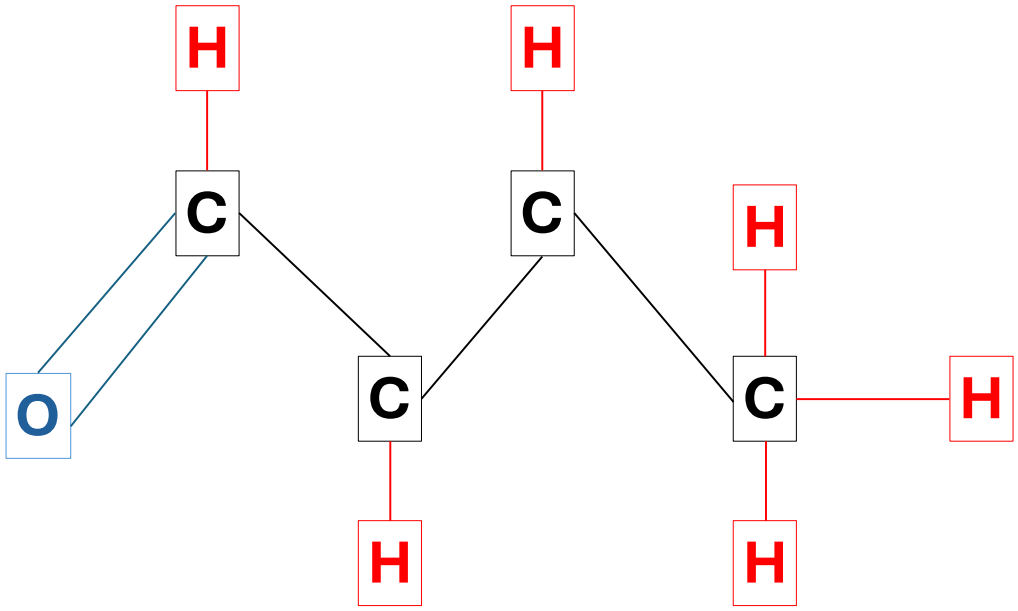
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Crotonaldehyde, 2-Butenal, Methyl Acrolein, Propylene Aldehyde, 4170-30-2
UN Number	1143
Chemical Formula	$CH_3CH=CHCHO$
Hazards	Toxic, polymerization, flammable liquid
PPE Considerations	CPC with flash protection or SFPC with SCBA based on the task assigned
Fire Fighting Considerations	Water spray (avoid smooth bore nozzle), ATC AFFF, BC extinguisher, CO_2. Note: Control and collect water runoff.
Decontamination	Ventilation, water or water with surfactant
Detection and Monitoring	Colormetric, electrochemical sensor, PID IP = 9.73 ev
Chemical and Physical Properties	
Physical State	Water white liquid with suffocating odor. Shipped mixed with inhibiter agent.
Vapor Pressure	19 mm/Hg
Boiling Point	219°F
Vapor Density	2.41
Specific Gravity	.87
Miscibility	18%
Flash Point	45°F
LEL/UEL	2.1% / 15.5%
Autoignition Temp	311°F
pH	-
Toxicity	
IDLH	50 ppm
PEL/REL/STEL	2 ppm or 6mg/kg^3 **/**2 ppm or 6 mg/kg^3 **/**-
LD50	174 mg/kg
LC50	336 mg/m^3
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Toxic by inhalation, ingestion, and contact
Signs/Symptoms of Exposure	Respiratory, CNS, increased heart rate, irritation to skin or mucous membranes,
Medical Treatment	Fresh air and treat symptomatically
Other Information	

Polymerization hazard. Do not expose to heat or fire. May form explosive vapors. Incompatible with caustics, oxidizers, ammonia, nitric acid, amines

Chemical Structure