Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : GBS Bottle Ink

Product code : GBS

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Polymeric US 117 East 14th Avenue North Kansas City, MO 64116 - United States T 816-221-5567

1.4. Emergency telephone number

Emergency number : CHEMTREC: 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315 - Causes skin irritation
Eye Dam. 1 H318 - Causes serious eye damage
Skin Sens. 1 H317 - May cause an allergic skin reaction
Carc. 2 H351 - Suspected of causing cancer (Inhalation)

STOT RE 2 H373 - May cause damage to organs through prolonged or repeated exposure

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07



_ GH303

GHS05

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H318 - Causes serious eye damage H351 - Suspected of causing cancer (Inhalation)

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe fume, mist, vapors P261 - Avoid breathing fume, mist, vapors

P264 - Wash hands, face, hands, forearms and face, clothing thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 - If on skin: Wash with plenty of water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P308+P313 - If exposed or concerned: Get medical advice/attention

P310 - Immediately call a doctor, a POISON CENTER P314 - Get medical advice/attention if you feel unwell P321 - Specific treatment (see a doctor on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents/container to hazardous or special waste collection point, in

02/26/2016 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
1-ethenyl-2-pyrrolidinone, inhibited	(CAS No) 88-12-0	10 - 15	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
1,6-hexanediol diacrylate	(CAS No) 13048-33-4	7-15	Skin Irrit. 2, H315 Skin Sens. 1, H317

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Irritation of the eye tissue.

Symptoms/injuries after inhalation : Dry/sore throat.

Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with

skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8 Exposure controls/personal protection" "

6.2. Environmental precautions

Avoid release to the environment.

02/26/2016 EN (English US) 2/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection"".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not

handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed

out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)			
ACGIH ACGIH TWA (ppm) 0.05 ppm			
ACGIH Remark (ACGIH) Liver dam			

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : EN 166 - eye protection. EN 511 - protective gloves.

Hand protection : Protective gloves. Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : colors, varied Odor acrylate odor Odor threshold No data available рΗ No data available Melting point Not applicable Freezing point : No data available : No data available **Boiling point**

Flash point : > 200 °F

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) No data available **Explosion limits** : No data available Explosive properties No data available Oxidizing properties No data available Vapor pressure : No data available Relative density No data available Relative vapor density at 20 °C : No data available

02/26/2016 EN (English US) 3/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility : Insoluble in water.

Log Pow : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids, bases, oxidizing agents

10.6. Hazardous decomposition products

Carbon dioxide, carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

1-ethenyl-2-pyrrolidinone, inhibited	(88-12-0)	
LD50 oral rat	1022 mg/kg 834-1314,Rat; Equivalent or similar to OECD 401; Experimental value	
LD50 dermal rat	1043 mg/kg rat	
LD50 dermal rabbit	> 400 mg/kg (Rabbit; Experimental value; BASF test)	
LC50 inhalation rat (mg/l)	3.07 mg/l/4h (Rat; Experimental value)	
ATE US (oral)	1022.000 mg/kg body weight	
ATE US (dermal)	1043.000 mg/kg body weight	
ATE US (gases)	4500.000 ppmV/4h	
ATE US (vapors)	3.070 mg/l/4h	
ATE US (dust, mist)	3.070 mg/l/4h	
1.6-hexanediol diacrylate (13048-33-4)		

1,6-hexanediol diacrylate (13048-33-4)		
LD50 oral rat > 5000 mg/kg (Rat)		
LD50 dermal rabbit 3600 mg/kg (Rabbit)		
ATE US (dermal) 3600.000 mg/kg body weight		

Skin corrosion/irritation: Causes skin irritation.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer (Inhalation).

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)		
	IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

02/26/2016 EN (English US) 4/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity (repeated

exposure)

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Dry/sore throat.

Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)			
LC50 fish 1	976 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 72 h; Oncorhynchus mykiss; Static system; Fresh water; Experimental value)		
EC50 Daphnia 1	45 mg/l (EC50; Equivalent or similar to OECD 202; 48 h; Daphnia sp.; Static system; Fresh water; Experimental value)		
Threshold limit algae 1	> 1000 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)		

12.2. Persistence and degradability

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)			
Persistence and degradability Readily biodegradable in water. Highly mobile in soil.			
Biochemical oxygen demand (BOD)	and (BOD) < 0.002 g O₂/g substance		
Chemical oxygen demand (COD) 1.894 g O₂/g substance			
1,6-hexanediol diacrylate (13048-33-4)			
Persistence and degradability Inherently biodegradable.			

12.3. Bioaccumulative potential

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)			
Log Pow 0.4 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flasi Method; 25 °C)			
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
1,6-hexanediol diacrylate (13048-33-4)			
Bioaccumulative potential No bioaccumulation data available.			

12.4. Mobility in soil

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)		
Log Koc	log Koc,SRC PCKOCWIN v2.0; 1.099 - 1.1497; Calculated value	

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

TDG

No additional information available

02/26/2016 EN (English US) 5/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

2-p	henoxy	ethy)	l acry	late (48145-	04-6)
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SARA Section 313 - Emission Reporting 7-16 %

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

1-ethenyl-2-pyrrolidinone, inhibited (88-12-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information

: Polymeric makes no warranty, express or implied, as to the accuracy or reliability of information contained herein, except that such information is, to the best of Polymeric's knowledge and belief, accurate as of the date indicated on this document. Final determination of suitability of material is the sole responsibility of the user. All the materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Polymeric urges the customer receiving this safety data sheet to study it carefully to become aware of the hazards, if any, in the product. In the interest of safety, the customer should (1) notify your employees, agents and contractors of the information included in this SDS and (2) furnish a copy to each of your employees, customers and agents.

02/26/2016 EN (English US) 6/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4		
,	, , ,		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4		
Acute Tox. 4 (Oral) Acute toxicity (oral) Category 4			
Carc. 2	Carcinogenicity Category 2		
Eye Dam. 1	Serious eye damage/eye irritation Category 1		
Skin Irrit. 2	Skin corrosion/irritation Category 2		
Skin Sens. 1	Skin sensitization Category 1		
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2		
STOT SE 3	Specific target organ toxicity (single exposure) Category 3		
H302	Harmful if swallowed		
H312	Harmful in contact with skin		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H318	Causes serious eye damage		
H332	Harmful if inhaled		
H335	May cause respiratory irritation		
H351	Suspected of causing cancer		
H373	May cause damage to organs through prolonged or repeated exposure		

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

02/26/2016 EN (English US) 7/7