PolyOne

MATERIAL SAFETY DATA SHEET SLD LIQUID GOLD EPIC LIQUID GOLD A48X

Version Number 1.1 Revision Date 03/30/2014

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	SLD LIQUID GOLD EPIC LIQUID GOLD A48X
Product code	:	FO20025833
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Bisphenol A - Epichlorohydrin polymer	25068-38-6	1 - 5
Zinc	7440-66-6	1 - 5
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 Eyes	May be harmful if swallowed.May cause eye and skin irritation.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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Medical Conditions	:	None known.
Aggravated by Exposure:		
		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 of 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 eye irritation persists, seek medical attention.
Skin	:	Wash off with soap and plenty of water. If skin irritation persists seek medical attention.
		5. FIREFIGHTING MEASURES
Flash point	:	no data available
Flammable Limits		
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Auto-ignition temperature	:	Not applicable
Suitable extinguishing media	:	Carbon dioxide blanket, Water spray, Dry powder, Foam.
Special Fire Fighting Procedures	:	Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards	:	May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	6. A	CCIDENTAL 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 the 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.

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		7. HANDLING AND STORAGE
Handling	:	Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.
8. EX	POSU	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.

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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	Recommended exposure limit (REL):	Dust and mist. as Cu	NIOSH
	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	OSHA Z1A
	0.1 mg/m3	Time Weighted Average (TWA):	Fume. as Cu	OSHA Z1A
	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 Colour Odour Melting point/range Boiling Point: Water solubility liquid
viscous, liquid
YELLOW
very faint
not applicable
not applicable
immiscible

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH

Not established
Not determined
Not applicable
Not determined
Not determined

: Not applicable

10. STABILITY AND REACTIVITY

Stability	:	The product is stable if stored and handled as prescribed.
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.

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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).

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
25068-38-6	Bisphenol A -	Irritant	Skin.
	Epichlorohydrin polymer		
		sensitizer	Skin.
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
25068-38-6	Bisphenol A -	Oral LD50	11,400 mg/kg	rat
	Epichlorohydrin polymer	Dermal LD50	> 6,000 mg/kg	rabbit
7440-66-6	Zinc	Oral LD50	630 mg/kg	rat
112945-52-5	Silica, amorphous, fumed, crystal-free	Oral LD50	3,160 mg/kg	rat

12. ECOLOGICAL INFORMATION

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	
	1	3. DISPOSAL CONSIDERATIONS	
Product	:	Where possible recycling is preferred to disposal or incineration. The	

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	classification, trans	naterial has the respo portation and disposa state/provincial and lo	
Contaminated packaging	material has the res	ponsibility for proper lisposal in accordance	he generator of waste waste classification, with applicable federal,
	14. TRANSPORT IN	FORMATION	
U.S. DOT Classification	: Refer to specific reg	gulation.	
ICAO/IATA	: Refer to specific reg	gulation.	
IMO/IMDG (maritime)	: Refer to specific reg	gulation.	
	15. REGULATORY I	NFORMATION	
US Regulations:			
OSHA Status	: Classified as hazard	lous based on compo	nents.
TSCA Status		_	d on or exempt from the
	TSCA Inventory.		
US. EPA CERCLA Hazardou	us Substances (40 CFR 302))	
not applicable			
California Propositior 65	n : Not applicable		
SARA Title III Section 302 E	Extremely Hazardous Substa	ance	
Unless specific chemicals are	e identified under this sectio	n, this product is Not	Applicable under this regula
SARA Title III Section 313 T	Foxic Chemicals:		
Unless specific chemicals are	e identified under this sectio		
Chemical Name		CAS-No.	Weight percent
COPPER		7440-50-8	5.00 - 10.00
ZINC (FUME OR DUST)	ZINC (FUME OR DUST)	7440-66-6	1.00 - 5.00

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Canadian Regulations:

Chemical Name		CAS-No.	Weight	NPRI ID#
Common		7440-50-8	5.00 - 10	00
Copper Zinc		7440-50-8	1.00 - 5.0	
WHMIS Classification	:	D2B		
WHMIS Ingredient Discl	losu	re List		
CAS-No. 7440-50-8				
DSL	:	All components of this produc Substances List (DSL) or are e		adian Domestic
tional Inventories:				
Australia AICS	:	Listed		
China IECS	:	Listed		
Europe EINECS	:	Listed		
Japan ENCS	:	Not determined		
Korea KECI	:	Listed		
Philippines PICCS	:	Listed		

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.