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Issue Date: September 2015

ISSUED by UNASCO

Product Name STAINLESS STEEL THREAD SEALING TAPE

GHS Product	STAINLESS STEEL THREAD SEALING TAPE	
Identifier Company Name	UNASCO PTY LTD	
Address	1 Amax Avenue Girraween, NSW 2145 Australia	Emergency Telephone Number Unasco Pty Ltd CCN710993
Telephone/Fax Number	Non-Emergency Tel: 800 713 4589 Fax: 707 238 1419	CHEMTREC (USA & Canada): 800 424 9000 International: 703 741 5970
Recommended use of the chemical and restrictions on use	Sealing threads of stainless steel pipe	and fittings.

2. Hazard Identification

 $Classification \ of \ the \ Not \ classified \ as \ Hazardous \ according \ to \ the \ Globally \ Harmonized \ System \ substance \ or \ mixture \ of \ Classification \ and \ labeling \ of \ Chemicals \ (GHS).$

3. <u>Composition/information on ingredients</u>

Chemical Article A test conducted by wiping both sides of the tape with a tissue soaked in acetone indicates that there is <1% of free nickel on the surface of the tape. There is more than <1% in the final product but most of the Ni is encapsulated in the tape. There would be less than <1% by weight exposed on the surface of the tape.

Name	CAS	Proportion
Polytetrafluoroethylene	9002-84-0	60-100 %
Nickel	7440-02-0	10-30 %
Distillates, petroleum,	64742-47-8	0-1 %
Hydro-treated light		
Ingredients determined		Balance
not to be hazardous.		
	Polytetrafluoroethylene Nickel Distillates, petroleum, Hydro-treated light	Polytetrafluoroethylene 9002-84-0 Nickel 7440-02-0 Distillates, petroleum, 64742-47-8 Hydro-treated light Ingredients determined

4. First-aid measures			
Inhalation	Not considered a potential route of exposure.		
Ingestion	Unlikely due to form of product. However, if ingested, do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.		
Skin	Not considered a potential route of exposure.		
Eye contact First Aid Facilities	Not considered a potential route of exposure. However if in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention. Eyewash and normal washroom facilities.		
Advice to Doctor	Treat symptomatically.		
Other Information			

5. Fire-fighting measures

Suitable	Use carbon dioxide, dry chemical, water mist or water spray.
extinguishing media	
Hazards from	Under fire conditions this product may emit toxic and/or irritating fumes
Combustion	including carbon monoxide, carbon dioxide and oxides of nitrogen.
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Specific hazards arising from the	Combustible. This product will readily burn under fire conditions. Product will also burn in an atmosphere of greater 95% of oxygen.		
chemical Decomposition Temp. ²⁰	60°C(500°F)		
Precautions in connection with Fire	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapors or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.		
6. Accidental	release measures		
Personal precautions, protective equipment and emergency	Protective equipment and special precautions not required. Collect the material and place into a suitable labeled container. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.		
7. Handling a	nd storage		
Precautions for Safe Handling Conditions for safe storage, including any incompatabilities Corrosiveness	Use only in a well ventilated area. Keep containers closed when not in use. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, foodstuffs, and clothing. Keep containers closed when not in use and protected against physical damage. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. Non corrosive		
Storage Temperatures	Store in cool place below 260°C (500°F).		
•	ontrols/personal protection		
Occupational exposure limit values	available exposure limits for ingredients and dust are listed below: Substance TWA TEL Notices		
	ppm mg/m ³ ppm mg/m ³ Nickel, metal 1 Sen		
Biological Limit Values Appropriate	<pre>TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week. STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday. `Sen' Notice: The substance may cause sensitization by skin contact or by inhalation No biological limits allocated. Use with good general ventilation. If mists or vapors are produced,</pre>		
engineering controls Respiratory Protection	local exhaust ventilation should be used. Not required under normal conditions of use (Temperature below $260^{\circ}C$ $500^{\circ}F$) However, if engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable mist filter should be used.		
Eye Protection	Not required under normal conditions of use.		
Hand Protection	Not necessary under normal conditions of use in most case since less than 1%		

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of free nickel on the surface of the tape. However, persons with pre-existing skin medical conditions and/or allergic reactions should avoid repeated skin contact and wear impervious chemical gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.

Body Protection

Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended.

