

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: MORGAN-270-BULK
Product Name: K-Shine Special No. 4
Company Name: Morgan-Gallacher, Inc.
 8707 Millergrove Drive
 Santa Fe Springs, CA 90670
Emergency Contact: CHEMTREC

Phone Number:
 +1 (562)695-1232
 +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Oxidizing Liquids, Category 3
Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Acute Toxicity: Oral, Category 4
Corrosive To Metals, Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases: May intensify fire; oxidizer.
 May be corrosive to metals.
 Harmful if swallowed.
 Causes severe skin burns and eye damage.
 Causes serious eye damage.

GHS Precaution Phrases: Keep out of reach of children.
 Read label before use.
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Keep away from combustible materials.
 Do not get in eyes, on skin, or on clothing.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Wash hands thoroughly after handling.
 Take any precaution to avoid mixing with Alkaline or chlorinated products....

GHS Response Phrases: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
 Get immediate medical advice/attention.
 Wash contaminated clothing before reuse.
 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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 If experiencing respiratory symptoms: Get medical advice/attention.

GHS Storage and Disposal Phrases: 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: Inhalation may cause irritation, coughing, sore throat, and in extreme cases, pulmonary edema.

Skin Contact: Corrosive, causes skin burning. Readily absorbed through skin.

Eye Contact: Causes severe eye burns. Causes serious eye damage.

Ingestion: Ingestion can cause severe irritation and/or burns to the gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7697-37-2	Nitric acid	<45.0 %
7664-38-2	Phosphoric acid	<10.0 %
75-75-2	Methanesulfonic acid	< 5.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

In Case of Inhalation: If breathed in, move person into fresh air. Consult a physician.

In Case of Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

In Case of Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. 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: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

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: No data available.

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.
Steps To Be Taken In Case Material Is Released Or Spilled:	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Spill residues may be neutralized with dilute alkaline solution of soda ash or lime.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Do not store near combustible materials. Do not add water to this product. Store away from incompatible substances. reducing agents, combustible materials, organic materials, metal alkalis and moisture.
Precautions To Be Taken in Storing:	Store away from incompatible substances. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7697-37-2	Nitric acid	PEL: 2 ppm	TLV: 2 ppm STEL: 4 ppm	No data.
7664-38-2	Phosphoric acid	PEL: 1 mg/m3	TLV: 1 mg/m3 STEL: 3 mg/m3	No data.
75-75-2	Methanesulfonic acid	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 or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
Eye Protection:	Wear chemical splash goggles and face shield.
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.
Environmental Exposure Controls:	Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Reddish. Purple. Transparent. Liquid.	
pH:	< 3.0	
Melting Point:	No data.	
Boiling Point:	No data.	
Flash Pt:	No data.	
Evaporation Rate:	No data.	
Flammability (solid, gas):	No data available.	
Explosive Limits:	LEL: No data.	UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.	
Vapor Density (vs. Air = 1):	No data.	
Specific Gravity (Water = 1):	1.18 - 1.20	
Density:	9.92 LB/GA	
Solubility in Water:	No data.	
Octanol/Water Partition Coefficient:	No data.	
Autoignition Pt:	No data.	
Decomposition Temperature:	No data.	
Viscosity:	No data.	

10. STABILITY AND REACTIVITY

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Extremes of temperature and direct sunlight. Incompatible materials, flames and sparks.
Incompatibility - Materials To Avoid:	Alkali metals, Organic materials, acetic anhydride, Acetonitrile, Alcohols, acrylonitrile, ammonia, Crotonaldehyde. halogenated hydrocarbons, Bases, Metals, Hexalithium disilicide, This product can react with chemically reactive metals, such as, aluminum, zinc, magnesium, copper, etc. Releases hydrogen gas which forms explosive mixture with air. ketones, Water. Fluorine. Amines, Thiols. Cadmium, bromine, copper, hydrazine, Hydrazinium nitrate, Nitro compounds, Cyanides. Phosphorus trihydride (phosphine) Diphosphine, halides, Organic halides, May set fire to wood or paper. Polyethers, methyl vinyl ether.
Hazardous Decomposition or Byproducts:	Carbon oxides, oxides of phosphorus, nitrogen oxides (NOx), hydrogen gas, Phosphine, 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.
 Reproductive Effects: No data available.
 Mutagenicity: No data available.
 Neurotoxicity: No data available.

