Material Safety Data Sheet May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910,1200. Standard must be consulted for specific requirements.	U.S. Department of Labor Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072			
IDENTITY (As Used on Label and List) Style 7075, NOVATEC 825F	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space_must be marked to indicate that.			
Section I				
Manufacturer's Name	Emergency Tele	phone Number		
Phelps Industrial Products, Inc.	(410) 796-2222			
Address (Number, Street, City, State, and ZIP Code) 6300 Washington Blvd.	Telephone Number for Information (410) 796-2222			
Elkridge, MD 21075	Date Prepared 12/01/10			
	Signature of Pre			
	Dr. G. Ba	uer		
Section II — Hazardous Ingredients/Identity Information	n		Other Limite	
Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
none				
		A DIA CONSTRUCTO		
Section III — Physical/Chemical Characteristics				
Boiling Point	Specific Gravity (I	H ₂ O = 1)		
		H ₂ O = 1)		<u></u>
n/a ** /apor Pressure (mm Hg.)	Specific Gravity (0.98 Metting Point	H ₂ O = 1)		
Boiling Point n/a ** /apor Pressure (mm Hg.) n/a	0.98	H ₂ O = 1)		
n/a ** (apor Pressure (mm Hg.) n/a	0.98 Melting Point			
n/a ** (apor Pressure (mm Hg.) n/a (apor Density (AIR = 1)	0.98 Melting Point n/a	5		
n/a ** /apor Pressure (mm Hg.) n/a /apor Density (AIR = 1) n/a	0.98 Metting Point n/a Evaporation Rate			
n/a ** 'apor Pressure (mm Hg.) n/a 'apor Density (AIR = 1) n/a iolubility in Water	0.98 Metting Point n/a Evaporation Rate			
n/a ** apor Pressure (mm Hg.) n/a apor Density (AIR = 1) n/a olubility in Water i.nsoluble	0.98 Metting Point n/a Evaporation Rate			
n/a ** apor Pressure (mm Hg.) n/a a/a apor Density (AIR = 1) n/a a/a a/a a/a a/a a/a a/a a/a a/a a/a	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1			
n/a ** (apor Pressure (mm Hg.) n/a (apor Density (AIR = 1) n/a involubility in Water insoluble ppearance and Odor form: solid color: cranberry odo	0.98 Metting Point n/a Evaporation Rate		n/a **: no	ot applicat
n/a ** apor Pressure (mm Hg.) n/a availated for the form in the form in the form is a state of the form is a st	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1 r: n/a	1) n/a		
n/a ** /apor Pressure (mm Hg.) n/a /apor Density (AIR = 1) n/a Solubility in Water insoluble uppearance and Odor form: solid color: cranberry odo Section IV — Fire and Explosion Hazard Data lash Point (Method Used)	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1	1) n/a	LEL	ot applicat
n/a ** /apor Pressure (mm Hg.) n/a /apor Density (AIR = 1) n/a Solubility in Water insoluble ppearance and Odor form: solid color: cranberry odo Section IV — Fire and Explosion Hazard Data lash Point (Method Used) n/a	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1 r: n/a	1) n/a	LEL	ot applicat
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n/a ** apor Pressure (mm Hg.) n/a apor Density (AIR = 1) n/a olubility in Water insoluble ppearance and Odor form: solid color: cranberry odo Gection IV — Fire and Explosion Hazard Data lash Point (Method Used) n/a xtinguishing Media all common extinuishing media pecial Fire Fighting Procedures	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1 r: n/a	1) n/a	LEL I n/a r	JEL 1/a
n/a ** apor Pressure (mm Hg.) n/a apor Density (AIR = 1) n/a olubility in Water insoluble ppearance and Odor form: solid color: cranberry odo Gection IV — Fire and Explosion Hazard Data lash Point (Method Used) n/a xtinguishing Media all common extinuishing media pecial Fire Fighting Procedures	0.98 Metting Point n/a Evaporation Rate (Butyl Acetate = 1 Fiz n/a Flammable Limits	1) n/a	LEL L n/a r	JEL 1/a

