

SAFETY DATA SHEET

in accordance with REACH (1907/2006/EC, as amended by 453/2010/EC) and WHMIS 2015

Revision date: 26 April 2018 Initial date of issue: 21 August 2007 SDS No. 1051-11a

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

1760

1.2. Relevant identified uses of the substance or mixture and uses advised against

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.

1.3. Details of the supplier of the safety data sheet

Company:

Supplier:

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 (SDS questions): ProductMSDSs@chesterton.com

E-mail: customer.service@chesterton.com SDS requests: www.chesterton.com

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive, Unit 105, Burlington, Ontario L7L 4X8 - Tel. 905-335-5055 EU: Chesterton International GmbH, Am Lenzenfleck 23, D85737 Ismaning, Germany - Tel. +49-89-996-5460

1.4. Emergency telephone number

24 hours per day, 7 days per week Call Infotrac: 1-800-535-5053

Outside N. America: +1 352-323-3500 (collect)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / WHMIS 2015 / GHS

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

2.1.2. Classification according to Directive 1999/45/EC

This product does not meet the criteria for classification in any danger category according to Directive 1999/45/EC on classification, packaging and labelling of dangerous preparations.

2.1.3. Classification according to WHMIS 1988

D2B: Toxic materials causing other effects

2.1.4. Australian classification

Not classified as hazardous according to criteria of Safe Work Australia.

2.1.5. Additional information

None

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP] / WHMIS 2015 / GHS

Hazard pictograms:N/ASignal word:NoneHazard statements:NonePrecautionary statements:None

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Supplemental information: None

2.3. Other hazards

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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous Ingredients ¹	% Wt.	CAS No./ EC No.	REACH Reg. No.	Classification (acc. to 1272/2008/EC)	Classification (67/548/EEC)
Graphite	5-25	7782-42-5 231-955-3	NA	Not classified	Not classified

Indications of danger acc. to 67/548/EEC: Not applicable For full text of H-statements and R-phrases: see SECTION 16.

Classified according to: *29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L..O. 111F), California Proposition 65

* 1272/2008/EC, 67/548/EEC, 99/45/EC, REACH

* WHMIS 2015

* Safe Work Australia [NOHSC: 1008 (2004)]

SECTION 4: FIRST AID MEASURES

4.1. Description of 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

4.2. Most important symptoms and effects, both acute and delayed

Graphite dust may cause mechanical irritation to the skin, eyes and nasal passages. Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Carbon Dioxide, dry chemical, foam or water spray

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be emitted at temperatures above 260°C (500°F).

5.3. Advice for firefighters

Recommend Firefighters wear self-contained breathing apparatus.

Flammability Classification: -

HAZCHEM Emergency Action Code: 2

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions

No special requirements.

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6.3. Methods and material for containment and cleaning up

No special steps required. Nontoxic.

6.4. Reference to other sections

Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not smoke when handling PTFE products; wash hands after handling to avoid transfer to tobacco products.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

7.3. Specific end use(s)

No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values

Ingredients	OSHA	PEL	ACGI	H TLV	UK \	NEL ²	AUSTRA	ALIA ES3
	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
Graphite	15 mppcf	(resp)	(resp)	2	(resp) (inhal)	4 10	(resp)	3

8.2. Exposure controls

8.2.1. Engineering measures

No special requirements. If exposure limits are exceeded, provide adequate ventilation (good general mechanical ventilation).

8.2.2. Individual protection measures

Respiratory protection: Not normally needed. If exposure limit is exceeded, use approved dust respirator (e.g., EN filter type

P2).

Protective gloves: Not normally needed.

Eye and face protection: Not normally needed.

Other: None

8.2.3. Environmental exposure controls

Refer to sections 6 and 12.

² EH40 Workplace exposure limits, as amended.

³ Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003].

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Odour None Colour off-white / gray Odour threshold not determined **Initial boiling point** not applicable Vapour pressure @ 20°C not applicable Melting point not applicable % Aromatics by weight not applicable % Volatile (by volume) not applicable not applicable Flash point not applicable Relative density not applicable Method not applicable Weight per volume not applicable not applicable Coefficient (water/oil) not applicable **Viscosity Autoignition temperature** not determined not applicable Vapour density (air=1) Rate of evaporation (ether=1) **Decomposition temperature** not determined not applicable Insoluble

Upper/lower flammability or explosive limits

not applicable not determined

not applicable

Oxidising properties

Solubility in water

not applicable

Flammability (solid, gas) **Explosive properties**

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Extreme heat above 260°C (500°F).

