



## TSI INCORPORATED

500 Cardigan Road, Shoreview, MN 55126 USA  
tel 651 490 2811 + toll free 800 874 2811 + fax 651 490 3824 + web [www.tsi.com](http://www.tsi.com)

# Montreal Protocol – EPA Clean Air Act (USA) Declaration – Substances that Deplete the Ozone Layer

Dear TSI Incorporated Business Partner,

TSI Incorporated (“TSI”), its affiliates and divisions announce our commitment to comply with The Montreal Protocol on Substances that Deplete the Ozone Layer and all applicable laws and safety regulations related thereto including, but not limited to, the United States Clean Air Act Regulation (42 U.S.C. §7401 et seq.). The amendments in the Clean Air Act set in motion the phase out of a list of chemicals we know of as; CFCs, Halons’, HCFCs, methyl bromide, and other ozone-depleting substances (ODS). See Appendices A & B for these substances.

In order to provide customers with sufficient information on known Ozone-Depleting Substances (ODS), TSI directs you to the EPA website for more information on the topic: <https://www.epa.gov/ozone-layer-protection/international-actions-montreal-protocol-substances-deplete-ozone-layer>

TSI does not utilize any of the banned substances listed in Appendix A and Appendix B in the manufacture or operation of its products. TSI also works within local regulations and guidelines established by state agencies where our manufacturing facilities are located, e.g., Minnesota Pollution Control Agency and the Illinois Pollution Control Board.

The information in this declaration is based on TSI’s commercially reasonable efforts to identify information from supplier declarations, engineering evaluation, and assessments; the information is correct to TSI’s knowledge.

TSI continues to actively evaluate our supply chain and operations, reflecting any changes as required for continued safe and compliant use of affected products or whenever amendments occur to the candidate list. TSI is committed to compliance with government regulations and industry standards for the protection of the environment as well as continually striving to meet the needs of our customers.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Snell', written in a cursive style.

Ryan Snell  
Vice President – Operations  
25-October-2017



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# Appendix A

### Class I ODS

- Class I ODS are divided into eight groups.
- Class I ODS listed in Groups 1 through 5 are identified in Title VI of the Clean Air Act.
- Class I ODS listed in Groups 6 and 7, methyl bromide and hydrobromofluorocarbons, are identified in EPA's Accelerated Phaseout final rule.
- Class I ODS listed in Group 8, chlorobromomethane, is identified in EPA's Chlorobromomethane Phaseout final rule.

### **Chemical Name**

#### **Group I**

CFC-11 (CCl<sub>3</sub>F) Trichlorofluoromethane  
CFC-12 (CCl<sub>2</sub>F<sub>2</sub>) Dichlorodifluoromethane  
CFC-113 (C<sub>2</sub>F<sub>3</sub>Cl<sub>3</sub>) 1,1,2-Trichlorotrifluoroethane  
CFC-114 (C<sub>2</sub>F<sub>4</sub>Cl<sub>2</sub>) Dichlorotetrafluoroethane  
CFC-115 (C<sub>2</sub>F<sub>5</sub>Cl) Monochloropentafluoroethane

#### **Group II**

Halon 1211 (CF<sub>2</sub>ClBr) Bromochlorodifluoromethane  
Halon 1301 (CF<sub>3</sub>Br) Bromotrifluoromethane  
Halon 2402 (C<sub>2</sub>F<sub>4</sub>Br<sub>2</sub>) Dibromotetrafluoroethane

