



## SAFETY DATA SHEET

in accordance with 1907/2006/EC (REACH, as amended by 453/2010/EC) and 29 CFR 1910.1200

**Revision date:** 18 March 2015

**Initial date of issue:** 6 July 2007

**SDS No.** 256-10

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

#### 1.1. Product identifier

3500 Valvelon®

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

Polytetrafluoroethylene (PTFE) For use against liquids and gases from -240°C (-400°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)  
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:

#### 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] / 29 CFR 1910.1200 / 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 and GHS.

##### 2.1.2. Classification according to Directives 1999/45/EC and 1975/324/EEC

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. Canadian WHMIS classification

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] / 29 CFR 1910.1200 / 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 <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	Classification (CLP/GHS)	Classification (67/548/EEC)
None					

Indications of danger acc. to 67/548/EEC: None

<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, 67/548/EEC, 99/45/EC, REACH  
\* Controlled Products Regulations  
\* 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.

**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:** 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**

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)**

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>

None

<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.

**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**

<b>Physical state</b>	solid	<b>Odour</b>	None
<b>Colour</b>	white	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	not applicable	<b>Vapour pressure @ 20°C</b>	not applicable
<b>Melting point</b>	342°C (648°F)	<b>% Aromatics by weight</b>	not applicable
<b>% Volatile (by volume)</b>	not applicable	<b>pH</b>	not applicable
<b>Flash point</b>	not applicable	<b>Relative density</b>	1.5 – 2.0 (specific gravity)
<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 applicable	<b>Solubility in water</b>	insoluble
<b>Flammability (solid, gas)</b>	not applicable	<b>Oxidising properties</b>	not applicable
<b>Explosive properties</b>	not applicable		

**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**

Acids, bases and strong oxidizers like liquid Chlorine and concentrated Oxygen.

**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.**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**

Nontoxic, inert material.

**12.2. Persistence and degradability**

Material is chemically unreactive and nonbiodegradable.

**12.3. Bioaccumulative potential**

Does not 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 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: 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:** None  
**313 Chemicals:** None

**Hazardous Materials Identification System (HMIS)**

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

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>1</b>
<b>Personal Protection</b>	<b>*</b>

**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  
 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  
 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)  
 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)  
 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 de la santé et de la sécurité du travail (CSST)  
 Chemical Classification and Information Database (CCID)  
 European Chemicals Agency (ECHA) - Information on Chemicals  
 Hazardous Substances Information System (HSIS)  
 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:**

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 2.1, 3, 4.2, 9.1, 11, 16.

**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.