



## MATERIAL SAFETY DATA SHEET

(According to ANSI Z400.1-2004)

**PRODUCT NAME: ULANO A-DEVELOPER POWDER**

**Previous Issue: July 13, 2009**

**Date Prepared: June 22, 2010**

### 1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Name: **A-DEVELOPER POWDER**  
 Company: **ULANO® CORPORATION**  
 110 Third Avenue  
 Brooklyn, NY 11217  
 Phone: 718-237-4700  
 Fax: 718-802-1119  
 Emergency contact: 1-800-424-9300 (CHEMTREC)

MSDS prepared by: Fred Widman

Recommended use: Sensitizing powder for stencil emulsions for screenprinting

### 2. HAZARD IDENTIFICATION OF THE PREPARATION

This preparation is not classified as hazardous according to 29CFR 1910-1200.

This product may be a flammable solid

Appearance / Odor: white powder / no odor

Potential Health Effects: See Section 11 for more information

Potential Health Effects Eyes

This product may be irritating to the eyes.

Potential Health Effects: Skin

Repeated exposure may irritation to skin

Potential Health Effects: Ingestion

Ingestion of this product may be irritating to the digestive system.

Potential Health Effects: Inhalation

No known effect

Xi Irritant

36 Irritating to eyes

Target Organs: not known

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Potential Environmental Effects: See Section 12 for more information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the below mentioned materials

Hazardous components:

EINECS-No	Name	Hazard	%content
CAS-No.	R-phrases		
201-069-1	Citric Acid		
77-92-9	36	Xi	60.0-100.0%

**PRODUCT NAME: ULANO A-DEVELOPER POWDER**

**Date Prepared: June 22, 2010**

**Additional information:**

For full text of risk phrases see Section 16.

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**4. FIRST AID MEASURES**

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**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if necessary.

**Ingestion:**

If conscious, drink milk or water. Get medical attention.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops. Wash clothing before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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**5. FIRE-FIGHTING MEASURES**

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Flammable: no

Means of extinction: treat surrounding fire

Unsuitable extinguishing media: Hard water stream

Flash point: n.a

Upper flammable limit: n.a

Explosion data impact: n.a

Lower flammable limit: n.a

Explosion data static: n.a

Hazardous combustion products: Oxides of carbon

Fire fighters should wear SCBA for fighting fires in enclosed areas.

Autoignition temp: Decomposition temperature 1852°F (1011°C)

This material is an organic powder. Care must be taken to avoid dust produced fire or explosion.

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**6. ACCIDENTAL RELEASE MEASURES**

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Do not empty large quantities directly into drains. Sweep up and collect in a sealable fiber or plastic container and proceed according to local waste disposal regulations. Avoid dust creation.

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**7. HANDLING AND STORAGE**

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Keep container tightly closed and in a cool and well ventilated place. Ensure adequate ventilation. Avoid contact with skin and eyes.

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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Occupational exposure limit:

CAS #	Name	OSHA TWA	ACGIH TWA
77-92-9	Citric Acid	None listed	None listed

**Engineering controls**

General- not required

Local exhaust- recommended

Other- none

**PRODUCT NAME: ULANO A-DEVELOPER POWDER**

**Date Prepared: June 22, 2010**

**Personal Protection**

Gloves- recommended  
 Respirator- NIOSH approved powder respirator if dust is created.  
 Eye- protective goggles recommended  
 Protective footwear- not required  
 Protective clothing- not required  
 Other- none

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form: powder  
 Color: white  
 Odor: odorless  
 Flash point: n.a  
 Ignition temperature: n.a  
 Density: n.a  
 Viscosity: n.a  
 Explosion limits: n.a  
 Boiling point: n.a  
 Vapour density: n.a  
 Vapour pressure: n.a  
 Melting Point: Not known  
 pH: n.a  
 Coefficient of water/ oil distribution: soluble in water  
**Volatile Organic Compounds: less than 0.1%**

**10. STABILITY AND REACTIVITY**

Stable under recommended storage and handling conditions  
 (See Section 7).  
 Store as a non-hazardous solid  
 INCOMPATIBILITY: Strong oxidizers

**11. TOXICOLOGICAL INFORMATION**

**Effects of acute exposure:**

COMPONENT	CAS#	LD <sub>50</sub>	LC <sub>50</sub>
Citric Acid	77-92-9	5,040 mg/kg oral, rat	Not established

