



MATERIAL SAFETY DATA SHEET

in accordance with 1907/2006/EC

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: 1760

Date: 21 August 2007

MSDS No. 1051-9

Not classified as hazardous according to criteria of Worksafe Australia.

Company:
 A.W. CHESTERTON COMPANY
 860 Salem Street
 Groveland, MA 01834-1507, USA
 Tel.: +1 978-469-6446 Fax: +1 978-469-6785
 (Mon. - Fri. 8:30 - 5:00 PM EST)
 E-mail (questions): ProductMSDSs@chesterton.com
 MSDS requests: www.chesterton.com

Supplier:

For Chemical Emergency:

24 hours per day, 7 days per week
 Call Infotrac: 1-800-535-5053
 Outside N. America: +1 352-323-3500 (collect)

Use: Graphite coated Polytetrafluoroethylene (PTFE) yarn. For use against water, steam, oil, solvents, acids and alkalies to 260°C (500°F), pH 0-14, with the exception of strong oxidizers in the 0-2 pH range.

2. HAZARDS IDENTIFICATION

None expected in industrial use. PTFE is nonhazardous at ambient temperatures. At temperatures above 260°C (500°F), toxic decomposition products may be emitted. Due to toxic decomposition, avoid smoking (wash hands to avoid transfer to tobacco products) when handling.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients ¹	% Wt.	CAS No.	EC No.	Symbol	R-phrases
Graphite	5-25	7782-42-5	231-955-3	–	–

4. FIRST AID MEASURES

Inhalation: If overcome by decomposition fumes, remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin Contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye Contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: not applicable

Advice to Physician: Treat symptoms.

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 ® Reg. US Patent and TM Office

¹Classified according to: * 29 CFR 1910.1200, 1915, 1916, 1917
 * Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F)
 * Controlled Products Regulations
 * 67/548/EEC (2004/73/EC) and 99/45/EC
 * Worksafe Australia [NOHSC: 1008 (2004)]

5. FIRE-FIGHTING MEASURES

Extinguishing Methods:	Carbon Dioxide, dry chemical, foam or water spray
Unusual Fire and Explosion Hazards:	Toxic fumes may be emitted at temperatures above 260°C (500°F).
Special Fire Fighting Measures:	Recommend Firefighters wear self-contained breathing apparatus.
Flammability Classification:	–
HAZCHEM Emergency Action Code:	2 Z

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Utilize exposure controls and personal protection as specified in Section 8.
Environmental Precautions:	No special requirements.
Methods of Clean Up:	No special steps required. nontoxic

7. HANDLING AND STORAGE

Handling:	Do not smoke when handling PTFE products; wash hands after handling to avoid transfer to tobacco products.
Storage:	Store in a cool, dry area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Ingredients	OSHA		ACGIH TLV		AUSTRALIA	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Graphite	15 mppcf	(resp)	(resp)	2	(resp)	3

Respiratory Protection:	Not normally needed. If exposure limit is exceeded, use approved dust respirator.
Ventilation:	No special requirements. If exposure limits are exceeded, provide adequate ventilation.
Protective Gloves:	Not normally needed.
Eye Protection:	Not normally needed.
Other:	none

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	solid	Odour	none
Colour	off-white / gray	Vapour pressure @ 20°C	not applicable
Initial boiling point	not applicable	% Aromatics by weight	not applicable
Melting point	not applicable	pH	not applicable
% Volatile (by volume)	not applicable	Density	not applicable
Flash point	not applicable	Weight per volume	not applicable
Method	not applicable	Coefficient (water/oil)	not applicable
Viscosity	not applicable	Vapour density (air=1)	not applicable
Autoignition temp.	not determined	Rate of evaporation (ether=1)	not applicable
Explosion limits	not applicable	Solubility in water	insoluble
		Other	none

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	Carbon Monoxide, Carbon Dioxide, trace amounts of Hydrogen fluoride, Perfluorocarbon olefins, and other toxic fumes may be evolved above 260°C (500°F).
Conditions to Avoid:	Extreme heat above 260°C (500°F).
Materials to Avoid:	Fluorine, Chlorine Trifluoride and related compounds and molten alkali metals.

