Safety Data Sheet

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Imagemark XR

Product code : XR

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

Use of the substance/mixture : Screenprinting ink

1.3. Details of the supplier of the safety data sheet

Polymeric Imaging 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

Skin Sens. 1 H317 - May cause an allergic skin reaction

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

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

H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

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 to approved container

2.3. Other hazards

Other hazards not contributing to the

classification

: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
1,6-hexanediol diacrylate	(CAS No) 13048-33-4	15 - 20	Skin Irrit. 2, H315 Skin Sens. 1, H317
trimethylolpropane triacrylate,stabilized	(CAS No) 15625-89-5	0 - 5.6	Skin Irrit. 2, H315 Skin Sens. 1, H317

Full text of H-phrases: see section 16

SECTION 4: First aid measures

Description of first aid measures

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 eyes with water as a precaution.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

: Cough. Irritation of the respiratory tract. May cause respiratory irritation. Slight irritation.

Symptoms/injuries after skin contact

: Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact

: Causes serious eye irritation. : Irritation of the gastric/intestinal mucosa.

Symptoms/injuries after ingestion Chronic symptoms

: Skin rash/inflammation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

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**

Firefighting instructions

: Exercise caution when fighting any chemical fire. Fight fire with normal precautions from a

reasonable distance.

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. Avoid contact with skin and eyes. Avoid breathing mist/vapor.

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" "

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up

: Take up liquid spill into absorbent material.

Other information

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

Reference to other sections

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

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling

Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapor/mist/spray.

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.

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7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

Control parameters

No additional information available

8.2. **Exposure controls**

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

: nitrile rubber. Materials for protective clothing Hand protection Protective gloves. Eye protection Safety glasses.

Skin and body protection Wear suitable protective clothing.

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

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties 9.1.

Physical state : Liquid Color : varied Odor Acrylate odor Odor threshold No data available рΗ : No data available Not applicable Melting point Freezing point No data available Boiling point No data available

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 : No data available Vapor pressure : No data available Relative density Relative vapor density at 20 °C : No data available

Solubility Slight

Log Pow No data available : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity : No data available Viscosity, kinematic No data available

: \approx 4000 (4000 - 14000) cP Halftones range: 24,000-32,000 cps (color specific) Viscosity, dynamic

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1.

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

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

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

10.5. Incompatible materials

Oxidizing agent. acids. Combustible materials.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Inhalation; Skin and eyes contact.

Acute toxicity : Not classified

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

rimethylolpropane triacrylate,stabilized (15625-89-5)	
LD50 oral rat	5190 mg/kg (Rat)
LD50 dermal rabbit	5170 mg/kg (Rabbit)
ATE US (oral)	5190.000 mg/kg body weight
ATE US (dermal)	5170.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Irritation: may cause irritation to the respiratory system. Harmful in contact with skin. Harmful if

swallowed.

Symptoms/injuries after inhalation : Cough. Irritation of the respiratory tract. May cause respiratory irritation. Slight irritation.

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

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Irritation of the gastric/intestinal mucosa.

Chronic symptoms : Skin rash/inflammation.

Other information : Likely routes of exposure: inhalation, skin and eye.

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.

12.2. Persistence and degradability

6-hexanediol diacrylate (13048-33-4)		
Persistence and degradability	Inherently biodegradable.	
trimethylolpropane triacrylate,stabilized (15625-89-5)		
Persistence and degradability	Biodegradability in water: no data available.	
ThOD	1.835 g O₂/g substance	

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12.3. Bioaccumulative potential

1,6-hexanediol diacrylate (13048-33-4)	
Bioaccumulative potential	No bioaccumulation data available.
trimethylolpropane triacrylate,stabilized (15625-89-5)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

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

Waste disposal recommendations : Avoid release to the environment. Discharging into rivers and drains is forbidden. Dispose in a

safe manner in accordance with local/national regulations. Do not discharge into drains or the environment. Use appropriate containment to avoid environmental contamination.

Additional information : Clean up even minor leaks or spills if possible without unnecessary risk.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s. (contains 2 Phenoxyethyl

acrylate), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.

(contains 2 Phenoxyethyl acrylate)

Hazard Classes (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G - Identifies PSN requiring a technical name

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DOT Special Provisions (49 CFR 172.102)

: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

173 - An appropriate generic entry may be used for this material.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) :

DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Other information : No supplementary information available.

TDG

No additional information available

Transport by sea

UN-No. (IMDG) : 3082

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous compounds
Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No.(IATA) : 3082

Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Imagemark XR

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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 contains 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-phenoxy ethyl acrylate (48145-04-6)	
SARA Section 313 - Emission Reporting	<25%

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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

Toluene 108-88-3 <400 ppm	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Male	No

SECTION 16: Other information

Other information	: 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)
	funcials a security scale of visus annularies a sustantial and a securi

furnish a copy to each of your employees, customers and agents.

Disclaimer:

Polymeric makes no warranty, express or implied, as to the accuracy or reliability of the 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.

Full text of H-phrases:

ox of 11 philaded.		
	Skin Irrit. 2	Skin corrosion/irritation Category 2
	Skin Sens. 1	Skin sensitization Category 1
	H315	Causes skin irritation
	H317	May cause an allergic skin reaction

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

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