

Safety Data Sheet

| Section 1 – Identificatio | n of the Su | ubstance/Pre | paration, an | d of the | Company | |
|---------------------------|--------------|-----------------------|-----------------|-------------|------------------|--------|
| Product Identifier: | | | | [WHMIS Clas | ssification] | · |
| AP Style # 625 & 625C | | | | N/A | | |
| Product Use: | | | | | | |
| Valve Packing | | | | | | |
| Manufacturer's Name: | | | Supplier's Name | : | | |
| Curtiss-Wright | | | Curtiss-Wrig | ht | | |
| Street Address: | | | Street Address: | | | |
| 18001 Sheldon Road | | | 18001 Sheld | don Road | | |
| City: | | State: | City: | | | State: |
| Middleburg Hts. | | ОН | Middleburg | Hts. | | ОН |
| Postal Code: | Emergency Te | elephone: | Postal Code: | | Emergency Telepl | hone: |
| 44130 +1.216.267.3200 | | 44130 +1.216.267.3200 | | 200 | | |
| Date MSDS Prepared: | • | MSDS Prepared By | | | Phone Number: | |
| 1/29/16 | | Raymond Moc | ody | | +1.216.267.32 | 200 |

| Section 2 –Composition/Information on Ingredients | | | | |
|---|---|------------|---------------------|---------------------|
| Hazardous Ingredients (specific) | % | CAS Number | OSHA PEL | ACGIH TLV |
| Fibrous Glass | | 65997-17-3 | 10mg/m ³ | 10mg/m ³ |
| Copper | | 7440-50-8 | NL | NL |

| Section 3 – Hazards Identification | | | | | |
|--|------------------------|---------------------|------------------------|---------------------|----------------|
| Route of Entry: | Skin Absorption | Eye Contact | \boxtimes Inhalation | ⊠ Ingestion | |
| [Emergency Overvi | iew] | | | | |
| Release of large amounts of fibers may cause upper respiratory tract irritation and fiber-related lung disease. | | | | | |
| Dermal irritation and allergic skin reaction if fibers contacts skin for prolonged or repeated periods. WARNING: | | | | | |
| Contains fiber | rs and particulates. A | void Creating dust. | . Breathing Gask | et dust may cause p | permanent lung |



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| damage. |
|--|
| [WHMIS Symbols] |
| N/A |
| Eye – Eye contact may cause slight chemical and mechanical irritation. |
| Skin - Dermal irritation and allergic skin reaction if fibers contacts skin for prolonged or repeated periods. May cause abrasion with resulting irritation and rash |
| Inhalation - Release of large amounts of fibers may cause upper respiratory tract irritation and dust related lung disease (fibrosis). |
| Ingestion – Low toxicity if ingested. |
| |
| Section 4 – First Aid Measures Skin Contact: |
| Frequent washing will deter transitory chemical and mechanical dermatitis. If rash develops consult a physician. |
| Eye Contact: |
| Immediately wash eyes with water for at least 5 minutes. Seek medical attention is discomfort persists. |
| Inhalation: |
| Remove patient to fresh air. Seek medical attention. |
| Ingestion: |
| Induce vomiting and seek medical attention. |

| Section 5 – Fire Fight | ing Measu | ires | | L | |
|---|-----------------|-----------------------------|-----|---|--|
| Flammable: | If yes, under w | hat conditions? | | | |
| 🗌 Yes 🛛 No | Does not s | Does not support combustion | | | |
| Means of Extinction: | | | | | |
| Use DRY chemical, carbon dioxide, foam, or water spray. Conducive with surrounding Material and equipment Use adequate personal protective equipment. | | | | | |
| Flashpoint (°C) and Method: Upper Flammable Limit (% by Volume): Lower Flammable Limit (% by Volume): | | | | | |
| Does not Flash | | N/A | N/A | | |



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| Auto ignition Temperature (°C): | Explosion Data – Sensitivity to impact: | Explosion Data – Sensitivity to Static Discharge: |
|---|---|---|
| N/A | N/A | N/A |
| Hazardous Combustion Products: | | |
| None Known | | |
| [NFPA]: | | |
| Not available | | |
| | | |
| Section 6 – Accidental Re Leak and Spill Procedures: | | |
| Leak and Spint Tocedures. | | |
| As Valve Packing, product do | es not spill or create a release | |
| Section 7 – Handling and | Storago | |
| Handling Procedures and Equipment: | Storage | |
| | | |
| In normal hanging of valve Pa | acking, no significant release of fibers of | ccurs. |
| Storage Requirements: | | |
| While there are no hazards as | sociated with storage we recommend the | he following storage conditions. |
| Storage temperature below 7 | 5°F | |
| Humidity between 50% - 60% | , | |
| Darkened storage room | | |
| If these conditions are met, a | useful life of 5 years can be expected. | |
| | otrols/Personal Protection | |

