the facts in a statement of reasonable cause alleged in support of nonassessment or a complete or partial waiver of the penalty, shall notify the administrator, in writing, of its determination on the statement of reasonable cause and its determination whether to waive the penalty in whole or in part, and/or assess a penalty. If it is the determination of the Department to assess a penalty, the notice shall indicate the amount of the penalty assessment, not to exceed the amount described in paragraph (c) of this section. This notice is a “pleading” for purposes of §2570.131(m) of this chapter.

(2) Except as provided in paragraph (h) of this section, a notice issued pursuant to paragraph (g)(1) of this section, indicating the Department’s determination to assess a penalty, shall become a final order, within the meaning of §2570.131(g) of this chapter, forty-five (45) days from the date of service of the notice.

(b) Administrative hearing. A notice issued pursuant to paragraph (g) of this section will not become a final order, within the meaning of §2570.131(g) of this chapter, if, within thirty (30) days from the date of the service of the notice, the administrator or a representative thereof files a request for a hearing under §§2570.130 through 2570.141 of this chapter, and files an answer to the notice. The request for hearing and answer must be filed in accordance with §2570.132 of this chapter and §18.4 of this title. The answer opposing the proposed sanction shall be in writing, and supported by reference to specific circumstances or facts surrounding the notice of determination issued pursuant to paragraph (g) of this section.

(i) Service of notices and filing of statements. (1) Service of a notice for purposes of paragraphs (c) and (g) of this section shall be made:

(1) By delivering a copy to the administrator or representative thereof; or

(ii) By leaving a copy at the principal office, place of business, or residence of the administrator or representative thereof; or

(iii) By mailing a copy to the last known address of the administrator or representative thereof.

(2) If service is accomplished by certified mail, service is complete upon mailing. If service is by regular mail, service is complete upon receipt by the addressee. When service of a notice under paragraph (c) or (g) of this section is by certified mail, five days shall be added to the time allowed by these rules for the filing of a statement or a request for hearing and answer, as applicable.

(3) For purposes of this section, a statement of reasonable cause shall be considered filed:

(i) Upon mailing, if accomplished using United States Postal Service certified mail or express mail;

(ii) Upon receipt by the delivery service, if accomplished using a “designated private delivery service” within the meaning of 26 U.S.C. 7502(f);

(iii) Upon transmission, if transmitted in a manner specified in the notice of intent to assess a penalty as a method of transmission to be accorded such special treatment; or

(iv) In the case of any other method of filing, upon receipt by the Department at the address provided in the notice of intent to assess a penalty.

(j) Liability. (1) If more than one person is responsible as administrator for the failure to furnish the items required under section 101(f), (k), or (l), or section 514(o)(3) of the Act, as applicable, all such persons shall be jointly and severally liable for such failure. For purposes of paragraph (a)(1)(iii) of this section, the term “administrator” shall include plan sponsor (within the meaning of section 3(16)(B) of the Act).

(2) Any person, or persons under paragraph (j)(1) of this section, against whom a civil penalty has been assessed under section 502(c)(4) of the Act, pursuant to a final order within the meaning of §2570.131(g) of this chapter shall be personally liable for the payment of such penalty.

(k) Cross-references. (1) The procedural rules in §§2570.130 through 2570.141 of this chapter apply to administrative hearings under section 502(c)(4) of the Act.

(2) When applying procedural rules in §§2570.130 through 2570.140:

(i) Wherever the term “502(c)(7)” appears, such term shall mean “502(c)(4)”; and

(ii) Reference to §2560.502c–7(g) in 2570.131(c) shall be construed as reference to §2560.502c–4(g) of this chapter;

(iii) Reference to §2560.502c–7(e) in §2570.131(g) shall be construed as reference to §2560.502c–4(e) of this chapter;

(iv) Reference to §2560.502c–7(g) in §2570.131(m) shall be construed as reference to §2560.502c–4(g); and

(v) Reference to §§2560.502c–7(g) and 2560.502c–7(h) in §2570.134 shall be construed as reference to §§2560.502c–4(g) and 2560.502c–4(h), respectively.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 82


RIN 2060–AG12

Protection of Stratospheric Ozone: Notice 23 for Significant New Alternatives Policy Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Determination of Acceptability.

SUMMARY: This Determination of Acceptability expands the list of acceptable substitutes for ozone-depleting substances under the U.S. Environmental Protection Agency’s (EPA) Significant New Alternatives Policy (SNAP) program. The determinations concern new substitutes for use in the refrigeration and air conditioning, fire suppression and explosion protection, and foam blowing sectors.


FOR FURTHER INFORMATION CONTACT: Margaret Sheppard by telephone at (202) 343–9163, by facsimile at (202) 343–2338, by e-mail at sheppard.margaret@epa.gov, or by mail at U.S. Environmental Protection...
You can find submissions to EPA for the use of the substitutes listed in this document and other materials supporting the decisions in this action in docket EPA–HQ–OAR–2003–0118 at http://www.regulations.gov.

A. Refrigeration and Air Conditioning

1. R–407A

EPA’s decision: R–407A [R–32/125/134a (20.0/40.0/ 40.0)] is acceptable for use in new and retrofit equipment as a substitute for hydrochlorofluorocarbon (HCFC)–22 and HCFC blends including, but not limited to, R–401A, R–401B, R–402A, and R–402B in:

• Retail food refrigeration.
• Cold storage warehouses.
• Refrigerated transport.
• Residential and light commercial air conditioning and heat pumps.

R–407A is a blend of 40.0% by weight HFC–125 (pentafluoroethane, CAS ID #354–33–6), 40.0% by weight HFC–134a (1,1,1,2-tetrafluoroethane, CAS ID #611–97–2), and 20.0% by weight HFC–32 (difluoromethane, CAS ID #75–10–5). This blend is also known by the trade names KLEA 60, KLEA 407A, and others. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0167 at www.regulations.gov.

Environmental information: The ozone depletion potential (ODP) of R–407A is zero. The global warming potentials (GWPs) of HFC–125, HFC–134a, and HFC–32 are 3500, 1430, and 675, respectively (relative to carbon dioxide), using a 100-year time horizon (The International Panel on Climate Change [IPCC], Fourth Assessment Report, Climate Change 2007: The Physical Science Basis). The atmospheric lifetimes of these constituents are 29, 14, and 4.9 years, respectively.

The contribution of this blend to greenhouse gas emissions will be reduced given the venting prohibition under section 608(c)(2) of the Clean Air Act. This section and EPA’s implementing regulations codified at 40 CFR part 82, subpart F prohibit the intentional venting or release of substitutes for class I or class II ODSs used during the repair, maintenance, service or disposal of refrigeration and air conditioning equipment (i.e., appliances).

HFC–125, HFC–134a, and HFC–32 are excluded from the definition of volatile organic compound (VOC) under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State Implementation Plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information:

While one of the blend components, HFC–32, is flammable, the blend as formulated and under worst case fractionated formulation scenarios is not flammable.

Toxicity and exposure data:

Potential health effects of this substitute at lower concentrations include dizziness and loss of concentration. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, it may cause central nervous system depression, irregular heart beat, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants.

To protect against these potential health risks, HFC–125, HFC–134a, and HFC–32 have 8 hour/day, 40 hour/week workplace environmental exposure limits (WEELs) of 1000 ppm established by the American Industrial Hygiene Association (AIHA). EPA recommends that users follow all requirements and recommendations specified in the Material Safety Data Sheet (MSDS) for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. We also recommend that users of R–407A adhere to the AIHA’s WEELs. EPA anticipates that users will be able to meet the WEELs and will be able to address potential health risks by following requirements and recommendations in the MSDSs and other safety precautions common in the refrigeration and air conditioning industry.

Comparison to other refrigerants:

R–407A is not an ozone depleter in contrast to the ozone-depleting substances which it replaces. R–407A is comparable to other substitutes for HCFC–22 and its blends in its lack of risk for ozone depletion. (HCFC–22 has an ODP of 0.05 and a GWP of 1810, according to the Scientific Assessment of Ozone Depletion: 2006 prepared by the World Meteorological Organization (WMO, 2006).) R–407A has a GWP of about 2100, comparable to or lower than that of other substitutes for HCFC–22. For example, the GWP of R–407C is about 3350, the GWP of R–410A is about 2100, and the GWP of R–507 is about 4000. Flammability and toxicity risks are low, as discussed above. Thus, we find that R–407A is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end uses listed above.
2. KDD6

**EPA's decision:**
KDD6 is acceptable for use in new and retrofit equipment as a substitute for CFC–12 in:
- Chillers (screw, reciprocating).
- Industrial process refrigeration.
- Industrial process air conditioning.
- Retail food refrigeration.
- Cold storage warehouses.
- Refrigerated transport.
- Commercial ice machines.
- Ice skating rinks.
- Household refrigerators and freezers.
- Vending machines.
- Water coolers.
- Residential dehumidifiers.
- Residential and light commercial air conditioning and heat pumps.
- Non-mechanical heat transfer.


**Environmental information:**
The ODP of KDD6 is zero. The average 100-year integrated GWP of this blend is between 2100 and 3350, in the range of the GWP s for R–407C and R–410A, two other commonly used substitute refrigerants.

The contribution of this blend to greenhouse gas emissions will be reduced given the venting prohibition under section 608(c)(2) of the Clean Air Act. This section and EPA's implementing regulations codified at 40 CFR part 82, subpart F prohibit the intentional venting or release of substitutes for class I or class II ODSs used during the repair, maintenance, service or disposal of refrigeration and air conditioning equipment (i.e., appliances).