CAS# 7664-38-2: Phosphoric acid: Acute toxicity, LDLO, Route of Application: Unreported., Human, 220.0 MG/KG.
 Acute toxicity, LD50, Oral, Rat, 1530. MG/KG.
 Acute toxicity, LC50, Inhalation, Rat, > 850.0 MG/M3, 1 H.
 Acute toxicity, LD50, Skin, Species: Rabbit, 2740. MG/KG.
 Standard Draize Test, Skin, Species: Rabbit, 595.0 MG, 24 H.
 Standard Draize Test, Eyes, Species: Rabbit, 119.0 MG.

CAS# 75-75-2: Methanesulfonic acid: Acute toxicity, LD50, Oral, Rat, 200.0 MG/KG.
 Acute toxicity, LD50, Skin, Species: Guinea pig, > 2.000 GM/KG.
 Acute toxicity, LD50, Oral, Quail, 1.000 GM/KG.

Irritation or Corrosion: Other Studies: CAS# 7697-37-2:
 Acute toxicity, LC50, Inhalation, Rat, 67.00 ppm (NO2), 4 H.

Carcinogenicity/Other Information: CAS# 7664-38-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

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

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7697-37-2	Nitric acid	n.a.	n.a.	n.a.	n.a.
7664-38-2	Phosphoric acid	n.a.	n.a.	n.a.	n.a.
75-75-2	Methanesulfonic acid	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information available.
 Physical: No information available.

CAS# 7697-37-2: Nitric acid: 100% mortality or 0% survival of organism., Brook Trout (Salvelinus fontinalis), 1562.5 UG/L, Mortality.
 LC50, Green Or European Shore Crab (Carcinus maenas), adult(s), 180000. UG/L, 48 H, Mortality.
 LC50, Cockle (Cerastoderma edule), adult(s), 330000. - 1000000. UG/L, 48 H, Mortality.
 LC50, Hooknose (Agonus cataphractus), adult(s), 100000. - 330000. UG/L, 48 H, Mortality.
 LC50, Starfish (Asterias rubens), adult(s), 100000. - 330000. UG/L, 48 H, Mortality.

CAS# 7664-38-2: Phosphoric acid: Not reported., Rainbow Trout (Oncorhynchus mykiss), fingerling, 5.190 %, 27 W, Growth.
 Not reported., Rainbow Trout (Oncorhynchus mykiss), fingerling, 5.190 %, 27 W, Feeding Behavior.
 Not reported., Rainbow Trout (Oncorhynchus mykiss), fingerling, 5.190 %, 27 W, Mortality.

Results of PBT and vPvB assessment: Other Studies: CAS# 7697-37-2:
 LC50, Cockle (Cerastoderma edule), adult(s), 330000 - 1000000 ug/L, 48H, Mortality
 LC50, Starfish (Asterias rubens), adult(s), 100000 - 330000 ug/L, 48H, Mortality

Other Studies: CAS# 7664-38-2:

Not reported. Rainbow Trout (*Oncorhynchus mykiss*), fingerling, 5.190%, 27 W

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Observe all federal, state, and local environmental regulations. 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. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid, Phosphoric Acid)

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN3264

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)
7697-37-2	Nitric acid	Yes 1000 LB	Yes 1000 LB	Yes
7664-38-2	Phosphoric acid	No	Yes 5000 LB	No
75-75-2	Methanesulfonic acid	No	No	No

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

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

CAS # Hazardous Components (Chemical Name)

Other US EPA or State Lists

7697-37-2	Nitric acid	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: Yes - 1356; NY Part 597: Yes: HS; PA HSL: Yes - E
7664-38-2	Phosphoric acid	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC: Cat. IIb, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: No; NY Part 597: Yes: HS;

75-75-2 Methanesulfonic acid

PA HSL: Yes - E
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

16. OTHER INFORMATION

Revision Date: 08/31/2018

Additional Information About This Product: No data available.

This Product:

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.