MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007 Page 1 of 7 Print Date 11/29/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone:Emergency telephone:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name :	10989LG LIQUID GOLD (B)
Product code :	FO20015827
Chemical Name :	Mixture
CAS-No. :	Mixture
Product Use :	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Copper	7440-50-8	5 - 10

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye/skin irritation.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.
Medical Conditions Aggravated by Exposure:	: None known.

PolyOne.

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007 Page 2 of 7 Print Date 11/29/2011

	4. FIRST AID MEASURES
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases or doubt seek medical advice.
Ingestion	: Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.
Eyes	: Rinse immediately with plenty of water for at least 15 minutes. If ey irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: No data available
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 No data available No data available Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible. 6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or th soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
Handling	: Heat only in areas with appropriate exhaust ventilation. Processing

POLYONE CORPORATION

PolyOne.

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007 Page 3 of 7 Print Date 11/29/2011

Storage	:	fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.
8. EXPO	SU	RE CONTROLS / PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing
Additional Protective Measures	:	Safety shoes
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.
Exposure limit(s)		

PolyOne

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007 Page 4 of 7 Print Date 11/29/2011

Components	Value	Exposure time	Exposure type	List:
Copper	1 mg/m3	Time Weighted Average (TWA):	Dust and mist. as Cu	ACGIH
	0.2 mg/m3	Time Weighted Average (TWA):	Fume.	ACGIH
	1 mg/m3	PEL:	Dust and mist. as Cu	OSHA Z1
	0.1 mg/m3	PEL:	Fume. as Cu	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):	Dust and mist. as Cu	MX OEL
	0.2 mg/m3	Time Weighted Average (TWA):	Fume. as Cu	MX OEL
	2 mg/m3	Short Term Exposure Limit (STEL):	Dust and mist. as Cu	MX OEL
	2 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Cu	MX OEL
Silica, amorphous, fumed, crystal-free	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odour Melting point/range Boiling Point: Water solubility
- liquid
 Viscous, liquid
 NOT APPLICABLE
 Very faint
 Not applicable
 Not applicable
 Immiscible
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not establishedNot determinedNot applicableNot determinedNot determined
- : Not applicable

	1(). STABILITY AND REACTIVITY
Stability	:	Stable.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).

olvOn<u>e</u>

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007

Page 5 of 7 Print Date 11/29/2011

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
112945-52-5	Silica, amorphous, fumed, crystal-free	Irritant	Eyes, Respiratory system.
7440-50-8	Copper	Irritant	Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, Liver, Kidney.

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
112945-52-5	Silica, amorphous, fumed,	Oral LD50	3,160 mg/kg	rat
	crystal-free			

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: No data available
Additional advice	: No data available
	13. DISPOSAL CONSIDERATIONS
Product	: Where possible recycling is preferred to disposal or incineration. Th generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
Contaminated packaging	: Recycling is preferred when possible. The generator of waste materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Refer to specific regulation.

PolyOne.

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

ion Number 1.0 sion Date 06/29/2007					Pri	Page of the Page o
ICAO/IATA (air)	:	Refer to specific regulat	ion.			
IMO / IMDG (maritime)	:	Refer to specific regulat	ion.			
	15	. REGULATORY INFO)RMATI()N		
US Regulations:						
-		~				
OSHA Status	:	Classified as hazardous	based on c	omponent	ts.	
TSCA Status	:	All components of this p Inventory.	product are	e listed on	or exem	pt from the TSC
US. EPA CERCLA Hazardou	ıs Sub	stances (40 CFR 302)				
Not applicable						
California Propositior 65	1 :	Not applicable				
SARA Title III Section 302 E	Extrem	ely Hazardous Substance				
Unless specific chemicals are	identi	fied under this section, th	is product	is Not Ap	plicable	under this regul
1			1		ſ	
SARA Title III Section 313 T Unless specific chemicals are			is product	is Not Ap	plicable	under this regul
Chemical Name			CAS-N	0.	Weigh	t %
COPPER			7440-50		5.00 -	
ZINC (FUME OR DUST)			7440-66	-6	1.00 -	5.00
Canadian Regulations:						
	ease I					
National Pollutant Rel			No.	Weight	t %	NPRI ID#
Chemical Name		CAS-J			-	
		CAS-J 7440- 7440-	50-8	5.00 - 1		71 231

WHMIS Classification : Not controlled.

DSL

: All components of this product are on the Canadian Domestic

PolyOne

MATERIAL SAFETY DATA SHEET 10989LG LIQUID GOLD (B)

Version Number 1.0 Revision Date 06/29/2007 Page 7 of 7 Print Date 11/29/2011

		Substances List (DSL) or are exempt.		
National Inventories:				
Australia AICS	:	Not determined		
China IECS	:	Not determined		
Europe EINECS	:	Listed		
Japan ENCS	:	Not determined		
Korea KECI	:	Not determined		
Philippines PICCS	:	Not determined		
16. OTHER INFORMATION				

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.