10.5. Incompatible materials

Fluorine, Chlorine Trifluoride and related compounds and molten alkali metals.

10.6. 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).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary route of exposure Inhalation, skin and eye contact. Personnel with pre-existing chronic respiratory impairments may be aggravated by exposure. under normal use:

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.

As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed by the Carcinogenicity:

National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), the

Occupational Safety and Health Administration (OSHA) or Regulation (EC) No 1272/2008.

Aspiration hazard: Not applicable Other information: None known

SECTION 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.

12.1. Toxicity

Not determined

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12.2. Persistence and degradability

PTFE: Material is chemically unreactive and nonbiodegradable. Graphite: inorganic substance.

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Solid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Unused product is not a regulated waste. Check local, state and national/federal regulations and comply with the most stringent requirement. This product is not classified as a hazardous waste according to 2008/98/EC.

European List of Wastes code: Not determined

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE TDG: NOT APPLICABLE US DOT: NOT APPLICABLE

14.2. UN proper shipping name

ADR/RID/ADN/IMDG/ICAO:
TDG:
NON-HAZARDOUS, NON REGULATED
NON-HAZARDOUS, NON REGULATED
NON-HAZARDOUS, NON REGULATED

14.3. Transport hazard class(es)

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE TDG: NOT APPLICABLE US DOT: NOT APPLICABLE

14.4. Packing group

ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE TDG: NOT APPLICABLE US DOT: NOT APPLICABLE

14.5. Environmental hazards

NOT APPLICABLE

14.6. Special precautions for user

NOT APPLICABLE

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

NOT APPLICABLE

14.8. Other information

NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU regulations

Authorisations under Title VII: Not applicable

Restrictions under Title VIII: None

Other EU regulations: None 15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards: 313 Chemicals:

Immediate None

Hazardous Materials Identification System (HMIS)

4 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazar

2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard

* = See Section 8

HEALTH	כ
FLAMMABILITY	0
REACTIVITY	1
Personal Protection	*

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Other national regulations: None 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Abbreviations ACGIH: American Conference of Governmental Industrial Hygienists

and acronyms: ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE: Acute Toxicity Estimate BCF: Bioconcentration Factor

CLP: Classification Labelling Packaging Regulation (1272/2008/EC)

ES: Exposure Standard

GHS: Globally Harmonized System

ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods LC50: Lethal Concentration to 50 % of a test population

LD50: Lethal Dose to 50% of a test population

LOEL: Lowest Observed Effect Level

N/A: Not Applicable NA: Not Available

NOAEL: No Observed Adverse Effect Level

NOEL: No Observed Effect Level

OSHA: Occupational Health & Safety Administration PBT: Persistent, Bioaccumulative and Toxic substance

PEL: Permissible Exposure Limit

(Q)SAR: Quantitative Structure-Activity Relationship

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit STOT: Specific Target Organ Toxicity

TDG: Transportation of Dangerous Goods (Canada)

TLV: Threshold Limit Value

US DOT: United States Department of Transportation vPvB: very Persistent and very Bioaccumulative substance

WEL: Workplace Exposure Limit

WHMIS: Workplace Hazardous Materials Information System

Other abbreviations and acronyms can be looked up at www.wikipedia.org.

Key literature references Commission de la santé et de la sécurité du travail (CSST)

and sources for data: European chemical Substances Information System (ESIS)

European Chemicals Agency (ECHA) - Information on Chemicals

Hazardous Substances Data Bank (HSDB) Hazardous Substances Information System (HSIS)

Swedish Chemicals Agency (KEMI)

Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008:

Classification	Classification procedure
Not applicable	Not applicable

Relevant H-statements: None Relevant R-phrases: None

Hazard pictogram names: Not applicable

Changes to the SDS in this revision: Sections 1.3, 2.1, 2.2, 3, 16.

Date of last revision: 26 April 2018 **Further information:** None

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 suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.