SAFETY DATA SHEET
MG 4-Quat

Printed: 03/11/2019
Revision: 03/11/2019
Supersedes Revision: 02/14/2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-225-BULK

Product Name: MG 4-Quat

Company Name: Morgan-Gallacher, Inc.
8707 Millergrove Drive
Santa Fe Springs, CA 90670

Phone Number: +1 (562)695-1232

Emergency Contact: CHEMTREC

Phone Number: +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 1C
Serious Eye Damage/Eye Irritation, Category 1
Flammable Liquids, Category 4

GHS Signal Word: **Danger**

GHS Hazard Phrases:
Combustible liquid.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Causes serious eye damage.

GHS Precautionary Phrases:
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Do not get in eyes, on skin, or on clothing.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes.
Get immediate medical advice/attention.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.
IF ON SKIN: Wash with plenty of water. If skin irritation occurs, get medical advice/attention.

GHS Storage and Disposal Phrases:
Store in cool/well-ventilated place.
Store locked up.
Dispose of contents/container in accordance to local, state and federal regulations.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin Contact: May cause a burning sensation of the skin. May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation. Causes eye burns.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
68424-85-1	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	< 5.0 %
32426-11-2	1-Decanaminium, N,N-Dimethyl-N-octyl-, chloride	< 5.0 %
5538-94-3	1-Octanaminium, N,N-Dimethyl-N-octyl-, chloride	< 5.0 %
7173-51-5	1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride	< 5.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. Get medical aid.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

In Case of Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention. Gently lift eyelids and flush continuously with water. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical advice/attention.

In Case of Ingestion: Never give anything by mouth to an unconscious person. If swallowed, do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.

Note to Physician: Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt: 116.60 F

Explosive Limits: LEL: No data UEL: No data

Autoignition Pt: NA

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Flammable Properties and Hazards: No data available.

Hazardous Combustion Products: Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NOx), Further information.
Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Observe all federal, state, and local environmental regulations. Do not let product enter drains, sewers, watersheds or water systems.

Steps To Be Taken In Case Material Is Released Or Spilled: Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid breathing vapors, mist or gas.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid contact with eyes, skin, and clothing. Avoid breathing dust, mist, or vapor. Use only with adequate ventilation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Take precautionary measures against static discharges. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Do not allow to evaporate to near dryness.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from heat, sparks and flame. Keep from contact with oxidizing materials. Do not store in direct sunlight. Store in a tightly closed container. Flammables-area. Protect containers against damage. Keep container closed when not in use.

Other Precautions: Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Handle in accordance with good industrial hygiene and safety practice. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
68424-85-1	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	No data.	No data.	No data.
32426-11-2	1-Decanaminium, N,N-Dimethyl-N-octyl-, chloride	No data.	No data.	No data.
5538-94-3	1-Octanaminium, N,N-Dimethyl-N-octyl-, chloride	No data.	No data.	No data.
7173-51-5	1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride	No data.	No data.	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Transparent.
pH:	6.0 - 8.0
Melting Point:	NP
Boiling Point:	NA
Flash Pt:	116.60 F
Evaporation Rate:	NA
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data UEL: No data
Vapor Pressure (vs. Air or mm Hg):	NA
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	0.99 - 1.01
Solubility in Water:	100%
Saturated Vapor Concentration:	NA
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	NA
Autoignition Pt:	NA
Decomposition Temperature:	NA
Viscosity:	NA

10. STABILITY AND REACTIVITY

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Avoid extremely high temperature. Keep from contact with oxidizing materials.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, Anionic Surfactants.
Hazardous Decomposition or Byproducts:	Carbon oxides, Hydrogen chloride gas, nitrogen oxides (NOx), irritating and toxic fumes and gases.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Epidemiology: No data available.
Teratogenicity: No data available.
Mutagenicity: No data available.
Neurotoxicity: No data available.
Reproductive toxicity - no data available.
Respiratory or skin sensitization:

CAS# 7173-51-5: 1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride: Acute toxicity, LD50, Oral, Rat, 84.00 MG/KG.

