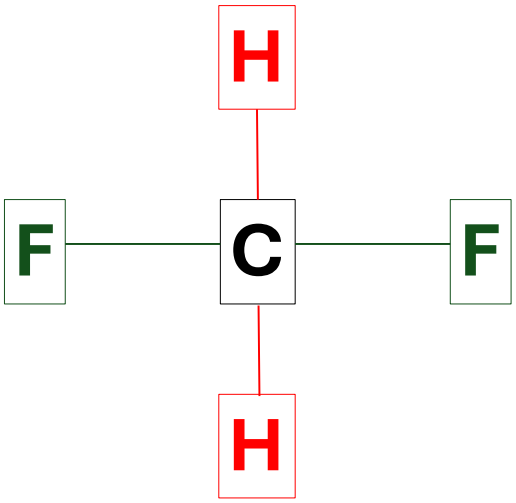
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	1,1 difluormethane, Dichloromethane, HFC-32; R32; methylene difluoride; Forane® 32; FRON R-32
UN Number	3252
Chemical Formula	CH_2F_2
Hazards	Flammable, liquified gas, expansion ratio, simple asphyxiant,
PPE Considerations	SFPC with SCBA
Fire Fighting Considerations	Water spray, BC extinguisher, ATC AFFF
Decontamination	Ventilation
Detection and Monitoring	Colormetric, electrochemical sensor, spectroscopy, PID IP = 11.3-11.8 ev
Chemical and Physical Properties	
Physical State	Colorless, with faint ether-like odor
Vapor Pressure	13.57 ATM
Boiling Point	-61°F
Vapor Density	1.86
Specific Gravity	.98
Miscibility	Immiscible
Flash Point	<662°F
LEL/UEL	14.4% / 100%
Autoignition Temp	32°F
pH	-
Toxicity	
IDLH	500 ppm (39,000 PAC-3)
PEL/REL/STEL	- /- /- (1000 8 hr., TWA)
LD50	52,000 ppm (rat)
LC50	-
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Simple asphyxiant, may cause frostbite
Signs/Symptoms of Exposure	Respiratory, CNS, increased heart rate, altered LOC
Medical Treatment	Fresh air and treat symptomatically
Other Information	
Thermal decomposition may release hydrogen fluoride, carbon monoxide, and/or carbonyl difluoride. May react with some metals. May react violently with aluminum.	

Incompatible with oxidizing and reducing agents, amines, nitrides, azo/dizo compounds, alkali metals and epoxides.

Chemical Structure