

Section 1 – Identification of the Substance/Preparation, and of the Company									
Product Identifier:					[WHMIS Classification]				
AP Style # 951						N/A			
Product Use:									
Gasketing									
Manufacturer's Name:				Supplie	Supplier's Name:				
Curtiss-Wright				Curtis	Curtiss-Wright				
Street Address:				Street A	ddress:				
18001 Sheldon Road				18001 Sheldon Road					
City:		;	State:	City:				State:	
Middleburg Hts.	Middleburg Hts.		ОН	OH Middlebur		ourg Hts.		ОН	
Postal Code:	Emergency Telephor		ephone:	Postal (Postal Code:		Emergency Telephone:		
44130	+1.216	6.267.	.3200	44130	44130 +1.21		+1.216.26	.267.3200	
Date MSDS Prepared: MSD			/ISDS Prepared	DS Prepared By:			Phone Numbe	r:	
2/24/2016 Ra		Raymond M	aymond Moody		+1.216.267.3200				
Section 2 –Composition	Section 2 –Composition/Information on Ingredients								
Hazardous Ingredients	, <u>.</u>	"""""""""""""""""""""""""""""""""""""				OSHA PEL		ACGIH TLV	
(specific)									
Alumin collingto (vitro que)	, , , , , , , , , , , , , , , , , , ,		2/	0.6		2 fiboro/oo TWA (COLIO)			
Aluminosilicate (vitreous)	/	75-85%	%	21		2 fibers/cc TWA (SOHIO)			
Containing									
Glass Filament and/or N/D		65997-1	65997-17-3						
and/or Inconel wire insert N/D									
Organic carrier fiber 15-25		15-25%	%						
Section 3 – Hazards Identification									
Route of Entry: Skin Absorption Eye Contact Inhalation Ingestion									



[Emergency Overview]					
Dermal irritation and aller	s of dust may cause upper respiratory tract irritation and dust-related lung disease. gic skin reaction if dust contacts skin for prolonged or repeated periods. WARNING: sulates. Avoid Creating dust. Breathing Gasket dust may cause permanent lung				
[WHMIS Symbols]					
N/A					
[Potential Health Hazard]					
Eye – Eye contact may ca	ause slight chemical and mechanical irritation.				
Skin - Dermal irritation and allergic skin reaction if dust contacts skin for prolonged or repeated periods. May cause abrasion with resulting irritation and rash.					
Inhalation - Release of large amounts of dust may cause upper respiratory tract irritation and dust related lung disease (fibrosis).					
Ingestion – Low toxicity if	ingested.				
Section 4 – First Aid I	Measures				
Skin Contact:					
Frequent washing will de	ter transitory chemical and mechanical dermatitis. If rash develops consult a physician				
Eye Contact:					
Immediately wash eyes v	vith water for at least 5 minutes. Seek medical attention is discomfort persists.				
Inhalation:					
Remove patient to fresh a	air. Seek medical attention.				
Ingestion:					
Induce vomiting and seek	medical attention.				
Section 5 – Fire Fight	ing Measures				
Flammable:	If yes, under what conditions?				
⊠ Yes □ No	Heat Flame				
Means of Extinction:					



Use water, DRY chemical, carbon dioxide, foam, or water spray. Use adequate personal protective equipment							
Flashpoint (°C) and Method:	Flashpoint (°C) and Method:	Flashpoint (°C) and Method:					
No data	No data	No data					
Auto ignition Temperature (°C):	Auto ignition Temperature (°C):	Auto ignition Temperature (°C):					
No data	No data	No data					
Hazardous Combustion Products:							
Carbon dioxide and carbon monoxide.							
[NFPA]:							
N/A							
Section 6 – Accidental Re Leak and Spill Procedures:	lease Measures						
As Gasketing, product does not spill or create a release. Accumulated dust may be vacuumed using a vacuum							
fitted with a HEPA filter or wet mopped for cleanup.							
Castion 7 Handling and Ctorons							
Section 7 – Handling and Storage Handling Procedures and Equipment:							
In normal handling of sheet and gaskets, no significant release of dust occurs.							
Storage Requirements:							
While there are no hazards associated with storage we recommend the following storage conditions.							
Storage temperature below 75°F							
Humidity between 50% - 60%							
Darkened storage room							
If these conditions are met, a useful life of 5 years can be expected.							
Section 8 – Exposure Controls/Personal Protection							
	GIH TLV SONAL PEL	☐ Other (specify)					



Specific Engineering Controls (such as ventilation, enclosure process)						
Ventilation needed only for dust-producing activities. Local exhaust may be necessary for some applications.						
Personal Protective Equipment	Gloves	□ Respirator	⊠ Eye	☐ Footwear	∑ clothing	☐ other
If marked, please specify type:						
Skin protection - For brief con When prolonged or frequent r rubber to prevent skin irritatio	epeated	contact could o		•		
Respiratory Protection - Resp Respiratory protection is requ performed. Use only NIOSH/I breathing apparatus when ex use approved SCBA device.	ired whe	n dust-emitting proved air-purif	activates (g	rinding, pile ators or pos	e driving, sanding itive pressure, s	g, etc.) are elf-contained
Eye Protection – Safety glass	es are re	commended wh	nen dust-er	nitting activ	ates occur.	
Section 9 – Physical and Chemical Properties						
Physical State:		Odor and Appearance	e:		Odor Threshold:	
Solid		No odor, White Inconel Core No		y in color	Not relevant	
Specific Gravity:		Vapor Density (air =1): Vapor Pressure (mmHg):		Hg):		
N/A	1	N/A			N/A	
Evaporation rate:	E	Boiling Point (°C): Freezing Point (°C):		Freezing Point (°C):	ng Point (°C):	
N/A		N/A N/A				
pH:		Coefficient of Water / Oil Distribution:		[Solubility in Water]:		
N/A		N/A		Insoluble		
10 – Stability and Reactivity						
Chemical Stability		r which conditions?				
⊠ Yes □ No						
Incompatibility With Other Substances	If yes, which ones?					
⊠ Yes □ No	Strong oxidizers, strong Acids and bases					



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(Conditions to avoid) Avoid open flame, welding arcs, or high temperature sources which induce thermal decomposition.

