

**Technology Title:** Perchlorate Free Flares

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**SYSCOM:** NAVSEA

**TRL:** 6

**Image:**



**ABSTRACT**

**Abstract #:** Pyrotechnic, flare, signaling, illumination, green technology

Pyrotechnics are used in a variety of applications including fireworks and colored signal flares. Currently available fireworks and signal flares use perchlorate oxidizers to produce their desired colors. Residual perchlorates from pyrotechnic devices may leach into groundwater and cause widespread contamination that requires remediation. NSWC has reformulated pyrotechnic compositions for red, yellow, and green to remove perchlorate ingredients, while maintaining or improving performance. Compositions have been developed, prototyped and tested with documented results. [NSWC Crane]

**THUMBNAIL**

New improved pyrotechnic compositions for red, green, and yellow flares which produce equal or superior emission intensities but containing no perchlorates.