applicable to materia and for warranty and may only applicable to materia difer 12 month from the r or determination of data. Le q.e.; aradior casins, Produ- tage of the same second second applicable to any origin (msc).	trol of our months pri- reasonabi linco Baxo loes not co differ froi Is manufai sumes no to his data si elease (ref .3.3 stam- data a or custo ta sheet. .ated sale	I laboratories or to issue of e variations monolithics), nostitute any m data found tured at the bbilgations to beet becomes . Dtd). ASTM dards, where version data re subject to mer branded i (download:		
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