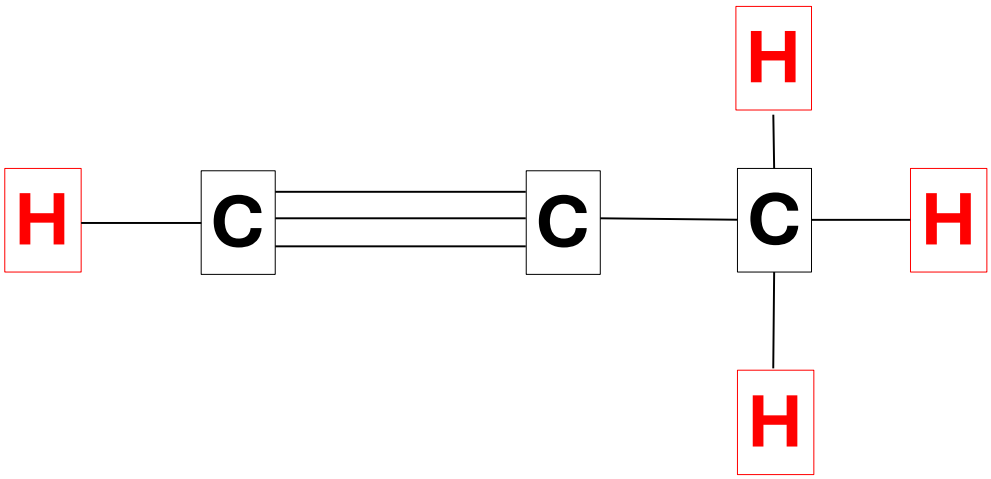
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Propine, 1-Propyne, 74-99-7, Allyene, Methyl Acetylene
UN Number	1060, when mixed with propadiene
Chemical Formula	C_3H_4
Hazards	Flammable gas, shipped as a liquified compressed gas
PPE Considerations	SFPC with SCBA
Fire Fighting Considerations	Use extinguishing method for exposed combustibles
Decontamination	Ventilation, water with surfactant (soap)
Detection and Monitoring	Combustible gas indicator (4/5-gas meter), electrochemical sensor, PID IP = 10.36 ev
Chemical and Physical Properties	
Physical State	Colorless compressed gas with a sweet odor
Vapor Pressure	5.2 ATM
Boiling Point	-10°F
Vapor Density	1.41
Specific Gravity	-
Miscibility	Insoluble
Flash Point	N/A
LEL/UEL	1.7%/11.7%
Autoignition Temp	-
pH	-
Toxicity	
IDLH	1700 ppm (10% LEL)
PEL/REL/STEL	1000 ppm or 1650 mg/kg^{3}/ 1000 ppm or 1650 mg/kg^{3}/-
LD50	-
LC50	-
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Simple asphyxiant, may cause frostbite when released, hydrocarbon narcosis
Signs/Symptoms of Exposure	Frostbite (contact), Respiratory irritation, hyper-excitability, CNS
Medical Treatment	Fresh air and treat symptomatically
Other Information	

Incompatible with strong oxidizers and copper alloys. May explosively decompose at 4.5-5.6 ATM
Chemical Structure