11. TOXICOLOGICAL INFORMATION

Primary Route of Exposure Under Normal Use:	Inhalation, skin and eye contact. Personnel with pre-existing chronic respiratory impairments may be aggravated by exposure.
Acute Effects:	Graphite dust may cause mechanical irritation to the skin, eyes and nasal passages. PTFE is nonhazardous at ambient temperatures. However, small quantities of toxic gases may be produced at temperatures above 260°C (500°F), due to PTFE decomposition. Inhalation of these decomposition products may cause temporary flu-like symptoms.
Chronic Effects:	Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs.
Other Information:	As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed in the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or the Occupational Safety and Health Administration (OSHA).

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

Mobility:	Solid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).
Degradability:	PTFE: material is chemically unreactive and nonbiodegradable.
Accumulation:	not determined
Ecotoxicity:	not determined

13. DISPOSAL CONSIDERATIONS

Unused product is not a regulated waste. Check local, state and national/federal regulations and comply with the most stringent requirement.

EWC-code: 07 02 13

14. TRANSPORT INFORMATION

TDG:	NONHAZARDOUS, NOT REGULATED	U.S. DOT : Shipping Name: NONHAZARDOUS Hazard Class: NOT REGULATED UN/NA # : NOT APPLICABLE Packaging Group # NOT APPLICABLE Emergency Response Guide Book No. - NOT APPLICABLE
IMDG:	NONHAZARDOUS, NOT REGULATED	
IATA/ICAO:	NONHAZARDOUS, NOT REGULATED	
ADR/RID:	NONHAZARDOUS, NOT REGULATED	

15. REGULATORY INFORMATION																			
European Classification ¹ :	none																		
R-Phrase(s):	none																		
S-Phrase(s):	–																		
Name of the substances on the label:	–																		
Other information:	none																		
Canadian Classification ¹ :	D2B: Toxic materials causing other effects																		
Risk Phrase(s):	Prolonged, excessive inhalation of Graphite dust has caused emphysema and pneumoconiosis.																		
Precautionary and First Aid Measure(s):	Avoid excessive creation and inhalation of dust during removal, drilling, grinding, cutting or sanding. If affected by inhalation of dust, move to fresh air. Contact physician immediately.																		
Other Information:	none																		
16. OTHER INFORMATION																			
US EPA SARA TITLE III	Hazardous Materials Identification System (HMIS)																		
312 Hazards : Immediate	313 Chemicals : none																		
	<table border="1"> <tr> <td>4 = Severe Hazard</td> <td>HEALTH</td> <td>0</td> </tr> <tr> <td>3 = Serious Hazard</td> <td>FLAMMABILITY</td> <td>0</td> </tr> <tr> <td>2 = Moderate Hazard</td> <td>REACTIVITY</td> <td>1</td> </tr> <tr> <td>1 = Slight Hazard</td> <td>Personal Protection</td> <td>*</td> </tr> <tr> <td>0 = Minimal Hazard</td> <td></td> <td></td> </tr> <tr> <td>* = See Section 8</td> <td></td> <td></td> </tr> </table>	4 = Severe Hazard	HEALTH	0	3 = Serious Hazard	FLAMMABILITY	0	2 = Moderate Hazard	REACTIVITY	1	1 = Slight Hazard	Personal Protection	*	0 = Minimal Hazard			* = See Section 8		
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JAPAN PRTR	Class I Chemicals : none																		
	Class II Chemicals : none																		
Risk phrases in section 3:	none																		
Changes to the MSDS in this revision:	section 1; updated to new format.																		
This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the accuracy of the data or the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.																			