

# ICI'S ALTERNATIVE HOLON PROGRAM

- MONTREAL PROTOCOL
- RECYCLING PROGRAM
- ALTERNATIVES RESEARCH:
  - ANNOUNCEMENT OF 124B1
- FURTHER OBJECTIVES:
  - 'BANK' ESTIMATES
  - HARC/HRI
  - FUNDAMENTALS TO ZERO ODD PRODUCTS



## RESEARCH TARGETS

- RETENTION OF CRITICAL TECHNICAL AND PERFORMANCE FACTORS ASSOCIATED WITH EXISTING PRODUCTS
- OZONE DEPLETION POTENTIAL OF <10% OF HALON 1211 - PREFERABLY 0
- TOXICOLOGICALLY ACCEPTABLE FOR USE AS FIRE-FIGHTING AGENT
- ACCESSIBLE MANUFACTURING ROUTE AT ACCEPTABLE COST ON APPROPRIATE TIME SCALE



# TABLE COMPARISON - OZONE DEPLETIVES

	<u>124B1</u>	<u>HOLON 1211</u>
CHEMICAL FORMULA	CF <sub>3</sub> CHFBR	CF <sub>2</sub> CLBR
MOLECULAR WEIGHT	180.9	165.4
OZONE DEPLETION POTENTIAL	0.4	3.0
BOILING POINT (°C)	8.6	-4.0
LIQUID DENSITY @ 20°C (GM/CC)	1.85	1.83
VAPOR PRESSURE (BAR ABS)		
20°C	1.55	2.36
40°C	2.99	4.29
60°C	5.29	7.20
EXTINGUISHING CONCENTRATION HEPTANE, CUPBURNER (% VOL.)	3.6	3.8
ATMOSPHERIC LIFETIME	3.9 YRS.	±18 YRS.



## ICI RESERACH PRODUCT

“T24B”

“BROMO-TETRAFLUOROETHANE”

- GOOD EXTINGUISHING AGENT
- RIGHT PROPERTIES FOR USE IN COXTABLES
- LOW LEVEL DECOMPOSITION PRODUCTS  
ABOUT 50 PERCENT OF HALON 1211

BUT

- UNCERTAINTY ON ODO ACCEPTANCE
- THEREFORE, NO CAPITAL COMMITMENT  
TO PRODUCTION BY ICI

