SAFETY DATA SHEET

Issuing Date 16-Sep-2013 **Revision Date** 16-Sep-2013 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name **Hillyard Quick and Clean Brass & More**

Other means of identification

Product Code(s) **HIL1065**

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Metal polish

Uses advised against No information available

Supplier's details

Supplier Address
Hillyard Industries, Inc.
302 North Fourth Street P.O. Box 909
St. Joseph, MO 64502
1-800-233-1321
www.hillyard.com

Emergency telephone number

Emergency Telephone Number 24 Hour Emergency Response 1-800-424-9300

Poison Control Center: 1-800-222-1222

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin Sensitization	Category 1
Aspiration Toxicity	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word **Danger**

Hazard Statements
- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction
- May be fatal if swallowed and enters airways

Appearance White **Physical State** Liquid. **Odor** Ammonia

Precautionary Statements

Prevention
- Wash face, hands and any exposed skin thoroughly after handling
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice
- None

Eyes
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention.

Skin
- IF ON SKIN: Wash with plenty of soap and water
- Take off contaminated clothing and wash before reuse
- If skin irritation or rash occurs: Get medical advice/attention.

Ingestion
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting.

Storage
- Store locked up.

Disposal
- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Toxic to aquatic life. Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Isoparaffinic Hydrocarbon	64742-47-8	10-30	*
Aluminum oxide	1344-28-1	10-30	*

Naphtha (petroleum), hydrotreated heavy	64742-48-9	1-5	*
Ammonia	7664-41-7	1-5	*
Sulfamic acid	5329-14-6	1-5	*
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine	4719-04-4	0.1-1	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, call a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Not an expected route of exposure. If swallowed: Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Aspiration hazard if swallowed - can enter lungs and cause damage.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO_2). Dry chemical. Water fog. Foam.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products Carbon oxides. Hydrogen. Ammonia. Amines. Nitrogen oxides (NOx). Sulfur oxides. Soot.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

Use water spray to cool surrounding containers. Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment.

Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Avoid release to the environment. See Section 12 for additional Ecological Information

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Small spillage: Wipe up with absorbent material (e.g. cloth, fleece) Large spillage: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with skin, eyes and clothing. Do not smoke. Use only with adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Store in cool/well-ventilated place. Keep out of the reach of children. Keep container closed when not in use. Keep away from heat and sources of ignition. Do not contaminate food or feed stuffs.

Incompatible Products Strong oxidizing agents. Strong acids. Halogens. Fluorine. Bleaching agents. Iodine. Amphoteric metals. Dimethyl sulfate.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum oxide 1344-28-1	TWA: 1 mg/m^3 respirable fraction	TWA: 15 mg/m^3 total dust TWA: 5 mg/m^3 respirable fraction (vacated) TWA: 10 mg/m^3 total dust (vacated) TWA: 5 mg/m^3 respirable fraction	-
Ammonia 7664-41-7	STEL: 35 ppm TWA: 25 ppm	TWA: 50 ppm TWA: 35 mg/m^3 (vacated) STEL: 35 ppm (vacated) STEL: 27 mg/m^3	IDLH: 300 ppm TWA: 18 mg/m^3 TWA: 25 ppm STEL: 27 mg/m^3 STEL: 35 ppm
Tall oil fatty acids 61790-12-3	5 mg/m^3 (resp) 10 mg/m^3 STEL (resp)	5 mg/m^3 (resp)	-

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Risk of contact, wear: Safety glasses with side-shields.
Skin and Body Protection No protective equipment is needed under normal use conditions.
Respiratory Protection None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	**Appearance**	White
Odor	Ammonia	**Odor Threshold**	No information available

Property	Values	Remarks/ - Method
pH	9	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	212 °F	None known
Flash Point	None to boiling	PMCC
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	> 1	None known
Relative Density	No data available	None known
Specific Gravity	1.091	None known
Water Solubility	Slightly soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	400 cps	None known

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) 3%

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Incompatible products.

Incompatible materials

Strong oxidizing agents. Strong acids. Halogens. Fluorine. Bleaching agents. Iodine. Amphoteric metals. Dimethyl sulfate.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen. Sulfur oxides. Soot. Ammonia. Amines.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye Contact Causes eye irritation.

Skin Contact Causes skin irritation.

Ingestion Not an expected route of exposure. Potential for aspiration if swallowed. May be fatal if swallowed and enters airways.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isoparaffinic Hydrocarbon	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Aluminum oxide	> 5000 mg/kg (Rat)	-	-
Naphtha (petroleum), hydrotreated heavy	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	-
Ammonia	= 350 mg/kg (Rat)	-	= 5.1 mg/L (Rat) 1 h = 2000 ppm (Rat) 4 h
Sulfamic acid	= 1450 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity Contains no ingredient listed as a carcinogen.

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 8691 mg/kg; Acute toxicity estimate

Inhalation

dust/mist 14.3 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isoparaffinic Hydrocarbon 64742-47-8		LC50 96 h: = 45 mg/L flow-through (Pimephales promelas) LC50 96 h: = 2.2 mg/L static (Lepomis macrochirus) LC50 96 h: = 2.4 mg/L static (Oncorhynchus mykiss)		LC50 96 h: = 4720 mg/L (Den-dronereides heteropoda)
Aluminum oxide 1344-28-1		LC50 96 h: > 100 mg/L semistatic (Salmo trutta)		LC50 48 h: > 100 mg/L (daphnia magna)
Naphtha (petroleum), hydrotreated heavy 64742-48-9		LC50 96 h: = 2200 mg/L (Pimephales promelas)		LC50 96 h: = 2.6 mg/L (Chaetogammarus marinus)

Ammonia 7664-41-7		LC50 96 h: 0.26 - 4.6 mg/L (Lepomis macrochirus) LC50 96 h: 0.73 - 2.35 mg/L (Pimephales promelas) LC50 96 h: = 0.44 mg/L (Cyprinus carpio) LC50 96 h: = 1.17 mg/L flow-through (Lepomis macrochirus) LC50 96 h: = 1.19 mg/L static (Poecilia reticulata) LC50 96 h: = 5.9 mg/L static (Pimephales promelas) LC50 96 h: > 1.5 mg/L (Poecilia reticulata)		LC50 48 h: = 25.4 mg/L (Daphnia magna)
Tall oil fatty acids 61790-12-3	EC50 72 h: >= 1000 mg/L (Pseudokirchneriella subcapitata)			
Sulfamic acid 5329-14-6		LC50 96 h: = 14.2 mg/L static (Pimephales promelas)		
Tetrapotassium pyrophosphate 7320-34-5		LC50 96 h: > 100 mg/L (Oncorhynchus mykiss)		EC50 48 h: > 100 mg/L (water flea)
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine 4719-04-4	-	-	EC50 = 28.9 mg/L 15 min	-

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Ammonia	-1.14

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Ammonia	7664-41-7	1-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonia	100 lb			X

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Ammonia	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Aluminum oxide	X	X	X		X
Ammonia	X	X	X		X
Sulfamic acid	X				

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	**Health Hazard**	2	**Flammability**	0	**Instability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazard**	2	**Flammability**	0	**Physical Hazard** 0	**Personal Protection** B

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet