HALOTRON BRX

TECHNICAL DATA

Environmental Properties

For its chemical class, Halotron BrX has an extraordinarily low global warming potential (less than 0.50, where CO2 = 1.0, 100 yr integrated time horizon). This is in contrast to some other conventional clean agents that have global warming potentials above 3,000. The Ozone Depletion Potential is near zero (0.0028, where CFC-11=1.0). The atmospheric lifetime is a very short 7 days. This property contributes to its favorable minimal environmental impact, which has resulted in this material not being subject to ozone depletion or global warming regulations.

Aviation Uses

The aviation related use is notable. Starting in 2009, Halotron BrX has been tested against myriad aviation related test protocols. This includes the U.S. FAA Minimum Performance Standard (MPS) tests to replace halon 1211 handheld fire extinguishers onboard commercial aircraft. That MPS requires satisfactory results for the seat fire toxicity test, the fuel-in-depth fire pan tests according to UL or equivalent standards (5-B) and the Hidden Fire Test (which tests agent effectiveness on fires where discharge is indirect). UL listed extinguishers that meet the FAA handheld MPS are commercially available and carry the label "FAA Approved. Meets the Minimum Performance Standards as a replacement for Halon 1211 as per report DOT/FAA/AR-01/37."

PROPERTIES OF HALOTRON BrX™	
Chemical Formula	CF3CBr=CH2 (stabilized with proprietary additives)
Chemical Name	2-bromo-3,3,3-trifluoro-1-propene
Molecular Weight	174.9
Boiling Point @ 1 Atm.	93° (34°C)
Specific Gravity, Liquid	1.65
Cup Burner Extinguishing Concentration, heptane, % vol.	4.8
Atmospheric Lifetime	7 days
Ozone Depletion Potential (CFC-11=1.0)	0.0028[1]
Global Warming Potential (CO2=1.0, 100 yr ITH)	0.26[1]
Cardio-Tox LOAEL, % vol.	1.0
Cardio-Tox NOAEL, % vol.	0.5
ASTM Standards for Quality Specification and Handling, Transportation and Storage	D8060, D8061
1 - Journal of Geophysical Research, Vol. 117, 2012	