

Safety Data Sheet

Mirachem Gun Cleaner (Use Dilution)

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY

Product name: Identified uses:	Mirachem Gun Cleaner (Use Dilution) Cleaner for removing lubricants, oils and gun powder residues from firearms. Use only for the purposes indicated on the label.		
Company:	Mirachem, LLC P.O. Box 14059 Phoenix, Arizona 85063-4059 USA		
Email address : Customer service:	<u>SDS@mirachem.com</u> USA (English)	Telephone:	1 (800) 847-3527
Emergency phone number(s)	USA (English) Chemtrec (US)	Telephone: Telephone:	1 (800) 847-3527 1 (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification GHS Label Elements	ACUTE AQUATIC HAZARD – Category 3
Pictogram Signal word Hazard statements	None required. None required. Harmful to aquatic life (H402)
Precautionary Statements	
Prevention: Response: Storage: Disposal:	Avoid release to the environment (P273) None required, None required. Dispose of contents/container in accordance with local/regional/national/international regulations (P501). See SECTION 13 – DISPOSAL CONSIDERATIONS, for additional waste disposal information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization:	Mixture (water based)	
Ingredient:	CAS Number	Percent
Proprietary surfactant blend*	Trade Secret	< 2

* Composition of this ingredient is a trade secret.

4. FIRST AID MEASURES

Protection of First-Aiders:	First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTON, for specific personal protective equipment.
Inhalation:	No adverse effects are anticipated. Remove to fresh air. If breathing is difficult, get medical assistance.
Eye contact:	May cause mild temporary irritation. If eye irritation develops, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation persists.
Ingestion:	No adverse health effects are anticipated. If swallowed, treat symptomatically and supportively. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. If adverse health effects develop, persist or are severe, seek medical attention. Never give anything by mouth to an unconscious person.
Skin contact:	No adverse effects expected. Prolonged or repeated exposure may cause mild irritation or drying of skin. If on skin, wash with plenty of water. If irritation develops or persists, get medical attention.
Symptoms and effects, both acute and delayed:	Aside from the information provided above and below, no additional symptoms and effects are anticipated.
Notes to physician:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate pre- existing dermatitis.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Do not use direct water stream. May spread fire.
Unusual fire and explosion hazards:	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products:	Decomposition products may include the following materials; carbon dioxide, carbon monoxide, nitrogen oxides.
Special precautions for fire fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving personal risk or without suitable training.
Special protective equipment for fire fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to SECTION 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION. Refer to SECTION 7 – HANDLING AND STORAGE, for additional precautionary measures.
Environmental precautions:	Prevent from entering into soil, ditches, storm sewers, waterways and/or ground water. See SECTION 12 – ECOLOGICAL INFORMATION for additional information.
Methods for cleaning up:	Contain spilled material; keep from entering soil, surface waters or sewers.
	Small Spills: Clean up with absorbent and collect absorbent for disposal in accordance with Federal, State or local disposal requirements.
	Large Spills: Dike or otherwise contain spilled material to insure runoff does not reach a waterway. Collect and drum off material for disposal in accordance with Federal, State or local disposal requirements. Notify local, state or federal authorities if required. Rinse with water. See SECTION 13 – DISPOSAL CONSIDERATIONS and SECTION 15 – REGULATORY REQUIREMENTS for additional information.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid contact with eyes. Keep container closed. Promptly clean up spills. See SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION for additional information.
Conditions for safe storage, including incompatibilities:	Keep containers tightly closed. Protect from freezing; may rupture or degrade product. Store between 40°F (4°C) and 110°F (43°C). Keep out of reach of children.
Recommended packaging materials:	Use original container or clean plastic (polyethylene) containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	None established (under ACGIH or OSHA.)
Engineering controls:	No special requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Eye/Face protection:	Wear safety glasses with side shields or chemical goggles where conditions may cause eye exposure.
Skin protection:	Under intended handling conditions, no protective clothing should be needed. Use protective clothing as required for the situation. Where diluted product is heated to > 120°F, wear thermal protective gloves, sleeves and apron.
Hand protection:	Under intended handling conditions, no protective gloves are required. Use protective gloves as required for the situation. Nitrile, vinyl or latex gloves of 4 mil thickness or greater are recommended. Where diluted product is heated to > 120°F, wear thermal protective gloves.
Respiratory protection:	Under intended handling conditions, no respiratory protection is needed.
Personal hygiene:	Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear pourable liquid, water- white to light yellow	Vapor pressure @ 20°C @ 37°C
Odor: Odor threshold: pH: Melting point: Freezing point: Initial boiling point: Flash point: Evaporation rate:	Fresh mild detergent Not established 9.5 Not applicable to liquids 32°F (0 °C) 212°F (100°C) Not established > 1 (Butyl Acetate = 1)	Vapor density (air = 1) Relative density: Solubility in water: Partition coefficient: Auto-ignition temperature: Decomposition temperature: Viscosity @ 20°C: Liquid density @ 20°C:
Flammability: Flammable limits in air:	Not classified Not established	VOC**

< 0.01 mm Hg* < 0.01 mm Hg* > 1 Not established Complete Not established Not established Not established < 100 cSt 1.0 g/cm³ 17.5 g/l (0.15 lb./gal)

- * Absolute (calculated)
- ** The VOC in this product has a vapor pressure of less than 0.1 mm Hg. Under many jurisdictions, this is classified as a low vapor pressure VOC. This material is <u>not</u> listed as a "Hazardous Air Pollutant (HAP)" under the Clean Air Act (CAA) list of volatile or organic hazardous air pollutants.

