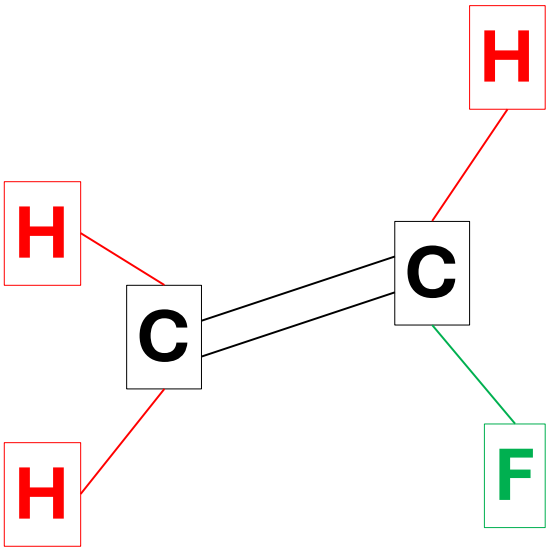
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Vinyl fluoride, Fluoroethene, Fluoriethylene,
UN Number	1860
Chemical Formula	CH_2=CHF
Hazards	Toxic, flammable gas, asphyxiant, polymerization
NFPA Hazard Class (H-F-R-Ⓞ)	2 – 4 – 2 –
PPE Considerations	Flash protective CPC with SCBA
Fire Fighting Considerations	Water spray, CO_2, dry chemical, ATC AFFF. Water mist to cool containers.
Decontamination	Ventilation
Detection and Monitoring	Colorimetric, spectroscopy, CGI, PID (IP=10.37 eV), electrochemical sensor
Chemical and Physical Properties	
Physical State	Colorless gas
Vapor Pressure	25.2 ATM
Boiling Point	-98°F
Vapor Density	1.6
Specific Gravity	.7
Miscibility	Insoluble
Flash Point	-
LEL/UEL	2.6 / 21.7%
Autoignition Temp	860°F
pH	-
Toxicity	
IDLH	Ca (ND)
LC50	>80 pph/12.5h
LD50	-
AEGL1/AEGL 2/AEGL (10 Min)	-/ - / - ppm
Emergency Response Planning Guide (ERPG) 1/2/3	- / - / - ppm
Protective Action Criteria (PAC) 1/2/3	570 / 6200 / 37000 ppm (LEL=26000 ppm)
PEL/REL/STEL	- / 1/ - ppm
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Toxic inhalation and contact
Signs/Symptoms of Exposure	Respiratory/skin/eye irritation, CNS s/s
Medical Treatment	Fresh air, water flush, treat symptomatically

Other Information
Reacts with air to form peroxides, may undergo exothermic polymerization
Chemical Structure