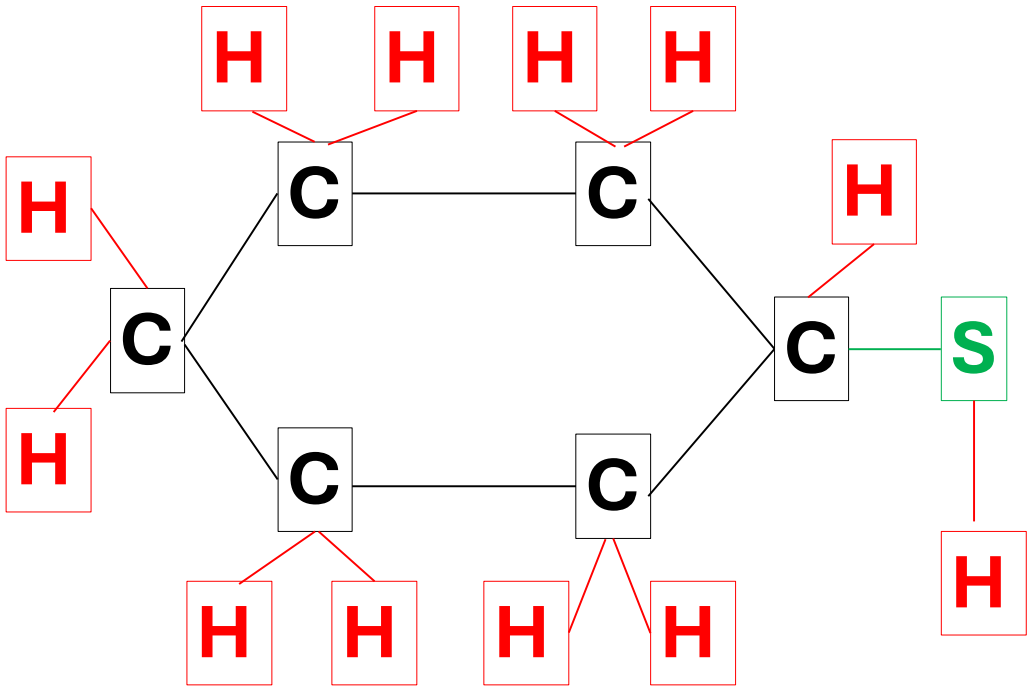
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Cyclohexanethiol, cyclohexylmercaptan, cyclohexylthiol, 1569-69-3
UN Number	3054
Chemical Formula	$C_6H_{11}SH$
NFPA Hazard Class (H-F-R-O)	**2 – 2 – 0 –**
Hazards	Toxic by all routes, flammable liquid
PPE Considerations	CPC with flash protection or SFPC with SCBA or APR based on assignment
Fire Fighting Considerations	ATC AFFF, dry chem, CO_2
Decontamination	Water with surfactant, forced air for vapor exposure
Detection and Monitoring	PID IP = ~9 ev, spectroscopy, combustible gas indicator/4-gas meter, chemical sensor
Chemical and Physical Properties	
Physical State	Colorless liquid with strong, offensive odor
Vapor Pressure	10 mm/Hg
Boiling Point	316°F
Vapor Density	4
Specific Gravity	.96
Miscibility/Solubility	Insoluble
Flash Point	110°F
LEL/UEL	- / -
Autoignition Temp	950°F
pH	-
Toxicity	
IDLH	N.D.
AEGL1/AEGL 2/AEGL 3 – 10 Min	1.5 / 1.5 / NR ppm
Protective Action Criteria (PAC) 1/2/3	.15 / 1.7 / 28 ppm (LEL = 3000 ppm)
Emergency Response Planning Guides (ERPG)	10 / 35 / 75 ppm
PEL/REL/STEL	.5 / - /- ppm (conversion 1 ppm = 4.75 mg/kg)
LD50	7.82 g/kg (dermal)
LC50	-
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Hazardous by all routes
Signs/Symptoms of Exposure	Respiratory s/s, dizziness, nausea, convulsions, eye/skin/CNS symptoms

Medical Treatment	Fresh air, water flush, treat symptomatically
Other Information	
Incompatible/reacts with oxidizers, strong acids, reducing agents, alkali metals	
Chemical Structure