#### **Group III**

CFC-13 (CF<sub>3</sub>Cl) Chlorotrifluoromethane  
CFC-111 (C<sub>2</sub>FCl<sub>5</sub>) Pentachlorofluoroethane  
CFC-112 (C<sub>2</sub>F<sub>2</sub>Cl<sub>4</sub>) Tetrachlorodifluoroethane  
CFC-211 (C<sub>3</sub>FCl<sub>7</sub>) Heptachlorofluoropropane  
CFC-212 (C<sub>3</sub>F<sub>2</sub>Cl<sub>6</sub>) Hexachlorodifluoropropane  
CFC-213 (C<sub>3</sub>F<sub>3</sub>Cl<sub>5</sub>) Pentachlorotrifluoropropane  
CFC-214 (C<sub>3</sub>F<sub>4</sub>Cl<sub>4</sub>) Tetrachlorotetrafluoropropane  
CFC-215 (C<sub>3</sub>F<sub>5</sub>Cl<sub>3</sub>) Trichloropentafluoropropane  
CFC-216 (C<sub>3</sub>F<sub>6</sub>Cl<sub>2</sub>) Dichlorohexafluoropropane  
CFC-217 (C<sub>3</sub>F<sub>7</sub>Cl) Chloroheptafluoropropane

#### **Group IV**

CCl<sub>4</sub> Carbon tetrachloride

#### **Group V**

Methyl Chloroform (C<sub>2</sub>H<sub>3</sub>Cl<sub>3</sub>) 1,1,1-trichloroethane

#### **Group VI**

Methyl Bromide (CH<sub>3</sub>Br)



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### **Chemical Name**

#### **Group VII**

CHBr<sub>2</sub>

HBFC-12B1(CHF<sub>2</sub>Br)

CH<sub>2</sub>FBr

C<sub>2</sub>H<sub>2</sub>F<sub>4</sub>

C<sub>2</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>3</sub>

C<sub>2</sub>H<sub>2</sub>F<sub>3</sub>Br<sub>2</sub>

C<sub>2</sub>H<sub>2</sub>F<sub>4</sub>Br

C<sub>2</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>3</sub>

C<sub>2</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>2</sub>

C<sub>2</sub>H<sub>2</sub>F<sub>3</sub>Br

C<sub>2</sub>H<sub>3</sub>F<sub>2</sub>Br<sub>2</sub>

C<sub>2</sub>H<sub>3</sub>F<sub>2</sub>Br

C<sub>2</sub>H<sub>4</sub>FBr

C<sub>3</sub>H<sub>2</sub>F<sub>6</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>5</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>3</sub>Br<sub>4</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>4</sub>Br<sub>3</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>5</sub>Br<sub>2</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>6</sub>Br

C<sub>3</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>5</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>2</sub>Br<sub>4</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>3</sub>Br<sub>3</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>4</sub>Br<sub>2</sub>