Some components of the blend are VOCs under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the national ambient air quality standards.

**Flammability information:**
While at least one of the blend components is flammable, the blend as formulated and under worst-case fractionated formulation scenarios is not flammable.

**Toxicity and exposure data:**
Potential health effects of this substitute at lower concentrations include dizziness and loss of concentration. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, it may cause central nervous system depression, irregular heart beat, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants.

To protect against these potential health risks, the manufacturer recommends an 8-hr TWA workplace exposure limit for the blend of 994 ppm. A number of components of the blend have workplace exposure limits of 1000 ppm set by the manufacturer, the AIHA, or the ACGIH. EPA anticipates that users will be able to meet the manufacturer's recommended workplace exposure limit and will be able to address potential health risks by following requirements and recommendations in the MSDS and other safety precautions common in the refrigeration and air conditioning industry.

**Comparison to other refrigerants:**
KDD6 is not an ozone depleter; thus, it poses a lower risk for ozone depletion than the ODS it replaces. KDD6 has comparable or lower risk for ozone depletion than other substitutes for CFC–12. (CFC–12 has an ODP of 1.0 and a GWP of 10,890 (WMO, 2006).) KDD6 has a GWP comparable to or lower than that of other substitutes for CFC–12. For example, the GWP of R–407C is about 3350, the GWP of R–410A is about 2100, and the GWP of R–507 is about 4000.

Flammability and toxicity risks are low, as discussed above. We find that KDD6 is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end uses listed above.

3. R–427A

**EPA's decisions:**
R–427A [R–32/125/143a/134a (15.0/25.0/10.0/50.0)] is acceptable for use in retrofit equipment as a substitute for HCFC–22 in:
- Retail food refrigeration.
- Industrial process air conditioning.
- Reciprocating chillers.
- Screw chillers.
- Household refrigerators and freezers.
- Residential and light commercial air conditioning and heat pumps.
- Motor vehicle air conditioning (buses and passenger trains only).

R–427A is a blend of 25.0% by weight HCFC–125 (pentfluoroethane, CAS ID #354–33–6), 50% by weight HCFC–134a (1,1,1,2-tetrafluoroethane, CAS ID #11–97–2), 10.0% by weight HCFC–143a (1,1,1-trifluoroethane, CAS ID #420–46–2), and 15.0% HFC–32 (difluoromethane, CAS ID #75–10–5). A common trade name for this refrigerant is Forane 427A. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0177 at www.regulations.gov.

**Environmental information:**
The ODP of R–427A is zero. The GWPs of HFC–125, HFC–134a, HFC–143a, and HFC–32 are 3500, 1430, 4470, and 675, respectively. The atmospheric lifetimes of these constituents are 29, 14, 52, and 4.9 years, respectively.

The contribution of this blend to greenhouse gas emissions will be reduced given the venting prohibition under section 608(c)(2) of the Clean Air Act. This section and EPA’s implementing regulations codified at 40 CFR part 82, subpart F prohibit the intentional venting or release of substitutes for class I or class II ODSs used during the repair, maintenance, service or disposal of refrigeration and air conditioning equipment (i.e., appliances).

HFC–32, HFC–125, HFC–134a, and HFC–143a are exempt from the definition of VOC under Clean Air Act regulations concerning the development of SIPs to attain and maintain the national ambient air quality standards. 40 CFR 51.100(s).

**Flammability information:**
While two components of the blend, HFC–32 and HFC–143a, are flammable, the blend as formulated and under worst-case fractionated formulation scenarios is not flammable.

**Toxicity and exposure data:**
Potential health effects of this substitute at lower concentrations include dizziness and loss of concentration. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, it may cause central nervous system depression, irregular heart beat, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants.

To protect against these potential health risks, the manufacturer recommends the following requirements and recommendations specified in the MSDS for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R–427A adhere to the AIHA's WEELs. EPA anticipates that users will be able to meet the WEELs and will be able to address potential health risks by following requirements and recommendations in the MSDSs and other safety precautions common in the
refrigeration and air conditioning industry.

Comparison to other refrigerants: R–427A is not an ozone depleter in contrast to HCFC–22, the ozone depleting substance which it replaces. R–427A is comparable to other substitutes for HCFC–22 in its lack of risk for ozone depletion. (HCFC–22 has an ODP of 0.05 and a GWP of 1810 (WMO, 2006).) R–427A has a GWP of about 2150, comparable to or lower than that of other substitutes for HCFC–22. For example, the GWP of R–407C is about 3350, the GWP of R–410A is about 2100, and the GWP of R–507 is about 4000. The flammability and toxicity risks are low, as discussed above. Thus, we find that R–427A is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end uses listed above.

4. R–424A (RS–44)

EPA’s decision:

R–424A [R–125/134a/600a/600/601a (50.5/47.0/0.9/1.0/0.6)] is acceptable for use in new and retrofit equipment as a substitute for HCFC–22 in motor vehicle air conditioning (buses and passenger trains only).