Irritation or Corrosion:

Other Studies: CAS# 68424-85-1:
Acute toxicity, LD, Oral, Rat,426 mg/kg

Other Studies: CAS# 68424-85-1:
Standard Draize Test, Skin, Species: Rabbit, 25 mg, 24 H

Carcinogenicity/Other Information:

IARC: 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
68424-85-1	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	n.a.	n.a.	n.a.	n.a.
32426-11-2	1-Decanaminium, N,N-Dimethyl-N-octyl-, chloride	n.a.	n.a.	n.a.	n.a.
5538-94-3	1-Octanaminium, N,N-Dimethyl-N-octyl-, chloride	n.a.	n.a.	n.a.	n.a.
7173-51-5	1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Results of PBT and vPvB assessment:

Other Studies: CAS# 5538-94-3:
LC50, Fathead Minnow (Pimephales promelas), 5.2ppm, 96H

Other Studies: CAS# 7173-51-5:
LC50, Water Flea (Daphnia magna), 160 ug/L, 48H
LC50, Fathead Minnow (Pimephales promelas), larvae, 470 ug/L, 24H
LC50, Rainbow trout (Oncorhynchus mykiss), 750 ug/L, 48H

Other Studies: CAS# 68424-85-1:
LC50, Rainbow trout (Oncorhynchus mykiss), 1.600ppm, 96H, Mortality

LC50, Striped bass (Morone saxatilis), 2820 ug/L, fry, 24H, Mortality

Persistence and Degradability: Product is biodegradable.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Disinfectants, liquid, corrosive n.o.s. (Quaternary Ammonium Chloride)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN1903 **Packing Group:** II

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
68424-85-1	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	No	No	No
32426-11-2	1-Decanaminium, N,N-Dimethyl-N-octyl-, chloride	No	No	No
5538-94-3	1-Octanaminium, N,N-Dimethyl-N-octyl-, chloride	No	No	No
7173-51-5	1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[ ] Yes [X] No	Explosive	[X] Yes [ ] No	Acute toxicity (any route of exposure)
[X] Yes [ ] No	Flammable (gases, aerosols, liquid, or solid)	[X] Yes [ ] No	Skin Corrosion or Irritation
[ ] Yes [X] No	Oxidizer (liquid, solid or gas)	[X] Yes [ ] No	Serious eye damage or eye irritation
[ ] Yes [X] No	Self-reactive	[ ] Yes [X] No	Respiratory or Skin Sensitization
[ ] Yes [X] No	Pyrophoric (liquid or solid)	[ ] Yes [X] No	Germ cell mutagenicity
[ ] Yes [X] No	Pyrophoric gas	[ ] Yes [X] No	Carcinogenicity
[ ] Yes [X] No	Self-heating	[ ] Yes [X] No	Reproductive toxicity
[ ] Yes [X] No	Organic peroxide	[ ] Yes [X] No	Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No	Corrosive to metal	[ ] Yes [X] No	Aspiration Hazard
[ ] Yes [X] No	Gas under pressure (compressed gas)	[ ] Yes [X] No	Simple Asphyxiant
[ ] Yes [X] No	In contact with water emits flammable gas	[ ] Yes [X] No	(Health) Hazard Not Otherwise Classified (HNOC)
[ ] Yes [X] No	Combustible Dust		
[ ] Yes [X] No	(Physical) Hazard Not Otherwise Classified (HNOC)		

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
68424-85-1	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No

32426-11-2	1-Decanaminium, N,N-Dimethyl-N-octyl-, chloride	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
5538-94-3	1-Octanaminium, N,N-Dimethyl-N-octyl-, chloride	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
7173-51-5	1-Decanaminium, N-Decyl-N,N-dimethyl-, chloride	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No

Regulatory Information: This product is considered a pesticide, and therefore excluded from US TSCA regulations.

16. OTHER INFORMATION

Revision Date: 03/11/2019

Additional Information About This Product: No data available.

Company Policy or Disclaimer: While Morgan-Gallacher believes the statements set forth herein are accurate as of the date hereof, Morgan-Gallacher makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.