



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:** 31 March 2009 **SDS No.** 1093-5a

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

1.1. Product identifier

184 and 185

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

Polytetrafluoroethylene (PTFE) Products 184 and 185 comply with FDA requirements for perfluorocarbon resins (21 CFR 177.1550) for food products. Product 185 also complies with FDA requirements for adhesive components (21 CFR 175.105). For use against most chemicals except elemental fluorine and molten alkali from -267°C (-450°F) to 260°C (500°F).

1.3. Details of the supplier of the safety data sheet

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 (SDS questions): ProductMSDSs@chesterton.com
E-mail: customer.service@chesterton.com
SDS requests: www.chesterton.com

Supplier:

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

Not controlled

2.1.4. Australian classification

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

2.1.5. Additional information

This product is not classified as a "hazardous material" in normal use as defined in: 29 CFR 1910.1200, 1915, 1916, 1917, Massachusetts Right-To-Know Law, Chapter 40, Acts and Resolves of 1983 (M.G.L. O. 111F).

2.2. Label elements

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

Hazard pictograms: N/A

Signal word: None

Hazard statements: None**Precautionary statements:** None**Supplemental information:** None**2.3. Other hazards**

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

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)
None					

Indications of danger acc. to 67/548/EEC: Not applicable

¹Classified 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: not applicable

Eye contact: not applicable

Ingestion: not applicable

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

PTFE is nontoxic at ambient temperatures. However, small quantities of toxic gases may be produced at temperatures above 260°C (500°F), due to decomposition. Inhalation of these decomposition products may cause temporary flu-like symptoms. None

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

Treat symptoms.

SECTION 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing media**

Use extinguisher appropriate to the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be emitted at temperatures above 260°C (500°F). Product will burn in an atmosphere of > 95% oxygen, when an ignition source is present.

5.3. Advice for firefighters

Recommend Firefighters wear self-contained breathing apparatus to protect against hazardous decomposition products.

Flammability Classification: –

HAZCHEM Emergency Action Code: not applicable

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.

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 cool, dry area.

7.3. Specific end use(s)

Polytetrafluoroethylene (PTFE) Products 184 and 185 comply with FDA requirements for perfluorocarbon resins (21 CFR 177.1550) for food products. Product 185 also complies with FDA requirements for adhesive components (21 CFR 175.105). For use against most chemicals except elemental fluorine and molten alkali from -267°C (-450°F) to 260°C (500°F). Refer to the product instructions and product data sheet for more detailed application information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Hazardous Ingredients	OSHA PEL		ACGIH TLV		UK WEL		AUSTRALIA ES	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
None								

8.2. Exposure controls

8.2.1. Engineering measures

No special requirements. If using under extreme heat, use local exhaust.

8.2.2. Individual protection measures

Respiratory protection: Not required.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state	solid	Odour	None
Colour	white	Odour threshold	not determined
Initial boiling point	not applicable	Vapour pressure @ 20°C	not applicable
Melting point	not applicable	% Aromatics by weight	0%
% Volatile (by volume)	not applicable	pH	not applicable
Flash point	not applicable	Relative density	not applicable
Method	None	Weight per volume	not applicable
Viscosity	not applicable	Coefficient (water/oil)	not applicable
Autoignition temperature	not applicable	Vapour density (air=1)	not applicable
Decomposition temperature	no data available	Rate of evaporation (ether=1)	not applicable
Upper/lower flammability or explosive limits	not applicable	Solubility in water	Insoluble
Flammability (solid, gas)	not applicable	Oxidising properties	not determined
Explosive properties	not determined		

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 under normal use:** Inhalation (PTFE decomposition fumes) and skin contact.**Acute effects:** PTFE is nontoxic at ambient temperatures. However, small quantities of toxic gases may be produced at temperatures above 260°C (500°F), due to decomposition. Inhalation of these decomposition products may cause temporary flu-like symptoms.**Chronic effects:** None**Carcinogenicity:** As per 29 CFR 1910.1200 (Hazard Communication), this product contains no carcinogens as listed by the 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.**Other information:** None**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

Nontoxic.

12.2. Persistence and degradability

nonbiodegradable.

12.3. Bioaccumulative potential

not determined

12.4. Mobility in soil

Solid. Insoluble in water.

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.

European List of Wastes code: 07 02 13

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: NON-HAZARDOUS, NON REGULATED
 TDG: NON-HAZARDOUS, NON REGULATED
 US DOT: 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:
 None None

Hazardous Materials Identification System (HMIS)

4 = Severe Hazard
 3 = Serious Hazard
 2 = Moderate Hazard
 1 = Slight Hazard
 0 = Minimal Hazard
 * = See Section 8

HEALTH	0
FLAMMABILITY	0
REACTIVITY	1
Personal Protection	*

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Class I Chemicals:
 None

Class II Chemicals:
 None

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 and acronyms: ACGIH: American Conference of Governmental Industrial Hygienists
 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
 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
 NOEL: No Observed Effect Level
 OSHA: Occupational Health & Safety Administration
 PBT: Persistent, Bioaccumulative and Toxic substance
 PEL: Permissible Exposure Limit
 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 and sources for data: Commission de la santé et de la sécurité du travail (CSST)
 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)

Relevant H-statements: None

Relevant R-phrases: None

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.