

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	REPULS®: MK-3, MK-4, MK-9, MK-20
Synonyms	Violent perpetrator suppressant
MSDS Number	D14037
Company Identification	Crotega Safety Solutions 5448 Douglas Dr N Minneapolis, MN 55429
Telephone	Crotega Safety Solution 612.547.3207 CHEMTREC 800.424.9300

2. HAZARDS IDENTIFICATION

Form	Slightly viscous liquid
Color	Blue
Odor	Sharp, pungent
GHS Classification	Acute toxicity, Oral (Category 1) Skin irritation (Category 0) Eye irritation (Category 1)

Pictogram**Signal Word** Warning**Hazard Statement(s)**

H303	May be harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H229	Pressurized container; may burst if heated

Precautionary Statement(s)

P264	Wash skin thoroughly after handling
P305 + P351 + P338 + P302 + P352	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists, get medical attention
P362	Take off contaminated clothing and wash before reuse
P501	Dispose of contents/container to an approved waste disposal plant
P412	Do not expose to temperatures exceeding 50°C/122°F
EUH210	Safety Data Sheets available upon request

Potential Acute Health Effects

Inhalation	Mist or vapors can cause irritation of the respiratory system
Ingestion	Can cause irritation of the mouth, esophagus and mucous membranes
Skin	Can cause skin irritation on repeated or prolonged contact
Eyes	Can cause eye irritation on prolonged or repeated contact

See section 11 for more detailed information on health effects and symptoms

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	WT %
Ammonium Propionate (AP)	17498-08-1	23.75–24.25
Propionic Acid	79-09-4	7–9
Ammonium Citrate	3012-65-5	~1.5
Surfactant	68439-46-3	~0.17
Water	7732-18-5	Balance

4. FIRST AID MEASURES

Eye Contact	In the event of contact, flush with water for 15 minutes. Get medical attention if symptoms persist.
Skin Contact	Wash thoroughly with soap and water in the event of contact. Get medical attention if symptoms persist.
Inhalation	If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Drink large quantities of water. Induce vomiting. Get immediate medical attention.
Protection of First Aid Personnel	No action shall be taken involving any personal risk or without suitable training.

5. FIRE-FIGHTING MEASURES

Flammability of the Product	Not flammable or combustible
Flash Point	>200°F (93°C)
Auto Ignition Temperature	Not determined
Extinguishing Media	
Suitable	Water spray, dry chemical, carbon dioxide and foam
Not Suitable	Not available
Special Fire-Fighting Procedures and Hazards	None
Unusual Fire and Explosion Hazards	None

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment recommended in Section 8. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Never exceed any occupational exposure limit.
Environmental Precautions	Contain to prevent loss to the environment. Collect excess material. Flush residual material to a sanitary sewer.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
Storage	Keep container tightly closed. Store at ambient temperatures. Freezes at -15°F (-26°C). Freezing does not deteriorate the product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient Name	ACGIH TLV	OSHA PEL
Propionic Acid	10 ppm	10 ppm (30 mg/m ³) TWA
Engineering Measures	None normally required	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.	
Respiratory	None normally required. However, respiratory protection may be required to avoid overexposure when handling indoors and in large quantities.	
Eyes and Face	Wear eye protection when training in the use of this product.	
Skin	Prevent contact with this product unless used as designed. Wear gloves and protective clothing depending on condition of use.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Blue, slightly viscous liquid
Odor	Sharp, pungent
pH	5.6–5.8
Water Solubility	Complete
Vapor Density (air = 1)	Not determined
Evaporation Rate (butyl acetate = 1)	Not determined
Boiling Point	>212°F (100°C)
Freezing Point	-15°F (-26°C)
Specific Gravity (H₂O = 1 @ 70 °F)	1.047–1.053
Vapor Pressure	Not determined
Volatile Organic (VOC) Content	None

10. STABILITY AND REACTIVITY

Stable	X
Unstable	
Hazardous Polymerization:	
Occurs	
Does Not Occur	X

11. TOXICOLOGICAL INFORMATION

Eye	Can cause eye irritation on prolonged or repeated contact. <i>Eye irritant – rabbit</i>
Dermal	Can cause skin irritation on repeated or prolonged contact. <i>Not a contact sensitizer – guinea pig (Buehler method)</i> <i>Slight irritant – rabbit</i>
Inhalation	Mist or vapors can cause irritation of the respiratory system. <i>LC50 – 2.04 mg/L – rat</i>
Oral	Can cause irritation of the mouth, esophagus and mucous membranes. <i>LD50 – 5000 mg/kg – rat</i>
Potential Chronic Health Effects	
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP or OSHA.
Mutagenicity	No data available
Teratogenicity	No data available
Developmental Effects	No data available
Fertility Effects	No data available

12. ECOLOGICAL INFORMATION

Biodegradability	No data available
Ecotoxicity	No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose of in accordance with all local, state and federal regulations.
RCRA	This material is not listed as a hazardous waste if and when it is discarded. <i>Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.</i>

14. TRANSPORTATION

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

US DOT 49 CFR 172.101

	Ground	Air
Proper Shipping Name	LTD QTY	Aerosol, nonflammable
Hazard Class	Not applicable	2.2
Identification Number	Not applicable	UN1950
Packing Group	Not applicable	Not applicable
Placards/Labels	Not applicable	Not applicable

INTERNATIONAL TRANSPORTATION REGULATIONS

Regulations vary from country to country. Check regulations for your country.

	Ground	Air	Oceans
Proper Shipping Name	LTD QTY	Aerosol, non-flamable	Aerosol, non-flamable
Hazard Class	Not applicable	2.2	2.2
Identification Number	Not applicable	UN1950	UN1950
Packing Group	Not applicable	Not applicable	None
Placards/Labels	Not applicable	2.2 LTD QTY	2.2 LTD QTY

15. REGULATORY INFORMATION

SARA Title III Section 313

This product does not contain any chemicals listed in 40 CFR 372.65 as toxic chemicals requiring notification.

Clean Water Act (CWA) Section 311

The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA: water, Ammonium Propionate, Nitrogen, Propionic Acid

TSCA – Toxic Substances Control Act

All components of this product are listed on the Toxic Substances Control Act Inventory or are excluded from listing requirements.

RCRA – Resource Conservation and Recovery Act

The requirements of the federal hazardous waste regulations do not apply unless the waste fails to pass any of EPA's four tests for determining hazardous wastes. *Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.*

State Regulations

Massachusetts

RTK Substances: The following components are listed: Propionic Acid

New Jersey

RTK Substances: The following components are listed: Propionic Acid, Citric Acid

Pennsylvania

RTK Substances: The following components are listed: Propionic Acid, Citric Acid

California

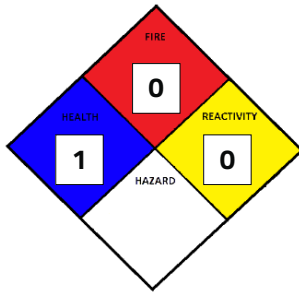
Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

16. OTHER INFORMATION

Date of Issue

03/05/21

NFPA



HMIS

HEALTH	1	Caution: NFPA and HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them.
FLAMMABILITY	0	
PHYSICAL HAZARDS	0	
PPE		The customer is responsible for determining the PPE code for this material.

Notice to Reader

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