



*Making Sure Each
Shot Counts!*

Palmer

-- JUN 2024

Safety Data Sheet

1. Identification

Product identifier	Cap-Chur Charges
Synonyms:	Power Loads Cap-Chur Charges DCF (Disposable Syringes)
Product codes:	Power Loads: 2423, 2425, 2427, Cap-Chur Charges 2361, 2363, 2365, DCF all sizes
Recommended use:	For medication or tranquilization of animals.
Recommended restrictions:	Not for human use. Animal use only.
Manufacturer/Importer/Supplier/Distributor information	
Company name:	Palmer Cap-Chur Equipment, Inc.
Address:	421 Tidwell Road Powder Springs, GA 30127 USA
Telephone:	770-942-4395
Fax:	770-949-3562
Email:	info@cap-chur.com
Emergency phone number:	+1 703-741-5971 / 1-800-424-9300 Day or Night

039-311

039-313

039-315

039-451

039-453

039-455

2. Hazard(s) identification

Physical hazards	Explosives	Division 1.4
Health hazards	Acute Toxicity (inhalation)	Category 3
	Skin Sensitization	Category 1A
	Carcinogenicity	Category 2
	Reproductive Toxicity	Category 1A
	Specific Target Organ Toxicity,	Category 2
	Repeat Exposure	
OSHA defined hazards	None known	
Label elements		
Hazard symbol:		
Signal word:	DANGER	
Hazard statement:	Fire or projection hazard. Suspected of causing cancer. May damage fertility or the unborn child. May cause damage to organs (central nervous system, blood, kidney, reproductive system) through prolonged or repeated exposure.	
Precautionary statement:		
Prevention:	Do not handle until all safety precautions have been read and understood. Keep away from heat. No smoking. Do not subject to shock. Wear eye protection. Do not breathe fumes.	
Response:	If exposed, concerned or you feel unwell: Get medical attention. In case of fire: Evacuate area. Fight fire with normal precautions from a reasonable distance.	

Storage:	Store in accordance with applicable fire codes. Keep only in original packaging.
Disposal:	Dispose of ammunition in accordance with local regulations.
Supplemental information:	Some of the hazardous components of this product are encased and are not biologically available. Decomposition products, including lead containing compounds, are released during the firing of cartridges. Use only outdoors or in a well-ventilated area.

3. Composition/Information on ingredients

Chemical Name	CAS Number	%*
Copper	7440-50-8	58.1
Nitrocellulose	9004-70-0	12.7
Nitroglycerin	55-63-0	5.5
Lead Styphnate	15245-44-0	1.86
Ethyl Centralite (diethyldiphenylurea)	85-98-3	1.3
Barium Nitrate	10022-31-8	1.03
Rosin	8050-09-7	0.7

*Composition comments: All concentrations are in percent by weight.

4. First aid measures

Inhalation:	Remove to fresh air. If symptoms occur, get medical attention.
Skin contact:	Wash exposed skin with plenty of soap and water. Get medical attention if irritation or other symptoms occur.
Eye contact:	Do not rub eyes. Flush eyes with plenty of water. If eye irritation develops and persists, get medical attention.
Ingestion:	Rinse mouth thoroughly with water. If symptoms develop get medical attention.
Most important symptoms/effects, acute and delayed Fragments from fired cartridge can cause physical injury. When cartridges are fired or otherwise discharged, dust and/or fumes may be absorbed by the digestive system and can result in both acute and chronic overexposure. Symptoms may include gastrointestinal irritation, nausea, vomiting and diarrhea. High concentrations of dust and/or fumes may irritate throat and respiratory system and cause coughing. Symptoms of chronic exposure to lead include anemia, visual and hearing disturbances, headache, memory loss, fatigue, muscle weakness, tremors, and convulsions. Ingestion of cartridges can cause irritation to the digestive system, and possibly other unknown health effects. Nitroglycerine may cause a drop in blood pressure, headache, cyanosis and mental confusion.	
Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.	
General Information In case of accident or if you feel unwell, seek medical advice immediately. Ensure that medical personnel are aware of the material(s) involved.	