R–424A is a blend of 50.5% by weight HFC–125 (pentafluoroethane, CAS ID #354–33–6), 47.0% by weight HFC–134a (1,1,1,2-tetrafluoroethane, CAS ID #811–97–2), 0.9% by weight R–600a (isobutane, 2-methyl propane, CAS ID #75–28–5), 1.0% by weight R–600a (n-butane, CAS ID #106–97–8), and 0.6% by weight R–601a (isopentane, 2-methylbutane, CAS ID #78–78–4). A common trade name for this refrigerant is RS–44. This formulation for RS–44 is different from the first formulation that EPA found acceptable in several refrigerant end uses (August 21, 2003; 68 FR 50533). EPA previously found the current formulation of RS–44, also designated as R–424A, acceptable as a substitute for R–22 in a number of other refrigeration and air conditioning end uses (September 28, 2006; 71 FR 56884).


Environmental information:
The ODP of R–424A is zero. The GWPs of HFC–125 and HFC–134a are 3500 and 1430 and their atmospheric lifetimes are 29 and 14 years, respectively. The GWPs of isobutane, n-butane, and isopentane are not provided in the IPCC’s Fourth Assessment Report, but are generally believed to be low (less than 10). Their atmospheric lifetimes are less than one year (see Table 2.8 in Safeguarding the Ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons, prepared by the IPCC and the Technology and Economic Assessment Panel of the Montreal Protocol).

The contribution of this blend to greenhouse gas emissions will be reduced given the venting prohibition under section 608(c)(2) of the Clean Air Act. This section and EPA’s implementing regulations codified at 40 CFR part 82, subpart F prohibit the intentional venting or release of substitutes for class I or class II ODSs used during the repair, maintenance, service or disposal of refrigeration and air conditioning equipment (i.e., appliances).

Isobutane, n-butane, and isopentane are VOCs under Clean Air Act regulations (see 40 CFR 51.100(s)) concerning the development of SIPs to attain and maintain the national ambient air quality standards. HFC–125 and HFC–134a are excluded from the definition of VOC under these regulations.

Flammability information:

While three components of the blend are flammable, the blend as formulated, and under worst-case fractionated formulation scenarios, is not flammable.

Toxicity and exposure data:
Potential health effects of this substitute at lower concentrations include dizziness and loss of consciousness. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, it may cause central nervous system depression, irregular heart beat, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space. These potential health effects are common to many refrigerants.

To protect against these potential health risks, HFC–125 and HFC–134a have 8 hour/day, 40 hour/week WEELs of 1000 ppm established by the AIHA. Isobutane, n-butane and isopentane have 8 hour/day, 40 hour/week threshold limit values (TLVs) established by the American Conference of Governmental Industrial Hygienists (ACGIH) of 1000 ppm, 800 ppm and 600 ppm, respectively. EPA recommends that users follow all requirements and recommendations specified in the MSDS for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R–424A adhere to the AIHA’s WEELs and the ACGIH’s TLVs. EPA anticipates that users will be able to meet the WEELs and TLVs and will be able to address potential health risks by following requirements and recommendations in the MSDSs and other safety precautions common in the refrigeration and air conditioning industry.

Comparison to other refrigerants:

R–424A is not an ozone depleter in contrast to HCFC–22 which it replaces. It is comparable to other substitutes for HCFC–22 in its lack of risk for ozone depletion. (HCFC–22 has an ODP of 0.05 and a GWP of 1810 (WMO, 2006).) R–424A has a GWP of about 2400, lower than that of some substitutes for HCFC–22 but higher than others. For example, the GWP of R–407C is about 3350, the GWP of R–410A is about 2100, and the GWP of R–507 is about 4000. Flammability and toxicity risks are low, as discussed above. Thus, we find that R–424A is acceptable because it does not pose a greater overall risk to public health and the environment in the end use listed above.

5. R–434A (RS–45)

EPA’s decision:

R–434A [R–125/134a/134a/600a (63.2/18.0/16.0/2.8)] is acceptable for use in new and retrofit equipment as a substitute for HCFC–22 in motor vehicle air conditioning (buses and passenger trains only).

R–434A is a blend of 18.0% by weight HFC–143a (1,1,1-trifluoroethane, CAS ID #420–46–2), 63.2% by weight HFC–125 (pentafluoroethane, CAS ID #354–33–6), 16.0% by weight HFC–134a (1,1,1,2-tetrafluoroethane, CAS ID #811–97–2), and 2.8% by weight R–600a (isobutane, 2-methyl propane, CAS ID #75–28–5). A common trade name for this refrigerant is RS–45. Under that trade name, EPA previously found R–434A acceptable as a substitute for R–22 in a number of other refrigeration and air conditioning end uses (October 4, 2007; 72 FR 56628). You may find additional information under Docket item EPA–HQ–OAR–2003–0118–0162 at www.regulations.gov.

