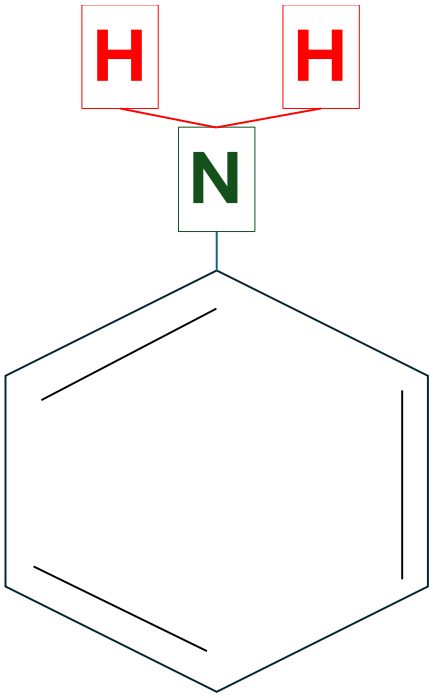
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Aniline, Aminobenzene, Aniline oil, Phenylamine, 62-53-3
UN Number	2821
Chemical Formula	$C_6H_5NH_2$
Hazards	Corrosive, toxic, forms methemoglobin, carcinogenic material
NFPA Hazard Class (H-F-R-Ⓞ)	3 – 2 – 0 –
PPE Considerations	Splash protective CPC or SFPC with SCBA based on assignment
Fire Fighting Considerations	ATC AFFF, dry chemical, CO_2
Decontamination	Flushing water or water with surfactant
Detection and Monitoring	Colorimetric, spectroscopy, electrochemical sensor, CGI, PID (IP=7.7 eV)
Chemical and Physical Properties	
Physical State	Colorless to brown oily liquid. Solid below 21°F.
Vapor Pressure	.6 mm/Hg
Boiling Point	363°F
Vapor Density	3.2
Specific Gravity	1.02
Miscibility	4%
Flash Point	158°F
LEL/UEL	1.3% / 11%
Autoignition Temp	1139°F
pH	8.1
Toxicity	
IDLH	100 ppm
LC50	2500 mg/m^3
LD50	200 mg/kg
AEGL1/AEGL 2/AEGL (10 Min)	48 / 78 / 20 ppm
Emergency Response Planning Guide (ERPG) 1/2/3	- / - / - ppm
Protective Action Criteria (PAC) 1/2/3	8 / 12 / 20 ppm (LEL =13000 ppm)
PEL/REL/STEL	5 / Ca/ 2 ppm
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Exposure by all routes

Signs/Symptoms of Exposure	Headache, dizziness, cyanosis, cardiac, skin/eye irritation
Medical Treatment	Fresh air, water flush, treat symptomatically, CO protocol
Other Information	
Incompatible with strong oxidizers, strong acids, toluene diisocyanate, alkalis, heat	
Chemical Structure