n/a

PAGE 1

AGE 2						
	Reactivity Dat	a	P			
Stability	Unstable		Conditions to Avoid			
	Stable	x				
ncompatibility	Materials to Avoid					
not known	1	10				
avoid bre	mposition or Byprod eathing of d	ecomp	osition products			
lazardous	May Occur	T	Conditions to Avoid		3	
olymerization	Will Not Occur	-				
	Will Hot Occur	X				
ection VI -	- Health Hazard	d Data				
oute(s) of Entry	: Inh	alation?	Skin?		Ingestion?	
lealth Hazards (Acute and Chronic) no acute h	azaró	s known			
10-01-01-01-01-01-01-01-01-01-01-01-01-0	no chronic					-
chronic:	no chronic	naza	ras known			
Carcinogenicity:	NT	P?	IARC Mo	ographs?	OSHA Regulated?	_
lione and Current	oms of Exposure					_
n/a	onis or Exposure					
Senerally Aggrav	ated by Exposure					
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≧enerally Aggrav n∕a		1				
Senerally Aggrav n/a Emergency and F	ated by Exposure	i				
n/a n/a Emergency and F n/a	ated by Exposure First Aid Procedures		e Handling and Use			
n/a m/gency and F n/a Section VII	ated by Exposure First Aid Procedures	or Saf	e Handling and Use			
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White the information and recommendations set forth herein are believed to be accurate as of the date of preparation, THE MANUFACTURER MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

NOVATEC 825F Engineered Graphite

*NOVATEC*s high percentage of graphite and low percentage of rubber binder gives it such remarkable media and temperature resistance that all other compressed non-asbestos is now obsolete.

NOVATEC 825°F is Frenzelit's general service compressed non-asbestos gasket sheet made with 75% pure graphite. This unique gasket sheet has great flexibility. It is easily identified by the cranberry colored "easy release" non-stick coating. This sheet's 45% compressibility allows for better sealing for those less than perfect flanges. This material does not cold flow when compressed with excessive torque. It likes stress and performs its best when compressed to 5000 PSI and beyond. This is an excellent steam sheet that works best in flanges.

Frenzelit's *NOVATEC* Engineered Graphite easily replaces the competitions non-asbestos compressed sheets. See our "Compressed Gasket Sheet Comparison" for details.

Our "Gasket Installation Procedure" must be followed to assure optimum performance in your gasket application.

Temperature	825°F/441°C		
Pressure	1500 PSI		
Color	Cranberry		
Composition	Graphite		
рН	2 - 14		
Density	62 lb./ft ³		
Leachable Chlorides	Less than 100 ppm		
PxT Values	1/16" - 350,000 3/32" - 210,000		
Fire Safe Tested	DIN Approved		
Thickness	.020", 1/32", 1/16", 3/32", 1/8", 3/16", 1/4"		
Sheet Size	60" x 60", 80" x 80", 60" x 80", 40" x 80"		
ASTM F 104 Tests 1/32" Thick			
F 38 B Creep Relaxation 22 Hrs @ 212°F (100°C) 22 Hrs @ 392°F (200°C)	15% 35%		
F 37 A Sealability Fuel A @ 14.5 PSI/Gasket Load 1000 PSI	.25 ml/hr		
F 37 B Sealability Fuel A @ 9.8 PSI/Gasket Load 500 PSI Nitrogen @ 30 PSI/Gasket Load 3000 PSI	05 ml/hr .1 ml/min		
F 146 Thickness Increase Oil #3, 5 Hrs @ 300°F Fuel B, 5 Hrs @ 73°F	< 3% < 4%		
F 36 A Compressibility 5000 PSI Gasket Load	45%		
F 36 A Recovery	10%		
F 152 Tensile Strength	600 PSI		
DIN 3535 Part 6 Gas Permeability Nitrogen @ 580 PSI/Gasket Load 4640 PSI	.2 cc/min		
DIN 52913 Stress Relaxation @ 7250 PSI 16 Hrs @ 347°F 16 Hrs @ 572°F	Stress Retained > 6500 PSI Stress Retained > 5000 PSI		
DIN 3754 48 Hrs @ 75°F Thickness Increase H2S04 Sulfuric Acid 65% Concentration NaOH Sodium Hydroxide 25% Concentration	7% 3%		

As in all compressed sheets the P x T values decrease significantly as the thickness increases. Our maximum temperature, pressure and P x T values cannot be exceeded.