Environmental information:
The ODP of R–434A is zero. The GWPs of HFC–143a, HFC–125, HFC–134a, and isobutane are 4470, 3500, 1430, and less than 10, respectively. The atmospheric lifetimes of these constituents are 52, 29, and 14 years, and less than one year, respectively.

The contribution of this blend to greenhouse gas emissions will be reduced given the venting prohibition under section 608(c)(2) of the Clean Air Act. This section and EPA’s implementing regulations codified at 40 CFR part 82, subpart F prohibit the intentional venting or release of substitutes for class I or class II ODSs used during the repair, maintenance,
service or disposal of refrigeration and air conditioning equipment (i.e., appliances).
HFC–143a, HFC–125 and HFC–134a are excluded from the definition of VOC under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the national ambient air quality standards. Isobutane is a VOC under Clean Air Act regulations.

Flammability information:
While two of the blend components, isobutane and HFC–143a, are flammable, the blend as formulated and under worst case fractionated formulation scenarios is not flammable.

Toxicity and exposure data:
Potential health effects of this substitute at lower concentrations include dizziness and loss of concentration. The substitute may also irritate the skin or eyes or cause frostbite. At sufficiently high concentrations, it may cause central nervous system depression, irregular heart beat, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space.
These potential health effects are common to many refrigerants.

To protect against these potential health risks, HFC–143a has an 8 hour/day, 40 hour/week recommended acceptable exposure limit for the workplace from the manufacturer of 1000 ppm. HFC–125 and HFC–134a have 8 hour/day, 40 hour/week WEELs of 1000 ppm established by the AIHA. Isobutane has an 8 hour/day, 40 hour/week TLV established by the ACGIH of 1000 ppm. EPA recommends that users follow all requirements and recommendations specified in the Material Safety Data Sheet (MSDS) for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R–434A adhere to the AIHA’s WEELs and the ACGIH’s TLV. EPA anticipates that users will be able to meet the WEELs and the TLV and will be able to address potential health risks by following requirements and recommendations in the MSDS and other safety precautions common in the refrigeration and air conditioning industry.

Comparison to other refrigerants:
R–434A is not an ozone depleter in contrast to HCFC–22, the ozone-depleting substance which it replaces. R–434A is comparable to other substitutes for HCFC–22 in its lack of risk for ozone depletion. (HCFC–22 has an ODP of 0.05 and a GWP of 1810 (WMO, 2006).) R–434A has a GWP of about 3200, lower than that of some substitutes for HCFC–22, but higher than others. For example, the GWP of R–407C is about 3350, the GWP of R–410A is about 2100, and the GWP of R–507 is about 4000. Flammability and toxicity risks are low, as discussed above. Thus, we find that R–434A is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the ceiling end use listed above.

B. Fire Suppression and Explosion Protection

1. Victaulic Vortex System

EPA’s decision:
The Victaulic Vortex System is acceptable as a halon 1301 substitute for total flooding uses in both occupied and unoccupied areas.
The Victaulic Vortex System is a fire suppression system that uses fine water vapor droplets and nitrogen gas (N₂, CAS ID #7727–37–9). It is designed for use with Class A and Class B fires. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0172 at www.regulations.gov.

Environmental information:
The ozone depletion potential (ODP) and the global warming potential (GWP) of each of the constituents of the Victaulic Vortex System is zero.
The Victaulic Vortex System does not contain volatile organic compounds (VOC) as defined under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information:
The Victaulic Vortex System is non-flammable.

Toxicity and exposure data:
The potential health risks of the Victaulic Vortex System come from N₂, an inert gas that at sufficiently high levels can cause asphyxiation. The Victaulic Vortex System can be designed to ensure that the oxygen concentration in any protected space will not fall below 12 percent over the 5 minute discharge period, consistent with the health criteria in National Fire Protection Agency (NFPA) Standard 2001 for Clean Agent Fire Extinguishing Systems. EPA recommends that use of this system should be in accordance with the safe exposure guidelines for inert gas systems in the latest edition of NFPA 2001, specifically the requirements for residual oxygen levels, and that use should be in accordance with the relevant operational requirements in NFPA 750 Standard on Water Mist Fire Protection Systems.

EPA also recommends that Section VIII of the Occupational Safety & Health Administration (OSHA) Technical Manual be consulted for information on selecting the appropriate types of personal protective equipment (PPE) recommended.