9. Physical and chemical properties

7. I hysical and cher	
Form	Article Silver-
Appearance	gray tape
Color	Silver-gray
Odor	Odorless
Decomposition Temperature Melting Point	260°C (500°F) Not available
Boiling Point	Polymer component depolymerises at 260°C(500°F).
Solubility in Water	Insoluble
Solubility in Organic	Insoluble
Solvents pH	Not applicable
Vapor Pressure	Not available
Vapor Density	Not applicable
(Air=1) Evaporation Rate	Not applicable
Odor Threshold	Not available
Viscosity	Not applicable
Partition Coefficient: n-octanol/water	Not available
Density	1.6g/cm ³
Flash Point	Not applicable
Flammability	Not flammable
Auto-Ignition	Not available
Temperature Flammable Limits -	Not applicable
Lower Flammable Limits -	Not applicable
Upper Explosion Properties	Not explosive
Other Information	Not sensitive to shock.

10. Stability and reactivity

Reactivity	Alkali metals remove fluorine from the polymer molecule. Extremely potent
	oxidizers such as fluorine and related compounds can be handled by PTFE
	with great care. The mixture becomes sensitive to a source of ignition such as
	impact. Some acids might react with nickel on the surface of the tape. Stable
Chemical Stability	under normal conditions of storage and handling. Stable up to $260^\circ\text{C}(500^\circ\text{F})$
Conditions to Avoid	Heat, flames and other sources of ignition.

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Naterials 809 Son	kali metals such as elemental sodium, potassium, lithium. % NaOH or KOH. me acids (react with nickel). tal hydrides such as boranes (e.g. B2H6), aluminum chloride, ammonia,
To DO Hazardous Decomposition Products	rtain amines (R - NH2), imines (R-NH) and 70% nitric acid -260°C(436°F) 260°C(500°F). NOT use on OXYGEN LINES. ermal decomposition may result in the release of toxic and/or irritating mes including carbon oxides, hydrogen fluoride. 11 not occur.

11. Toxicological Information

No toxicology data available for this product. Ingestion of this product may irritate the gastric tract causing nausea
and vomiting
The material is not normally an inhalation hazard at temperatures below 260°C(500°F) as it remains an inert solid. However, exposure to thermal degradation products at temperatures above 260°Cincluding nickel and its oxides, may produce severe pulmonary irritation which may be fatal. Signs and symptoms of pulmonary effects due to thermal decomposition may include sneezing, coughing, headaches, breathing difficulties and a pseudo-flu condition with fever and muscular pains. These effects may also be delayed. Gastrointestinal disturbances and convulsions can also occur.
Nickel powder dispersed through the tape may cause irritation in contact with the skin, which can result in redness, itchiness and possible dermatitis. 'Nickel itch' may begin with a burning sensation and localized itching on the hand, redness and nodular eruptions on the web of the fingers.
No adverse effects expected.
Not expected to be a respiratory sensitizer.
Not expected to be a skin sensitizer in most case since less than 1% of free nickel on the surface of the tape. However, may lead to allergic contact dermatitis and sensitisation in some individuals with pre-existing skin medical conditions and/or allergic reactions.
Not considered to be a mutagenic hazard.
Not considered to be a carcinogenic hazard. Nikel is listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC). Polytetrafluoroethylene is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).
Not considered to be toxic to reproduction.
Not expected to cause toxicity to a specific target organ.
Not expected to cause toxicity to a specific target organ through repeated or
prolonged exposure. Not expected to be an aspiration hazard.
Prolonged or repeated exposure to this material may result in skin irritation leading to dermatitis or sensitization. Repeated or prolonged exposure to thermal decomposition products may lead to serious toxic effects possibly leading to liver and kidney damage and possible heart failure. Chronic low-level exposure to nickel may cause allergies (occasionally asthma) in humans. Nickel has also been known to cause nose and sinus inflammation.

Safety Data Sheet

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12. Ecological information:

Ecotoxicity	No ecological data are available for this material. Not available
Persistence and	
degradability	Not available
Mobility	Not available
Bioaccumulative Potential	Not available
	Prevent this material entering waterways, drains and sewers.

Disposal Considerations	The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
14. Transport in	formation
Transport Information	Road and Rail Transport (ADG Code):
	Marine Transport (IMO/IMDG): Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
	Air Transport (ICAO/IATA): Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
IMDG Marine Pollutant	No

Regulatory	Not classified as a Scheduled Poison according to the Standard for the Uniform
Information	Scheduling of Medicines and Poisons (SUSMP).
Poisons Schedule	Not Scheduled
16. Other Information	