10. STABILITY AND REACTIVITY

Chemical stability & reactivity:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid:	No specific data.
Incompatible materials:	Avoid contact with strong acids, strong bases or strong oxidizers.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce CO ₂

11. TOXICOLOGICAL INFORMATION

The GHS health hazard classifications have been calculated adhering to GHS guidelines for mixtures. The Acute Toxicity Estimates for this mixture (ATE_{mix}) are representative of these calculations.

Acute Toxicity:

Oral: Dermal: Inhalation: Other routes:	Not classified Not classified No relevant data available. Not applicable.	> 2,500 mg/kg > 2,500 mg/kg	
Skin corrosion/irritation:	Does not meet the requirements for classification. Non-irritating.		
Serious eye damage/irritation:	Does not meet the requirements for classification. Non-irritating.		
Skin sensitization:	No component of this mixture is known to be a skin sensitizer.		
Respiratory sensitizer:	No relevant data available.		
Chronic Toxicity:			
Mutagenicity:	No component of this mixture is known to be a mutagen or a genotoxin.		
Carcinogenicity:	No component of this mixture is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.		
Teratogenicity:	No component in this mixture is known to be a teratogen.		
Developmental / fertility effects:	No known significant effects or critical hazards.		
Specific Target Organ Toxicity (STOT) Aspiration hazard:	- 3	No relevant data available No relevant data available	

12. ECOLOGICAL INFORMATION

The GHS environmental hazard classifications have been calculated adhering to GHS guidelines for mixtures. The Acute Toxicity Estimates for this mixture (ATE_{mix}) are representative of these calculations.

Toxicity:

Acute Aquatic Toxicity Chronic Aquatic Toxicity	Fish Crustacea Algae No relevant data	Category 3 Category 3 No relevant data a available.	$\begin{array}{c} LC_{50} \mbox{ ATE}_{mix} \\ EC_{50} \mbox{ ATE}_{mix} \\ \mbox{available.} \end{array}$	> 10 but < 100 mg/l > 10 but < 100 mg/l
Persistence and degradability: Bioaccumulative potential: Mobility in soil:	The individual c No relevant data No relevant data	a available.	ture are readily biode	gradable.

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. Rinse container before disposal. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff with soil and waterways.

RCRA Classification:

Unused disposed material is *not* a RCRA Hazardous Waste.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, State and local waste disposal requirements may be more restrictive or otherwise different from Federal laws and regulations.

14. TRANSPORT INFORMATION

UN Number: UN Proper Shipping Name: ADR (EU Carriage): AND/ADNR (Inland water):	N/A N/A Not regulated Not regulated	Transportation Hazard Class: UN Packing Group: RID (Rail) ICAO/IATA (Air)	N/A None Not regulated Not regulated
IMO/IMDG (Marine): DOT Shipping Name: NMFC Freight Class:	Not regulated Non-regulated Compound, Cleaning Fluid,	DOT Hazard Classification: NOI 48580 Sub 3	N/A
HS Tariff Classification (Schedule B) Special Precautions:	3402.90.5030 No known special precautic	ons.	

15. REGULATORY INFORMATION

US Federal Regulations

SARA Title III		
Section 302 – Extremely Hazardous Substance	This product does not contain chemicals at levels which requistatue.	ire reporting under this
Section 302.4 & 304: CERCLA: Hazardous Substances	Releases of this product to air, land, or water are not reportal Center under the Comprehensive Environmental Response, Act (CERCLA) or to state and local emergency planning com Amendments and Reauthorization Act (SARA) Title III Sectio	Compensation, and Liability mittees under the Superfund
Sections 311 & 312	Immediate (acute) Health Hazard Delayed (chronic) Health Hazard Fire Hazard Reactive Hazard Sudden Release of Pressure	No No No No
Section 313	This product does not contain chemicals at levels which requistatue.	ire reporting under this
<u>TSCA</u>	All chemical substances in this material are included on or ex TSCA Inventory of Chemical Substances.	empted from listing on the

US State Regulations

Arizona	Maricopa County	Under the definitions of Rule 331, this product is considered a Low-VOC cleaner.
California	California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)	This product does not contain any materials currently listed by California as chemicals known to cause cancer or known to have reproductive toxicity under Proposition 65.

International Regulatory Information

Notice: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warrantee, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with their Federal, State/Province, and local laws. The following specific information is made for the purpose of complying with numerous specific foreign regulations.

Country Substance (Chemical) Inventories

Canada	DSL	The individual components of this mixture are listed.
United States	TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

Other International Regulations:

Canada Non-controlled under WHMIS.

16. OTHER INFORMATION

HMIS Rating:



All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Mirachem shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current status of scientific and technical knowledge.