Comparison to other fire suppressants:
The Victaulic Vortex System is not an ozone depleter in contrast to the ozone depleting substance which it replaces. The Victaulic Vortex System has comparable or lower risk for ozone depletion than other substitutes for halon 1301. (Halon 1301 has an ODP of 16 and a GWP of 7140 (WMO, 2006).) The Victaulic Vortex System has a GWP of zero, comparable to or lower than that of other substitutes for halon 1301. For example, the GWP of HFC–227ea is 3220, the GWP of HFC–125 is 3500, and the GWP of HFC–236fa is 9810. The flammability and toxicity risks are low and are comparable or lower than for other acceptable fire suppressants such as IG–100 (N₂), as discussed above. Thus, we find that the Victaulic Vortex System is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end use listed above.

2. ATK OS–10

EPA’s decision:
The ATK OS–10 system is acceptable as a halon 1301 substitute for total flooding uses in both occupied and unoccupied areas.
The OS–10 system is a fire suppression system that uses gas generators, either singly or several grouped together in a casing, to suppress fires through production mainly of water vapor and nitrogen (N₂, CAS ID #7727–37–9). You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0198 at www.regulations.gov.

Environmental information:
The ODGP of each of the gaseous post-activation products of the OS–10 system is zero. The GWPs of the gaseous post-activation products of OS–10 are 1 or less.
The OS–10 system does not contain VOCs as defined under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information:
The OS–10 system is non-flammable.

Toxicity and exposure data:
Upon activation, OS–10 system produces post-activation products mainly consisting of gases and some
particulates. The main post-activation gaseous products are water and N₂, an inert gas that at sufficiently high levels can cause asphyxiation. The OS–10 system can be designed to ensure that the oxygen concentration in any protected space will not fall below 12 percent over the 5 minute discharge period, consistent with the health criteria in National Fire Protection Agency (NFPA) Standard 2001 for Clean Agent Fire Extinguishing Systems. Testing data provided by the submitter indicate that there will not be a significant amount of particulate left in the room after discharge. Thus, EPA believes that potential toxicity and nuisance dust effects from exposure to the particulate matter should not be detrimental to human health within the five-minute egress timeframe established for total flooding fire extinguishing systems by the NFPA Standard 2001 (NFPA 2008). EPA recommends that use of this system should be in accordance with the safe exposure guidelines for inert gas systems in the latest edition of NFPA 2001, specifically the requirements for residual oxygen levels, and that use should be in accordance with the relevant operational requirements in NFPA Standard 2010 for Aerosol Extinguishing Systems.

Installation and maintenance personnel should receive training in order to minimize the risk for accidental discharge of the system while performing installation or maintenance activities. Exposure of personnel during cleanup should be minimized by increasing the air exchange rate in the room prior to cleanup in order to aerate the space and reduce humidity. In addition, EPA recommends that all workers entering the protected volume to clean up after activation should wear appropriate personal protective equipment (PPE). We recommend consulting section VIII of the Occupational Safety & Health Administration (OSHA) Technical Manual (OSHA 1999) as well as all information from the manufacturer for information on selecting appropriate types of PPE to be worn by personnel involved in the manufacture, installation, maintenance, or clean up of OS–10.

Comparison to other fire suppressants:

The OS–10 system is not an ozone depleter in contrast to the ozone depleting substance which it replaces. OS–10 has comparable or lower risk for ozone depletion than other substitutes for halon 1301. (Halon 1301 has an ODP of 1 and an GWP of 1200 (WMO, 2006).) The gaseous post-activation products of OS–10 have GWPs well below those of other substitutes for halon 1301. For example, the GWPs of all of the OS–10 gases are less than 1 compared to the GWP of HFC–227ea at 3220, the GWP of HFC–125 at 3500, and the GWP of HFC–236fa at 9810. The flammability and toxicity risks are low and are comparable or lower than for other acceptable fire suppressants such as IG–100 (N₂), as discussed above. Thus, we find that the OS–10 system is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end use listed above.

C. Foam Blowing

1. Formacel® B

EPA’s decision:

Formacel® B is acceptable as a substitute for HCFC–22 and HCFC–142b in polystyrene, extruded boardstock and billet.

Formacel® B is a series of blends of the same component compounds. The submitter has claimed its composition as confidential business information. You may find the submission under Docket item EPA–HQ–OAR–2003–0118–0179 at www.regulations.gov.

Environmental information:

Formacel® B has no ODP. Formacel® B blends range in global warming potential (GWP) from approximately 140 to 1500. Formacel® B does not contain volatile organic compounds (VOC) as defined under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information:

Some components of the Formacel® B blends are flammable. Some specific blends are flammable as formulated and should be handled with proper precautions. EPA recommends that users follow all requirements and recommendations specified in the Material Safety Data Sheet (MSDS) and other safety precautions for use of flammable blowing agents used in the foam blowing industry. Use of Formacel® B will require safe handling and shipping as prescribed by the Occupational Safety and Health Administration (OSHA) and the Department of Transportation (for example, using personal safety equipment and following requirements for shipping hazardous materials at 49 CFR parts 170 through 173).

