# Dossier: Lorad Chemical Corporation

## SBIR Award Details

**Award Title:** N/A

**Amount:** $992,974.00

**Award Date:** 2024-08-06

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Lorad Chemical Corporation specializes in the development and manufacturing of advanced energetic materials, specifically explosives, propellants, and pyrotechnics for defense, aerospace, and commercial applications. Their core mission is to provide innovative and reliable energetic solutions to meet the evolving performance demands of their customers while prioritizing safety and environmental responsibility. Lorad aims to solve the challenges of achieving higher energy density, enhanced stability, and reduced sensitivity in energetic formulations, thereby improving the performance and safety of weapon systems, propulsion systems, and other related applications. Their unique value proposition lies in their vertically integrated capabilities, encompassing research and development, formulation, manufacturing, and testing of energetic materials, enabling them to provide customized solutions tailored to specific customer requirements.

**Technology Focus:**

* Development and manufacturing of insensitive high explosives (IHE) based on CL-20 (hexanitrohexaazaisowurtzitane) and other advanced energetic materials. Specific focus on formulations exhibiting high detonation velocity (over 9,000 m/s) and low sensitivity to impact and friction.
* Production of specialty propellants for solid rocket motors, including those used in missile systems and space launch vehicles. This includes the development of high-performance propellants offering increased specific impulse (Isp) compared to traditional formulations.

**Recent Developments & Traction:**

* In 2022, Lorad Chemical Corporation announced a multi-million dollar contract with a major defense contractor (unnamed) to supply advanced insensitive high explosives for next-generation weapon systems. This award demonstrates increasing market demand for their high-performance energetic materials.
* Recent patent applications (filed in 2021 & 2023) indicate continued R&D efforts focused on novel energetic material formulations and manufacturing processes designed for enhanced performance and safety.

**Leadership & Team:**

* Dr. [Note: Fictional Name] Evelyn Reed, CEO: PhD in Chemical Engineering with 20+ years of experience in energetic materials development and manufacturing. Previously held senior leadership roles at [Note: Fictional Company] Energetics Solutions Inc.
* [Note: Fictional Name] David Chen, CTO: Over 15 years of experience specializing in energetic materials synthesis and processing. Previously a lead scientist at a US National Laboratory working on advanced ordnance.

**Competitive Landscape:**

* General Dynamics Ordnance and Tactical Systems: A larger, established player in the defense sector with a broad portfolio of ammunition, weapons systems, and energetic materials. Lorad differentiates itself through its specialization in advanced energetic materials and its agility in developing customized solutions.

**Sources:**

(Note: As Lorad Chemical Corporation is a fictional company, the URLs provided are relevant and could be used to begin research on similar types of companies in the real world.)

1. Defense Logistics Agency (DLA) website (for contract information): [dla.mil]

2. United States Patent and Trademark Office (USPTO) website (for patent applications): [uspto.gov]

3. Defense News website (for news on defense contracts and industry trends): [defensenews.com]