5. Fire-fighting measures

Suitable extinguishing media:	Straight water stream; Water fog; Class A foam.
Unsuitable extinguishing media:	None.
Specific hazards arising from the chemical:	May ignite if heated to 250°F (121°C). Mass explosion will not occur. Hazardous chemical and toxic by-products from chemical decomposition may be formed during fire. These products vary depending on fire conditions and other combustibles present during fire. These may include smoke, carbon monoxide, carbon dioxide, oxides of nitrogen and lead fumes. Complete ventilation of structure is recommended.
Personal protective equipment:	Self-contained breathing apparatus (SCBA) and full structural protective clothing should be worn for any fire or exposure to heat. This includes, but is not limited to, protective coat, pants, boots, firefighting gloves, SCBA with face-piece and helmet, protective hood and eye protection. (NFPA 1971)
Fire suppression guidance:	Perform a risk assessment before engaging in offensive firefighting operations. Unless life safety risk or significant risk of property loss is present, consider taking defensive posture, protecting exposures and maintaining safe distance until material is consumed. For further information see the video "Ammunition and the Fire Fighter" by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI): www.youtube.com/watch?v=3SIOXowwC4c .
Specific methods:	Evacuate personnel to a safe area according to pre-determined public protection zones. Refer to pre-incident response and structural plans to determine if potential for involvement of other hazardous materials. Direct water streams at product to reduce projectile hazard from exploding cartridges. After the fire is controlled, heated products can still re-ignite and project pieces of metal posing risk to fire-fighters. Full PPE including respiratory protection should be worn during salvage, overhaul and fire investigation. Do not disturb the involved area until the fire is completely extinguished and the product and packaging are allowed to cool down to ambient temperatures.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Eliminate all ignition sources. Wear appropriate personal protective equipment. Damaged ammunition can explode upon contact creating projectiles dangerous to eyes, skin and body. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Sweep up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling: Projectiles from fired cartridge can cause physical injury. Do not handle until safety precautions have been read and understood. Do not subject to mechanical shock. Remove product from service if any of the following conditions occur: corrosion, physical damage, exposure to oil or spray lubricants. Provide appropriate exhaust ventilation. Do not breathe decomposition products. Lead containing compounds are released during the firing of cartridges. Care should be taken to minimize the potential exposure to lead. Do not taste or swallow. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage: Store in original container. Keep container tightly closed. Store in a cool, dry, well-ventilated place away from all sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls / Personal Protection

Occupational exposure limits

Chemical Name	CAS Number	ACGIH TLV	OSHA PEL	Other Information
Copper	7440-50-8	0.2 mg/m ³ (fume)	0.1 mg/m ³ (fume) 1 mg/m ³ (dust)	
Nitrocellulose	9004-70-0	None established	None established	Nitrocellulose
Nitroglycerin	55-63-0	0.05 ppm *Skin Designation	0.2 ppm 2.0 mg/m ³ *OSHA limit applies to skin	*Air sampling alone is insufficient to accurately quantify exposure. Measures to prevent significant cutaneous absorption may be required.
Lead Styphnate	15245-44-0	None established	None established	
Ethyl Centralite (diethyldiphenylurea)	85-98-3	None established	None established	
Barium Nitrate	10022-31-8	0.5 mg/m ³	0.5 mg/m ³	
Rosin	8050-09-7	*None established	*None established	*Exposure by all routes should be carefully controlled to levels as low as possible.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection: Wear appropriate protective clothing when cleaning equipment.

Hand protection: Wear protective gloves when cleaning equipment.

Other:

Respiratory protection: Wear appropriate respiratory protection when cleaning equipment.

General hygiene considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance: Brass Cartridge.

Physical State: Solid.

Form: Cartridge.

Color: Brass.

Odor: None.

Odor threshold: Not available.

pH: Not applicable.

Melting point/freezing point: Not applicable.

Initial boiling point/boiling range: Not applicable.

Flash point: Not applicable.

Evaporation rate: Not applicable.

Flammability (solid, gas): Fire or projection hazard.

Upper/lower flammability or explosive limits: Not applicable.

Vapor pressure: Not applicable.

Vapor density: Not applicable.

Relative density: >1

Solubility(ies): Not applicable.

Partition coefficient (in octanol/water):	Not applicable.
Auto-ignition temperature:	250°F / 121°C
Decomposition temperature:	Not available.
Viscosity:	Not applicable.

10. Stability and reactivity

Reactivity:	May explode with friction, impact, heat, and low level electrical current.
Chemical stability:	Risk of explosion by shock, friction, fire or other sources of ignition.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, sparks, and flames. Avoid contact with incompatible materials.
Incompatible materials:	Strong acids, bases, and oxidizers.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide, oxides of nitrogen, lead fumes.

11. Toxicological information

Information on likely routes of exposure

Inhalation: Fumes may irritate throat and respiratory system. Prolonged inhalation may cause chronic effects.

Skin contact: Contact with decomposition products may cause skin irritation.

Eye contact: Contact with decomposition products may cause eye irritation.

Ingestion: Ingestion may cause gastrointestinal irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Projectiles from fired cartridges can cause physical injury. When cartridges are fired or otherwise discharged, dust and/or fumes may be absorbed by the digestive system and can result in both acute and chronic overexposure. Symptoms may include gastrointestinal irritation, nausea, vomiting and diarrhea. High concentrations of dust and/or fumes may irritate throat and respiratory system and cause coughing. Symptoms of chronic exposure to lead include anemia, visual and hearing disturbances, headache, memory loss, fatigue, muscle weakness, tremors, and convulsions. Ingestion of cartridges can cause irritation to the digestive system, and possibly other unknown health effects. Nitroglycerine may cause a drop in blood pressure, headache, cyanosis and mental confusion.

