



## SAFETY DATA SHEET

in accordance with REACH (1907/2006/EC, as amended by 2015/830/EU) 29 CFR 1910.1200 and WHMIS 2015

Revision date: 13 April 2018

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SDS No. 1127-3

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

#### 1.1. Product identifier

ECS-T

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

ECS-T is a PTFE sheet suitable for services with high pressures and temperatures.

#### 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)  
SDS requests: [www.chesterton.com](http://www.chesterton.com)  
E-mail (SDS questions): [ProductMSDSs@chesterton.com](mailto:ProductMSDSs@chesterton.com)  
E-mail: [customer.service@chesterton.com](mailto:customer.service@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)  
NSW Poisons Information Centre (Australia): 13 11 26

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### 2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / 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, 29 CFR 1910.1200, WHMIS 2015 and GHS.

##### 2.1.2. Australian statement of hazardous nature

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

##### 2.1.3. Additional information

None

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No 1272/2008 [CLP] / 29 CFR 1910.1200 / WHMIS 2015 / GHS

Hazard pictograms: None

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 <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Silica (Quartz)	25-65	14808-60-7 238-878-4	NA	Not classified

<sup>1</sup> 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, GHS, REACH  
• WHMIS 2015  
• Safe Work Australia

**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

**Protection of first-aiders:** No special precautions.

**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. Repeated inhalation of respirable free silica may cause scarring of the lungs with cough and shortness of breath. Silicosis, a delayed lung injury that is a disabling, progressive and sometimes fatal pulmonary fibrosis, may result.

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

Treat symptoms.

**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media**

Water, foam, dry chemical. Do not use carbon dioxide.

**5.2. Special hazards arising from the substance or mixture**

Toxic fumes may be emitted at temperatures above 260°C (500°F). See section 10.6 for additional information.

**5.3. Advice for firefighters**

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

**Flammability Classification:** –

**HAZCHEM Emergency Action Code:** 1 Z

**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**

Dust shall be HEPA vacuumed or wet swept.

**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. Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in 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 <sup>1</sup>		ACGIH TLV <sup>2</sup>		UK WEL <sup>3</sup>		AUSTRALIA ES <sup>4</sup>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Silica (Quartz)	(resp.)	0.05	(resp.)	0.025	(resp.)	0.1	(resp.)	0.1
	(total)	30/(%SiO <sub>2</sub> +2)						

<sup>1</sup> United States Occupational Health & Safety Administration permissible exposure limits

<sup>2</sup> American Conference of Governmental Industrial Hygienists threshold limit values

<sup>3</sup> EH40 Workplace exposure limits, Health & Safety Executive

<sup>4</sup> Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003]

**8.2. Exposure controls****8.2.1. Engineering measures**

No special requirements. If using under extreme heat, use local exhaust. Local exhaust is needed during dust producing operations.

**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**

No special requirements.

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

<b>Physical state</b>	solid	<b>Odour</b>	none
<b>Colour</b>	tan	<b>Odour threshold</b>	not applicable
<b>Initial boiling point</b>	not applicable	<b>Vapour pressure @ 20°C</b>	not applicable
<b>Melting point</b>	327°C (620°F)	<b>% Aromatics by weight</b>	0%
<b>% Volatile (by volume)</b>	not applicable	<b>pH</b>	not applicable
<b>Flash point</b>	not applicable	<b>Relative density</b>	2.07 – 2.13
<b>Method</b>	none	<b>Weight per volume</b>	not applicable
<b>Viscosity</b>	not applicable	<b>Coefficient (water/oil)</b>	not applicable
<b>Autoignition temperature</b>	not applicable	<b>Vapour density (air=1)</b>	not applicable
<b>Decomposition temperature</b>	not determined	<b>Rate of evaporation (ether=1)</b>	not applicable
<b>Upper/lower flammability or explosive limits</b>	not determined	<b>Solubility in water</b>	insoluble
<b>Flammability (solid, gas)</b>	not determined	<b>Oxidising properties</b>	not determined
<b>Explosive properties</b>	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, Carbonyl 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:** Repeated inhalation of respirable free silica may cause scarring of the lungs with cough and shortness of breath. Silicosis, a delayed lung injury that is a disabling, progressive and sometimes fatal pulmonary fibrosis, may result.**Carcinogenicity:** The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have classified inhaled silica as a human carcinogen.**Aspiration hazard:** Not applicable**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**

No known significant effects.

**12.2. Persistence and degradability**

PTFE: nonbiodegradable. Silica (Quartz): inorganic substance, exists in nature.

**12.3. Bioaccumulative potential**

No data available. Not expected to bioaccumulate.

**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

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

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

**SECTION 14: TRANSPORT INFORMATION****14.1. UN number**

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

**14.2. UN proper shipping name**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	NON-HAZARDOUS, NON REGULATED
<b>TDG:</b>	NON-HAZARDOUS, NON REGULATED
<b>US DOT:</b>	NON-HAZARDOUS, NON REGULATED

**14.3. Transport hazard class(es)**

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

**14.4. Packing group**

<b>ADR/RID/ADN/IMDG/ICAO:</b>	NOT APPLICABLE
<b>TDG:</b>	NOT APPLICABLE
<b>US DOT:</b>	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:**

None

**313 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:** 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  
cATpE: Converted Acute Toxicity point Estimate  
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  
NOEC: No Observed Effect Concentration  
NOEL: No Observed Effect Level  
OECD: Organization for Economic Co-operation and Development  
PBT: Persistent, Bioaccumulative and Toxic substance  
(Q)SAR: Quantitative Structure-Activity Relationship  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)  
REL: Recommended Exposure Limit  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
STOT RE: Specific Target Organ Toxicity, Repeated Exposure  
STOT SE: Specific Target Organ Toxicity, Single Exposure  
TDG: Transportation of Dangerous Goods (Canada)  
TWA: Time Weighted Average  
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](http://www.wikipedia.org).

**Key literature references and sources for data:** Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)  
Chemical Classification and Information Database (CCID)  
European Chemicals Agency (ECHA) - Information on Chemicals  
Hazardous Chemical Information System (HCIS)  
National Institute of Technology and Evaluation (NITE)  
Swedish Chemicals Agency (KEMI)  
U.S. National Library of Medicine Toxicology Data Network (TOXNET)

### Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

Classification	Classification procedure
Not applicable	Not applicable

**Relevant H-statements:** None

**Hazard pictogram names:** None

**Changes to the SDS in this revision:** Sections 1.3, 1.4, 2.1, 2.2, 3, 4.1, 5.1, 5.2, 5.3, 7.1, 7.3, 8.1, 8.2.1, 9.1, 10.6, 11, 12.1, 12.3, 13, 15.1.2, 16.

**Revision date:** 13 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.