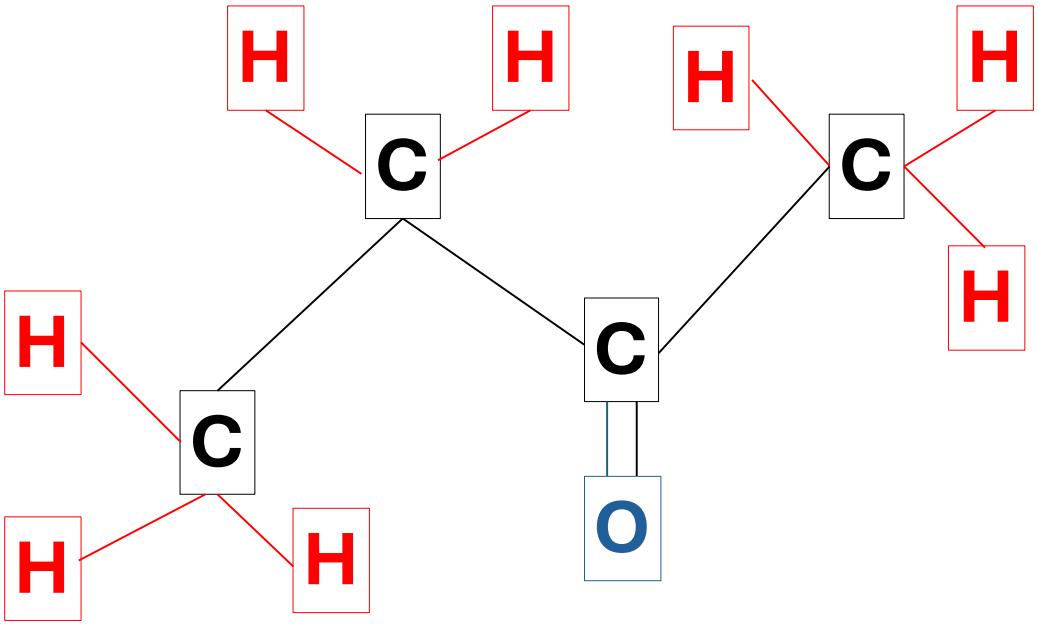
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Methyl Ethyl Ketone, MEK, 2-Butanone, Ethyl Methyl Ketone, Methyl Acetone, 78-93-3
UN Number	1193
Chemical Formula	C_4H_8O
NFPA Hazard Class (H-F-R-O)	1 – 3 – 0 –
Hazards	Flammable liquid, eye irritant, CNS toxicity
PPE Considerations	SFPC with SCBA or APR based on assignment
Fire Fighting Considerations	ATC AFFF, dry chem, CO_2
Decontamination	Water or water with surfactant, forced air for vapor exposure
Detection and Monitoring	PID IP = ~9.54 ev, spectroscopy, combustible gas indicator/4-gas meter, chemical sensor, colormetric
Chemical and Physical Properties	
Physical State	Colorless liquid with acetone-like odor
Vapor Pressure	78 mm/Hg
Boiling Point	175°F
Vapor Density	2.41
Specific Gravity	.8
Miscibility/Solubility	28%
Flash Point	16°F
LEL/UEL	1.8 / 10 %
Autoignition Temp	961°F
pH	-
Toxicity	
IDLH	3000 ppm
AEGL1/AEGL 2/AEGL 3 – 10 Min	200 / 200 / 200 ppm
Protective Action Criteria (PAC) 1/2/3	200 / 2700 / 4000 ppm (LEL = 18000 ppm)
Emergency Response Planning Guides (ERPG)	- / -/ -
PEL/REL/STEL	200 / 200 /200 ppm (conversion 1 ppm = 2.95 mg/kg)
LD50	2483 mg/kg (oral) 5000 mg/kg (dermal)
LC50	11700 mg/kg
Radioactive (Yes/No)	No

Medical	
Toxicological Considerations	Hazardous by inhalation, ingestion, contact
Signs/Symptoms of Exposure	Respiratory s/s, dizziness, nausea, eye/skin/CNS symptoms
Medical Treatment	Fresh air, water flush, treat symptomatically
Other Information	
Incompatible/reacts with oxidizers and caustics	
Chemical Structure