Information on toxicological effects

Acute toxicity: Not expected to be acutely toxic under normal conditions of use.

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Nitroglycerin	55-63-0	685 mg/kg	>2000 mg/k	(ATE)

Barium Nitrate	10022-31-8	(Rat) (ATE) 100 mg/kg (Rat)	(Rat) No data available	0.05 mg/l/4h No data available
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Skin corrosion/irritation: May cause skin irritation.

Serious eye damage/eye irritation: May cause eye irritation.

Respiratory sensitization: No data available.

Skin sensitization: Not expected to cause skin sensitization under normal conditions of use.

Germ cell mutagenicity: This product or any of its ingredients are not known or reported to be mutagenic.

Carcinogenicity: The National Toxicology Program (NTP) considers lead compounds reasonably anticipated to be a human carcinogen.

Chemical Name	CAS Number	ACGIH	IARC	NTP
Lead Styphnate	15245-44-0	Not Listed	Lead compounds - Not classifiable (3)	Lead compounds - Reasonably anticipated to be a human carcinogen

Reproductive toxicity: May damage fertility or the unborn child.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity - repeated exposure: Causes damage to organs (central nervous system, blood, kidney, reproductive system) through repeated exposure prolonged or repeated exposure.

Aspiration hazard: Due to the physical form of the product it is not an aspiration hazard.

Chronic effects: Prolonged or repeated exposure to decomposition products may cause chronic effects.

12. Ecological information

Ecotoxicity: Not expected to be hazardous to the aquatic environment in its present form.

Persistence and degradability: No data available on product mixture.

Bio-accumulative potential: No data available on product mixture.

Mobility in soil: No data available on product mixture.

Other adverse effects: No other adverse environmental effects known.

13. Disposal considerations

Disposal instructions

Dispose of in accordance with applicable federal, state, and local regulations. Do not discharge into drains, water courses or onto the ground.

Local disposal regulations

Dispose of in accordance with local regulations.

Waste from residues/unused products

Care must be taken to prevent environmental contamination from the use of this material. The user has the responsibility to dispose of unused material, residues, and containers in compliance with all relevant laws and regulations. Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.

Contaminated packaging

Dispose of in accordance with federal, state and local regulations.

14. Transport information**DOT**

UN number: UN0014

UN proper shipping name: Cartridges for tools, blank

Transport hazard class(es) 1.4S

Packing group: None (use PG II packaging)

Special precautions for users: This material is a dangerous good for transport. All involved staff must be appropriately trained. Eligible for shipment as a limited quantity per 49 CFR 173.63(b).

IATA

UN number: UN0014

UN proper shipping name: Cartridges for tools, blank

Transport hazard class(es) 1.4S

Packing group: II (use PG II packaging)

Special precautions for users: This material is a dangerous good for transport. All involved staff must be appropriately trained. Not a limited quantity by international air, but exempted from US government variation USG-13. Exempted from USG-5 by 49 CFR 173.56(h).

IMDG

UN number: UN0014

UN proper shipping name: Cartridges for tools, blank

Transport hazard class(es): 1.4S

Packing group: II (use PG II packaging)

Special precautions for users: This material is a dangerous good for transport. All involved staff must be appropriately trained. Eligible for shipment as a limited quantity.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper (5000 lbs); Zinc (1000 lbs); Nitroglycerine (10 lbs)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories:	Immediate Hazard: No
	Delayed Hazard: Yes
	Fire Hazard: No
	Pressure Hazard: Yes
	Reactivity Hazard: No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Copper (7440-50-8); Zinc (7440-66-6); Nitroglycerin (55-63-0)

US state regulations

US. Massachusetts RTK - Substance List

Copper (7440-50-8); Zinc (7440-66-6); Nitrocellulose (9004-70-0); Nitroglycerin (55-63-0); Lead styphnate (15245-44-0); Barium Nitrate (10022-31-8)

US. New Jersey Worker and Community Right-to-Know Act

Copper (7440-50-8); Zinc (7440-66-6); Nitrocellulose (9004-70-0); Nitroglycerin (55-63-0); Lead styphnate (15245-44-0); Barium Nitrate (10022-31-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Copper (7440-50-8); Zinc (7440-66-6); Nitrocellulose (9004-70-0); Nitroglycerin (55-63-0); Barium Nitrate (10022-31-8)

US. Rhode Island RTK

Copper (7440-50-8); Zinc (7440-66-6); Nitroglycerin (55-63-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This product contains a chemical known to the state of California to cause cancer, birth defects, or other reproductive harm.

Toxic Substance Control Act

Components of this product are listed on the United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory.

16. Other Information, including date of preparation or last revision

Issue date: May 5, 2018
Revision date: September 3, 2020
Version: Revision 1

Disclaimer

The information in this safety data sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. The information in the sheet was written based on the best knowledge and experience currently available and is believed to be reliable and up to date as of the date of publication, but no warranty is expressed or implied. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

Product Identifier

Version:

