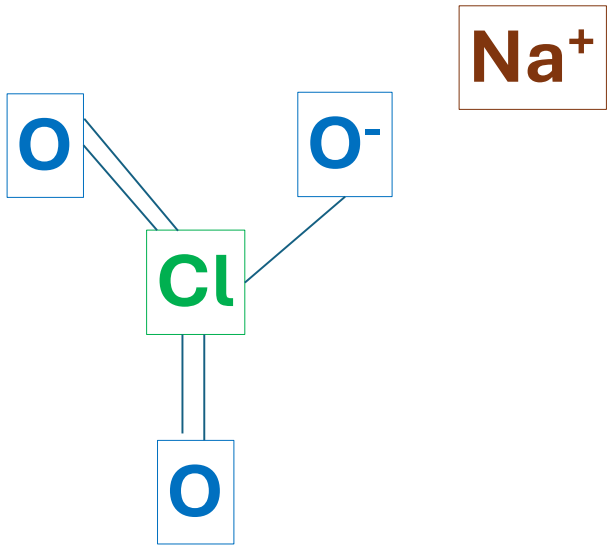
Chemical of the Week – Part 2

Hazard Profile	
Chemical Name and Pseudonyms	Sodium chlorate, Chloric acid, sodium salt, 7775-09-9
UN Number	1495
Chemical Formula	$NaClO_3$
Hazards	Oxidizer, toxic
NFPA Hazard Class (H-F-R-Ⓞ)	2 – 0 – 3 – OX
PPE Considerations	SFPC with SCBA
Fire Fighting Considerations	Extinguishing method appropriate for nearby combustibles
Decontamination	Flushing water or water with surfactant
Detection and Monitoring	Colorimetric, spectroscopy
Chemical and Physical Properties	
Physical State	Odorless pale yellow to white crystalline solid
Vapor Pressure	>1 ATM
Boiling Point	-169°F
Vapor Density	-
Specific Gravity	-
Miscibility	Soluble
Flash Point	-
LEL/UEL	- / -
Autoignition Temp	- decomposes at 482°F
pH	- ~9 in solution
Toxicity	
IDLH	-
LC50	-
LD50	50-500 mg/kg
AEGL1/AEGL 2/AEGL (10 Min)	- / - / - ppm
Emergency Response Planning Guide (ERPG) 1/2/3	- / - / - ppm
Protective Action Criteria (PAC) 1/2/3	16 / 170 / 310 mg/m^3
PEL/REL/STEL	- / -/ - ppm
Radioactive (Yes/No)	No
Medical	
Toxicological Considerations	Inhalation of dust/powder, ingestion, and contact
Signs/Symptoms of Exposure	Respiratory/skin/eye irritation, cyanosis, methemoglobin
Medical Treatment	Fresh air, water flush, treat symptomatically

Other Information
Strong oxidizer, reacts with wood, organic material, ammonium salts, sulfur, sulfuric acid, and metals. May release oxygen when exposed to heat.
Chemical Structure