| Dection 0 - Exposul | e controis/r e | 3130nai 1 10tt | JULION | | | | |
|--|-------------------|-------------------|-------------|----------------|----------------------|----------------|------|
| Exposure limits: | 🛛 ACGIH TLV | ⊠ OSH | IA PEL | ☐ Other (| (specify) | | |
| Specific Engineering Controls (such as ventilation, enclosure process) | | | | | | | |
| Ventilation needed only | for dust-produc | ing activities. I | ∟ocal exha | aust may be ne | cessary for s | ome applicatio | ons. |
| Personal Protective Equipment | Gloves | Respirator | 🖾 Eye | □ Footwear | \boxtimes clothing | □ other | |
| If marked, please specify type: | | | | | | | |
| Skin protection - For br | ief contact, no p | precautions oth | er than cle | ean body-cove | ring clothing | should be nee | ded. |



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When prolonged or frequent repeated contact could occur, use protective clothing and gloves such as butyl rubber to prevent skin irritation and dermatitis.

Respiratory Protection - Respiratory protection is not required under normal processing of sheet gaskets. Respiratory protection is required when dust-emitting activates (grinding, pile driving, sanding, etc.) are performed. Use only NIOSH/MSHA approved air-purifying respirators or positive pressure, self-contained breathing apparatus when exposure guidelines are greatly exceeded. In confined or poorly ventilated areas, use approved SCBA device.

Eye Protection – Safety glasses are recommended when dust-emitting activates occur.

| Section 9 – Physical and Chemi | cal Properties | | |
|--------------------------------|--|------------------------|--|
| Physical State: | Odor and Appearance: | Odor Threshold: | |
| Solid | No odor. Copper in color | Not relevant | |
| Specific Gravity: | Vapor Density (air =1): | Vapor Pressure (mmHg): | |
| No Data | N/A | N/A | |
| Evaporation rate: | Boiling Point (°C): | Freezing Point (°C): | |
| N/A | N/A | N/A | |
| pH: | Coefficient of Water / Oil Distribution: | [Solubility in Water]: | |
| N/A | N/A | Insoluble | |

| Section 10 – Stability and | Reactivity |
|--|---|
| Chemical Stability | If no, under which conditions? |
| 🛛 Yes 🗌 No | |
| Incompatibility With Other Substances | If yes, which ones? |
| 🛛 Yes 🗌 No | Strong oxidizing agents. Strong acids and bases |
| Direct flame will ignite elastom | ier compound. |
| Reactivity and under what conditions: | |
| (Specific materials to avoid) A cause premature product dege | void strong oxidizers, strong Acids and bases. Exposure to these chemicals may eneration. |
| Hazardous Decomposition Product: | |



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Carbon monoxide under certain circumstances, there may be others unknown to us.

| Section 11 – Toxicological Information | | | | | | |
|---|--|--|--|--|--|--|
| Effects of Acute Exposure: | | | | | | |
| Inhalation or ingestion of finely divided powder o | Inhalation or ingestion of finely divided powder or dust may be harmful. | | | | | |
| Effects of Chronic Exposure: | | | | | | |
| Contains fibers and particulates. Avoid Creating of damage. | dust. Breathing Gasket dust may cause permanent lung | | | | | |
| Irritancy of Product: | | | | | | |
| Relative | | | | | | |
| Skin Sensitization: | Respiratory Sensitization: | | | | | |
| Relative | Relative | | | | | |
| Carcinogenicity – IARC: | Carcinogenicity – ACGIH: | | | | | |
| Not listed as Carcinogenic | Not listed as Carcinogenic | | | | | |
| Reproductive Toxicity: | Teratogenicity: | | | | | |
| No data available | No data available No data available | | | | | |
| Embryo toxicity: | Mutagenicity: | | | | | |
| No data available | No data available | | | | | |
| Name of Synergistic Products / Effects: | | | | | | |

[Optional, not required under WHMIS]

| Section 12 – Ecological Information | 1 |
|---|---|
| Aquatic Toxicity: | |
| No data available | |
| Components of Gasketing are essentially non-biodegradable in the environment. No studies have been performed on end gasket products, however. | |
| | |

Section 13 – Disposal Considerations

Waste Disposal:



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Gasket materials are generally *not* considered hazardous waste as defined under RCRA. However, since waste disposal laws vary 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 Inform | nation | |
|----------------------------------|---------------|-----|
| Special Shipping Information: | | |
| No special precautions necessary | | |
| | | PIN |
| | | N/A |
| TDG: | [DOT] | |
| N/A | Not regulated | |
| [IMO] | [ICAO] | |
| N/A | N/A | |

| Section 15 – Regulatory Information | |
|---|----------------|
| [WHMIS Classification] | [OSHA] |
| Not Classified | Not Classified |
| [SERA] | [TSCA] |
| Not Classified | Not Classified |
| 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 <u>www.cwnuclear.com</u>, 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



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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 resulting from its use.

[Optional, not required under WHMIS]