Toxicity and exposure data:

Potential health effects of this substitute include nausea, headache, weakness, or central nervous system depression with effects such as dizziness, headache, or confusion. The substitute may also irritate the lungs, skin or eyes or cause frostbite. At high concentrations, the substitute may also cause irregular heart beat, abnormal kidney function, loss of consciousness, or death. The substitute could cause asphyxiation, if air is displaced by vapors in a confined space. These potential health effects are common to many foam blowing agents.

EPA anticipates that Formacel® B will be used consistent with the recommendations specified in the manufacturers’ Material Safety Data Sheets (MSDSs). The manufacturer recommends a workplace exposure limit of 1000 ppm for Formacel® B. EPA anticipates that users will be able to meet the manufacturer’s recommended workplace exposure limits and will be able to address potential health risks by following requirements and recommendations in the MSDSs and other safety precautions common in the foam blowing industry.

Comparison to other foam blowing agents:

Formacel® B is not ozone depleting in contrast to the ozone depleting substances which it replaces. Formacel® B has comparable or lower risk for ozone depletion than other substitutes for HCFC–22 and HCFC–142b. (HCFC–22 and HCFC–142b have ODPs of 0.05 and 0.07 and GWPs of 1810 and 2310, respectively (WMO, 2006).) Formacel® B blends range in GWP from 140 to 1500, comparable to or lower than that of other substitutes for HCFC–22 and HCFC–142b. For example, the GWP of HFC–134a is about 1430 and the GWP of HFC–245fa is about 1030. Flammability risks can be addressed by procedures common in the industry. The toxicity risks are low, as discussed above. Thus, we find that Formacel® B is acceptable because it does not pose a greater overall risk to public health and the environment than the other substitutes acceptable in the end use listed above.

II. Section 612 Program

A. Statutory Requirements

Section 612 of the Clean Air Act authorizes EPA to develop a program for evaluating alternatives to ozone-depleting substances. We refer to this program as the Significant New Alternatives Policy (SNAP) program. The major provisions of section 612 are:

- Rulemaking—Section 612(c) requires EPA to promulgate rules making it unlawful to replace any class I (chlorofluorocarbon, halon, carbon tetrachloride, methyl chloroform, and
hydrobromofluorocarbon) or class II
(hydrochlorofluorocarbon) substance
with any substitute that the
Administrator determines may present
adverse effects to human health or the
environment where the Administrator
has identified an alternative that (1)
reduces the overall risk to human health
and the environment, and (2) is
currently or potentially available.

• Listing of Unacceptable/Acceptable
Substitutes—Section 612(c) also
requires EPA to publish a list of the
substitutes unacceptable for specific
uses. We must publish a corresponding
list of acceptable alternatives for
specific uses.

• Petition Process—Section 612(d)
grants the right to any person to petition
EPA to add a substance to or delete a
substance from the lists published in
accordance with section 612(c). The
Agency has 90 days to grant or deny a
petition. Where the Agency grants the
petition, it must publish the revised lists
within an additional six months.

• 90-day Notification—Section 612(e)
directs EPA to require any person who
produces a chemical substitute for a
class I substance to notify the Agency
not less than 90 days before new or
existing chemicals are introduced into
interstate commerce for significant new
uses as substitutes for a class I
substance. The producer must also
provide the Agency with the producer's
unpublished health and safety studies
on such substitutes.

• Outreach—Section 612(b)(1) states
that the Administrator shall seek to
maximize the use of federal research
facilities and resources to assist users of
class I and II substances in identifying
and developing alternatives to the use of
such substances in key commercial
applications.

• Clearinghouse—Section 612(b)(4)
requires the Agency to set up a public
clearinghouse of alternative chemicals,
product substitutes, and alternative
manufacturing processes that are
available for products and
manufacturing processes which use
class I and II substances.

B. Regulatory History

On March 18, 1994, EPA published
the final rulemaking (59 FR 13044) that
described the process for administering
the SNAP program and issued our first
acceptability lists for substitutes in the
major industrial use sectors. These
sectors include:

• Refrigeration and air conditioning;
• Foam blowing;
• Solvents cleaning;
• Fire suppression and explosion
protection;
• Sterilants;
• Aerosols;
• Adhesives, coatings and inks; and
• Tobacco expansion.

These sectors comprise the principal
industrial sectors that historically
consumed the largest volumes of ozone-
depleting compounds.

As described in this original rule for
the SNAP program, EPA does not
believe that rulemaking procedures are
required to list alternatives as
acceptable with no limitations. Such
listings do not impose any sanction, nor
do they remove any prior license to use
a substance. Therefore, by this notice we
are adding substances to the list of
acceptable alternatives without first
requesting comment on new listings.

However, we do believe that notice-
and-comment rulemaking is required to
place any substance on the list of
prohibited substitutes, to list a
substance as acceptable only under
certain conditions, to list substances as
acceptable only for certain uses, or to
remove a substance from the lists of
prohibited or acceptable substitutes. We
publish updates to these lists as separate
notices of rulemaking in the Federal
Register.