Reactivity and under what conditions:

(Specific materials to avoid) Avoid strong oxidizers, strong Acids and bases. Exposure to these chemicals may cause premature product degeneration.

Hazardous Decomposition Product:

Carbon dioxide, carbon monoxide, and other hydrocarbons

Section 11 – Toxicological Information

Effects of Acute Exposure:

Acute: Inhalation of dusts and fibers may result in irritation of the upper respiratory tract (mouth, nose and throat) Inconel dust or fumes may give a metallic taste, headache, nausea, chills, fever, tightness of the chest, irritation of the respiratory tract, eyes, nose, cough.

Acute: Inhalation: loss of consciousness/death due to welding gases or lack of oxygen

Skin Contact: Skin contact with dusts and fibers may produce itching and temporary mechanical irritation

Eye Contact: Eye contact with fibers and dusts may produce temporary mechanical irritation

Effects of Chronic Exposure:

Chronic: Chronic exposure to Chromium (Cr)/Nickel (Ni)/Manganese (Mn) fumes or dust may cause skin sensitization, asthma, bronchitis, lung fibrosis or pneumoniosis. It may also cause damage to the kidneys and liver as well as the nervous system.

Irritancy of Product:

Skin Sensitization:

Relative

	,,,
Relative	Relative
Carcinogenicity – IARC:	Carcinogenicity – ACGIH:
Chromium (Cr) Nickel (Ni) (contained in Inconel wire) dusts and fumes containing Chromium or Nickel should be considered carcinogens.	Chromium (Cr) Nickel (Ni) (contained in Inconel wire) dusts and fumes containing Chromium or Nickel should be considered carcinogens.
Reproductive Toxicity:	Teratogenicity:

Respiratory Sensitization:



No data available	No data available					
Embryo toxicity:	Mutagenicity:					
No data available	No data available					
Name of Synergistic Products / Effects:						
No data available						
[Optional, not required under WHMIS]						
Section 12 – Ecological Information						
Aquatic Toxicity:		·				
No data available						
Section 13 – Disposal Considerations Waste Disposal:						
within states and municipalities, disposal of these products should be in accordance with all local, state, and federal laws and regulations (contact local or state environmental agencies for specific rules).						
Section 14 – Transport Information						
Special Shipping Information:						
No special precautions necessary.						
		PIN				
		N/A				
TDG:	[DOT]					
N/A	Not regulated					
[IMO]	[ICAO]					
N/A	N/A					
Costion 45 Demulatory Information						
Section 15 – Regulatory Information [WHMIS Classification]	[OSHA]					
Not regulated	Not regulated					



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[SERA]	[TSCA]				
Not regulated	Not regulated				
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and MSDS contains all of the information required by CPR.					

Section 16 – Other Information

Use: The limitations of use decrease significantly as gasket thickness increases. Do not use a thicker gasket material or "double gaskets" to solve a gasket problem without first consulting the manufacturer. Curtiss-Wright engineers can advise on gasket selection and installation based on specified operating conditions. If you are in any doubt, visit our website at www.cwnuclear.com, fax us at 724-295-6201 or phone us at +1.216.267.3200.

All gaskets should be cut by trained personnel only. Incorrect cutting can produce weaknesses in a gasket that may not be visible, but could cause failure. Gasket installation should be carried out by trained personnel only.

The ability of a gasket material to make and maintain a seal depends not only on the quality of the gasket material, but also on medium being sealed, the flange design, the amount of pressure applied to the gasket by the bolts and how the gasket is assembled into the flanges and tightened.

The higher the operating pressure and/or temperature, the greater the care and expertise required in selecting and installing gaskets. This includes, but is not limited to: confirmation that the flanges are suitable for the intended use; the finish on the flange faces; the parallelism of the flange faces; confirmation that the studs, bolts, washers and nuts are suitable for the intended use and in good condition; no anti stick compound is applied to the flanges or gaskets; confirmation that the gasket material and thickness are suitable for the intended use; and the gasket is evenly loaded by the correct tightening sequence of the bolts or studs, and to the correct torque to give the required gasket assembly stress. The use of torque wrenches, hydraulic bolt tensioners or other loading devices can assist achievement of the correct gasket stress.

The application of release agents to the gasket or flanges may cause gasket failure.

Because conditions of use are beyond the manufacturer's control, it is the responsibility of the user to ensure that the product is suitable for the intended use.

WARNING: Catastrophic gasket failure can be caused by steam or water hammer. Steam or water hammer can cause an instantaneous increase in internal pressure on the assembly that far exceeds the design or test pressures. Where water hammer exists, the basic problem should be corrected. DO NOT USE AP MATERIAL IN APPLICATIONS WHERE WATER OR STEAM HAMMER MAY STRESS THE GASKET BEYOND ITS DESIGN TOLERANCES

The information above is believed to be accurate and represents the best information available to us. However, we make no warranty expressed or implied, with respect to such information, and we assume no liability



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resulting from its use.

[Optional, not required under WHMIS]