C<sub>3</sub>H<sub>2</sub>F<sub>5</sub>Br

C<sub>3</sub>H<sub>3</sub>F<sub>2</sub>Br<sub>4</sub>

C<sub>3</sub>H<sub>3</sub>F<sub>2</sub>Br<sub>3</sub>

C<sub>3</sub>H<sub>3</sub>F<sub>3</sub>Br<sub>2</sub>

C<sub>3</sub>H<sub>3</sub>F<sub>4</sub>Br

C<sub>3</sub>H<sub>4</sub>F<sub>2</sub>Br<sub>3</sub>

C<sub>3</sub>H<sub>4</sub>F<sub>2</sub>Br<sub>2</sub>

C<sub>3</sub>H<sub>4</sub>F<sub>3</sub>Br

C<sub>3</sub>H<sub>5</sub>F<sub>2</sub>Br<sub>2</sub>

C<sub>3</sub>H<sub>5</sub>F<sub>2</sub>Br

C<sub>3</sub>H<sub>6</sub>FBr

#### **Group VIII**

CH<sub>2</sub>BrCl Chlorobromomethane



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### Appendix B

#### Class II ODS

##### **Chemical Name**

HCFC-21 (CHFCl<sub>2</sub>) Dichlorofluoromethane  
HCFC-22 (CHF<sub>2</sub>Cl) Monochlorodifluoromethane  
HCFC-31 (CH<sub>2</sub>FCI) Monochlorofluoromethane  
HCFC-121 (C<sub>2</sub>HFCl<sub>4</sub>) Tetrachlorofluoroethane  
HCFC-122 (C<sub>2</sub>HF<sub>2</sub>Cl<sub>3</sub>) Trichlorodifluoroethane  
HCFC-123 (C<sub>2</sub>HF<sub>3</sub>Cl<sub>2</sub>) Dichlorotrifluoroethane  
HCFC-124 (C<sub>2</sub>HF<sub>4</sub>Cl) Monochlorotetrafluoroethane  
HCFC-131 (C<sub>2</sub>H<sub>2</sub>FCI<sub>3</sub>) Trichlorofluoroethane  
HCFC-132b (C<sub>2</sub>H<sub>2</sub>F<sub>2</sub>Cl<sub>2</sub>) Dichlorodifluoroethane  
HCFC-133a (C<sub>2</sub>H<sub>2</sub>F<sub>3</sub>Cl) Monochlorotrifluoroethane  
HCFC-141b (C<sub>2</sub>H<sub>3</sub>FCI<sub>2</sub>) Dichlorofluoroethane  
HCFC-142b (C<sub>2</sub>H<sub>3</sub>F<sub>2</sub>Cl) Monochlorodifluoroethane  
HCFC-221 (C<sub>3</sub>HFCl<sub>6</sub>) Hexachlorofluoropropane  
HCFC-222 (C<sub>3</sub>HF<sub>2</sub>Cl<sub>5</sub>) Pentachlorodifluoropropane  
HCFC-223 (C<sub>3</sub>HF<sub>3</sub>Cl<sub>4</sub>) Tetrachlorotrifluoropropane  
HCFC-224 (C<sub>3</sub>HF<sub>4</sub>Cl<sub>3</sub>) Trichlorotetrafluoropropane  
HCFC-225ca (C<sub>3</sub>HF<sub>5</sub>Cl<sub>2</sub>) Dichloropentafluoropropane  
HCFC-225cb (C<sub>3</sub>HF<sub>5</sub>Cl<sub>2</sub>) Dichloropentafluoropropane  
HCFC-226 (C<sub>3</sub>HF<sub>6</sub>Cl) Monochlorohexafluoropropane  
HCFC-231 (C<sub>3</sub>H<sub>2</sub>FCI<sub>5</sub>) Pentachlorofluoropropane  
HCFC-232 (C<sub>3</sub>H<sub>2</sub>F<sub>2</sub>Cl<sub>4</sub>) Tetrachlorodifluoropropane  
HCFC-233 (C<sub>3</sub>H<sub>2</sub>F<sub>3</sub>Cl<sub>3</sub>) Trichlorotrifluoropropane  
HCFC-234 (C<sub>3</sub>H<sub>2</sub>F<sub>4</sub>Cl<sub>2</sub>) Dichlorotetrafluoropropane  
HCFC-235 (C<sub>3</sub>H<sub>2</sub>F<sub>5</sub>Cl) Monochloropentafluoropropane  
HCFC-241 (C<sub>3</sub>H<sub>3</sub>FCI<sub>4</sub>) Tetrachlorofluoropropane  
HCFC-242 (C<sub>3</sub>H<sub>3</sub>F<sub>2</sub>Cl<sub>3</sub>) Trichlorodifluoropropane  
HCFC-243 (C<sub>3</sub>H<sub>3</sub>F<sub>3</sub>Cl<sub>2</sub>) Dichlorotrifluoropropane  
HCFC-244 (C<sub>3</sub>H<sub>3</sub>F<sub>4</sub>Cl) Monochlorotetrafluoropropane  
HCFC-251 (C<sub>3</sub>H<sub>4</sub>FCI<sub>3</sub>) Monochlorotetrafluoropropane  
HCFC-252 (C<sub>3</sub>H<sub>4</sub>F<sub>2</sub>Cl<sub>2</sub>) Dichlorodifluoropropane  
HCFC-253 (C<sub>3</sub>H<sub>4</sub>F<sub>3</sub>Cl) Monochlorotrifluoropropane  
HCFC-261 (C<sub>3</sub>H<sub>5</sub>FCI<sub>2</sub>) Dichlorofluoropropane  
HCFC-262 (C<sub>3</sub>H<sub>5</sub>F<sub>2</sub>Cl) Monochlorodifluoropropane  
HCFC-271 (C<sub>3</sub>H<sub>6</sub>FCI) Monochlorofluoropropane