The Agency defines a “substitute” as
any chemical, product substitute, or
alternative manufacturing process,
whether existing or new, intended for
use as a replacement for a class I or class
II substance. Anyone who plans to
market or produces a substitute for an
ODS in one of the eight major industrial
use sectors must provide EPA with
health and safety studies on the
substitute at least 90 days before
introducing it into interstate commerce
for significant new use as an alternative.
This requirement applies to substitute
manufacturers, but may include
importers, formulators, or end-users,
when they are responsible for
introducing a substitute into commerce.

You can find a complete chronology
of SNAP decisions and the appropriate
Federal Register citations from the
SNAP section of EPA's Ozone Depletion
World Wide Web site at http://
www.epa.gov/ozone/snap/chron.html.
This information is also available from
the Air Docket (see ADDRESSES section
above for contact information).

List of Subjects in 40 CFR Part 82

Environmental protection,
Administrative practice and procedure,
Air pollution control, Reporting and
recordkeeping requirements.


Dina Kruger,
Acting Director, Office of Atmospheric
Programs.

Appendix A: Summary of Acceptable
Decisions

<table>
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<td>Screw chillers (retrofit and new)</td>
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<td>Retail food refrigeration (retrofit and new)</td>
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</tbody>
</table>
End-use | Substitute | Decision | Further information
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Refrigerated transport (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Commercial ice machines (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Ice skating rinks (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Household refrigerators and freezers (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Vending machines (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Water coolers (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Residential dehumidifiers (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Motor vehicle air conditioning for buses and passenger trains only (retrofit) | KDD6 as a substitute for CFC–12 | Acceptable. | 
Non-mechanical heat transfer (retrofit and new) | KDD6 as a substitute for CFC–12 | Acceptable. | 

**Foam Blowing**

| Foam Blowing | Formace® B as a substitute for HCFC–22 and HCFC–142b. | Acceptable | Observe recommendations in the manufacturer's MSDS and guidance for using these blends.

**Fire Suppression and Explosion Protection**

| Fire Suppression and Explosion Protection | Victaulic Vortex System as a substitute for halon 1301. | Acceptable | EPA recommends that users consult Section VIII of the Occupational Safety & Health Administration (OSHA) Technical Manual for information on selecting the appropriate types of Personal Protective Equipment (PPE).

EPA recommends that use of this system should be in accordance with the safe exposure guidelines for inert gas systems in the latest edition of NFPA 2001, specifically the requirements for residual oxygen levels, and should be in accordance with the relevant operational requirements in NFPA 750 Standard on Water Mist Fire Protection Systems.

Use should conform with relevant OSHA requirements, including 29 CFR part 1910, subpart L, sections 1910.160 and 1910.162.
Fisheries of the Northeastern United States; Summer Flounder, Scup, and Black Sea Bass Fisheries; 2009 Summer Flounder, Scup, and Black Sea Bass Specifications; Preliminary 2009 Quota Adjustments; 2009 Summer Flounder Quota for Delaware

**SUMMARY:** NMFS issues final specifications for the 2009 summer flounder, scup, and black sea bass fisheries. This final rule specifies allowed harvest limits for both commercial and recreational fisheries, including commercial scup possession limits. This action prohibits federally permitted commercial vessels from landing summer flounder in Delaware in 2009 due to continued quota repayment from previous years’ overages.

The actions of this final rule are necessary to comply with regulations implementing the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP), as well as to ensure compliance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

The intent of this action is to establish harvest levels and other management measures to ensure that target fishing mortality rates (F) or exploitation rates, as specified for these species in the FMP, are not exceeded. In addition, this action implements measures that ensure continued rebuilding of these three stocks that are currently under rebuilding plans.

**DATES:** Effective January 1, 2009, through December 31, 2009.

**ADDRESSES:** Copies of the specifications document, including the Environmental Assessment (EA), Regulatory Impact Review (RIR), Initial Regulatory Flexibility Analysis (IRFA), and other supporting documents used by the Summer Flounder, Scup, and Black Sea Bass Monitoring Committees and Scientific and Statistical Committee are available from Daniel Furlong, Executive Director, Mid-Atlantic Fishery Management Council, Room 2115, Federal Building, 300 South New Street, Dover, DE 19901–6790. The specifications document is also accessible via the Internet at [http://www.nero.noaa.gov](http://www.nero.noaa.gov).

EPA has no intention of duplicating or displacing OSHA coverage related to the use of personal protection equipment (e.g., respiratory protection), fire protection, hazard communication, worker training or any other occupational safety and health standard with respect to halon substitutes. EPA recommends that users consult Section VIII of the Occupational Safety & Health Administration (OSHA) Technical Manual for information on selecting the appropriate types of Personal Protective Equipment (PPE).

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