SECTION 1 IDENTIFICATION

Product Trade Name: Sapphire
Recommended Use: Ready to Use Glass Cleaner
Restrictions on Use: For Industrial and Institutional use only
Manufacturer: Maxim Chemical International Inc.
1607 Derwent Way, Delta, B.C. Canada V3M 6K8
(800) 663-9925
Emergency Phone Number/ 24-Hour Number: Canada: Canutec 613-996-6666
U.S.A.: Chemtrec 800-424-9300

SECTION 2 HAZARD IDENTIFICATION

Physical Hazards: None
Health Hazards: Non-hazardous
Label Elements: No pictogram
Signal word: Non-hazardous
Hazard Statement: Non-hazardous

Precautionary Statements:
Prevention: Not regulated.
Responses: Not regulated.
Storage: Not regulated. Store in a cool, dry place. Keep container tightly closed. Keep out of reach of children.
Disposal: Not regulated. Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Approx. Wt.%	CAS Number
No Hazardous Ingredients		

SECTION 4 FIRST-AID MEASURES

Inhalation: Immediately remove the affected victim to fresh air. If symptoms persist, obtain medical attention.
Skin Contact: Immediately flush exposed area with soap and water for at least 10 minutes. If irritation persists, or if contact has been prolonged, obtain medical attention. Remove contaminated clothing and launder before reuse.
Eye Contact: Immediately flush with warm running water for at least 15 minutes, holding eyelids open during flushing. Remove contact lenses, if present and easy to do. If irritation persists, repeat flushing and obtain medical attention immediately.
Ingestion: Do not induce vomiting. If the victim is fully conscious, give plenty of clean water to drink to dilute product. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness, or is convulsing. Call a Physician.

If irritation occurs or persists, get medical attention.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing Media: Water fog, alcohol foam, or dry chemical.
Flammability: Not flammable.
Flash Point: Not flammable.
Special Firefighting Procedures: Wear NIOSH/MSHA approved, self-contained breathing apparatus for firefighting situation. Use water spray to cool all nearby fire exposed surfaces.
Unusual Fire / Explosion Hazards: None.
Hazardous Decomposition Products: Carbon oxides

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Protection Precautions: Do not release to the environment or water source.

Steps To Be Taken In Case Material Is Released Or Spilled: Wear protective equipment. Soak up spills with absorbents, then dispose of in an appropriate waste container. Keep material away from sewers. Reuse if possible. Otherwise dispose recovered material in accordance with all local, State or Federal regulations.

SECTION 7 HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Keep out of reach of children. Store at temperatures below 30^{O}C (86^{O}F) and above 5^{O}C (41^{O}F).

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:
OSHA (PEL): N/A
ACGIH TLV: N/A
Other exposure limit: N/A
Appropriate Engineering Controls: Good general ventilation.
Individual Protection Measures / Personal Protective Equipment:
Gloves: Non-permeable gloves (rubber, nitrile) recommended.
Masks/Goggles: Not required for normal use of product. However, use chemical goggles or safety glasses when eye contact may occur.
Respirator: Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.
Apron: Not required for normal use of product.
Boots: Not required for normal use of product.
Other Protective Equipment: Eye wash, safety shower and full protective clothing recommended in the immediate work area.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear blue color.
Odor:	Mild ammonia odor.
Odor threshold:	N/A
pH:	10.0 - 11.0
Melting point/Freezing point:	N/A
Initial boiling point and boiling range:	N/A
Flash Point:	>100 ^{O}C
Evaporation Rate (Water=1):	N/A
Flammability:	Not flammable
Upper/Lower flammability or explosive limits:	None.
Vapor pressure:	N/A
Vapor density:	N/A
Relative density/Specific gravity (Water = 1):	1.01 @ 20 ^{O}C
Solubility(ies):	Soluble in water
Partition coefficient: n-octanol/water :	N/A
Auto-ignition temperature :	Not flammable
Decomposition temperature:	N/A
Viscosity:	N/A

SECTION 10 STABILITY AND REACTIVITY

Chemical stability:	Stable under normal storage conditions.
Possibility of hazardous reactions:	Adding sodium hydroxide to this material and or heating will volatize ammonia gas. Contact with iodine, bromine, calcium, hypochlorite mixtures, contact with halogens may cause violent splattering. Explosive products are formed by the reaction of ammonia with silver chloride, silver oxide, bromine, iodine, gold, mercury, tellurium halides.
Conditions to avoid:	Temperatures above 30^{O}C (86^{O}F) and below 5^{O}C (41^{O}F). Avoid contact with copper, zinc, tin, aluminum and alloys. Avoid nitric

acid, fluorine, chlorine. Avoid strong oxidizers, strong acids, halogens, mineral acids.

Incompatibility: Ammonia is incompatible or has potentially hazardous reactions with silver, acetaldehyde, acrolein, boron, halogens, perchlorate, chloric acid, chlorine monoxide, chlorides, nitrogen tetroxide, tin, sulphur cultures.

Hazardous Decomposition Products: Oxides of carbon.

SECTION 11 TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin and eye contact.
Symptoms: Non-irritant.
Acute Toxicity Estimates: Oral >2000 mg/kg, dermal >2000 mg/kg
Carcinogenicity: Not listed by NTP, IARC, OSHA, ACGIH.

SECTION 12 ECOLOGICAL INFORMATION

N/A

SECTION 13 DISPOSAL CONSIDERATIONS

Recommended Waste Disposal Methods: Reuse if possible. Otherwise dispose recovered material in accordance with all local, State or Federal regulations.

SECTION 14 TRANSPORT INFORMATION

This product is classified as "Non-flammable, Non-hazardous, Not Restricted" for Transport purposes.

Canadian TDG:
UN Number: Not regulated.
UN Proper Shipping Name: Not regulated.
Transport Hazard Class(es): Not regulated.
Packing Group: Not regulated.

SECTION 15 REGULATORY INFORMATION

HAZARD RATING INFORMATION

4=Extreme
3=High
2=Moderate
1=Slight
0=Insignificant

HMIS

0	Health
0	Flammability
0	Reactivity
A	Personal

A=Gloves, B=Goggles & Gloves
C=Goggles, Gloves and Apron

HMIS Protection Group A

All pertinent hazard information has been provided in this SDS, per the requirements of the U.S. Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and the Canadian Workplace Hazardous Materials Identification System Standards (CPR 4).

SECTION 16 OTHER INFORMATION

Acronym List:

ACGIH	American Conference of Governmental Industrial Hygienists
CFR	Code of Federal Regulations
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
MSHA	Mine Safety and Health Administration
N/A	Not available

NIOSH	The National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
TDG	Transportation of Dangerous Goods
TLV	Threshold Limit Value
UN	United Nations
WHMIS	Workplace Hazardous Materials Information System

It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. **Maxim Chemical International Inc.** will accept no liability for damages or loss incurred from the improper handling and use of this product.

The information provided in the Safety Data Sheet has been obtained from current sources and is believed to be reliable.

PREPARED BY: Technical Service/Regulatory Division LAST UPDATE: October 16, 2018