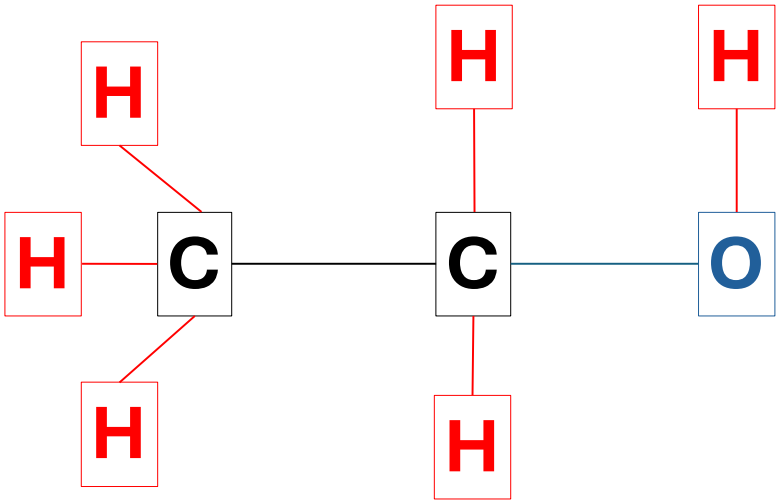
**Chemical of the Week – Part 2**

| Hazard Profile | |
|---|---|
| Chemical Name and Pseudonyms | Ethyl alcohol, Alcohol, Ethanol, EtOH, 64-17-5 |
| UN Number | 1170 |
| Chemical Formula | $CH_3CH_2OH$ |
| Hazards | Flammable liquid, CNS depressant, eye irritant |
| NFPA Hazard Class (**H-F-R-O**) | **2 – 3 – 0 –** |
| PPE Considerations | SFPC with SCBA or APR/PAPR based on assignment |
| Fire Fighting Considerations | ATC AFFF, dry chemical, $CO_2$ |
| Decontamination | Water |
| Detection and Monitoring | Colormetric, spectroscopy, CGI/FGI, FTIR, PID (IP=10.47 eV) |
| **Chemical and Physical Properties** | |
| Physical State | Clear liquid |
| Vapor Pressure | 44 - 60 mm/Hg |
| Boiling Point | 173°F |
| Vapor Density | 1.59 |
| Specific Gravity | .79 |
| Miscibility | Miscible |
| Flash Point | 56°F |
| LEL/UEL | 3.3% / 19% |
| Autoignition Temp | 689°F |
| pH | - |
| **Toxicity** | |
| IDLH | 3300 ppm (10% LEL) |
| LC50 | |
| LD50 | |
| AEGL1/AEGL 2/AEGL 3 – 10 Min | - / - / -mg/kg |
| Emergency Response Planning Guide (ERPG) 1/2/3 | 1800 / 3300 / - ppm |
| Protective Action Criteria (PAC) 1/2/3 | 1800 / 3300 / 15000 ppm |
| PEL/REL/STEL | 1000 / 1000 /1000 ppm |
| LD50 | 3450 mg/kg (oral) |
| $LD_{Lo}$ | 700 mg/kg |
| LC50 | 20000 ppm 10/H |
| Radioactive (Yes/No) | No |
| **Medical** | |

| | |
|---|---|
| Toxicological Considerations | Inhalation, ingestion, and contact hazard |
| Signs/Symptoms of Exposure | Respiratory s/s, irritation/burning of eyes, CNS s/s including dizziness, slurred speech, confusion, reproductive and teratogenic impacts |
| Medical Treatment | Fresh air, water flush, treat symptomatically |
| **Other Information** | |
| Incompatible with strong oxidizers, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, and sodium | |
| **Chemical Structure** | |