**General information:**

Effects of acute exposure:  
 Repeated or prolonged contact causes local irritation of skin and mucous membranes, particularly the eyes.  
 Irritancy of product- possible  
 Skin sensitization- none reported  
 Respiratory sensitization- none known  
 Carcinogenicity- no  
 IARC- no

**PRODUCT NAME: ULANO A-DEVELOPER POWDER**

**Date Prepared: June 22, 2010**

ACGIH - no  
 Reproductive toxicity - none known  
 Teratogenicity - none known  
 Embryotoxicity - none known  
 Mutagenicity - none known  
 Name of synergistic products/effects- none known

**12. ECOLOGICAL INFORMATION**

Do not empty large quantities into drains or release into open water.  
 Do not store at public waste disposal sites.

**13. WASTE DISPOSAL INFORMATION**

Dispose of as a non-hazardous solid  
 Empty container: scrap recycling or re-conditioning  
 Soiled container: (treatment like product itself)

**14. TRANSPORT INFORMATION**

ADR/RID/DOT:	Class: Not regulated UN: n.a
Packaging group:	n.a
IATA	Class: Not regulated UN: n.a
IMDG:	Class: Not regulated EMS: n.a UN: n.a
Marine pollutant:	no
Packaging group:	n.a

**15. REGULATORY INFORMATION**

Global Inventories (components):

Ingredient	--Canada--			
	TSCA	EC	DSL	NDSL
Citric Acid (77-92-9)	Yes	Yes	Yes	No

  

Ingredient	-SARA 302-		-----SARA 313-----		-RCRA-	CERCLA	-TSCA-
	RQ	TPQ	List		RQ	261.33	8(d)
Citric Acid	No	No	No		No	No	No

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

This product has been classified in accordance with the hazard criteria of the

Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is not classified as a hazardous material.

**PRODUCT NAME: ULANO A-DEVELOPER POWDER**

**Date Prepared: June 22, 2010**

**Labeling**

Xi

**R-phrases:**

36 Irritating to eyes

**S-phrases:**

26 In case of contact with eyes, rinse with plenty of water and seek medical advice

**Special labeling:**

National Regulation for Germany:

Water pollution class: 1

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**16. OTHER INFORMATION**

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**HMIS: Health 1, Flammability 2, Reactivity 0**

Text of risk phrases mentioned in Section 2:

Xi

36 Irritating to eyes

For further information please refer to our technical information sheet. Data in this MSDS correspond with our current level of knowledge, but do not represent any assurance of product properties. The user personally is responsible for compliance with all legal requirements.

**DISCLAIMER OF RESPONSIBILITY:**

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# MATERIAL SAFETY DATA SHEET

(According to ANSI Z400.1-2004)

**PRODUCT NAME: ULANO B-DEVELOPER POWDER**

**Previous Issue: July 13, 2009**

**Date Prepared: Sept. 5, 2012**

## 1. IDENTIFICATION OF PRODUCT AND COMPANY

Product Name: **B-DEVELOPER POWDER**  
 Company: **ULANO® CORPORATION**  
 110 Third Avenue  
 Brooklyn, NY 11217  
 Phone: 718-237-4700  
 Fax: 718-802-1119  
 Emergency contact: 1-800-424-9300 (CHEMTREC)

MSDS prepared by: P. Drago

Recommended use: Sensitizing powder for stencil emulsions used for screenprinting

## 2. HAZARD IDENTIFICATION OF THE PREPARATION

This preparation is not classified as hazardous according to 29CFR 1910-1200.

This product may be a flammable solid

Appearance / Odor: white powder / no odor

Potential Health Effects: See Section 11 for more information

Potential Health Effects Eyes: This product may be irritating to the eyes.

Potential Health Effects: Skin: Repeated exposure may irritation to skin

Potential Health Effects: Ingestion: Ingestion of this product may be irritating to the digestive system.

Potential Health Effects: Inhalation: No known effect

Xi Irritant  
 36 Irritating to eyes

Target Organs: not known

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Potential Environmental Effects: See Section 12 for more information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the below mentioned materials

Hazardous components:

EINECS-No	Name	Hazard	%content
CAS-No.	R-phrases		
234-390-0	Sodium perborate tetrahydrate		
10486-00-7	36	Xi	60.0-100.0%

### Additional information:

For full text of risk phrases see Section 16.

PRODUCT NAME: **ULANO B-DEVELOPER POWDER**

Date Prepared: **Sept. 5, 2012**

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#### **4. FIRST AID MEASURES**

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**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if necessary.

**Ingestion:**

If conscious, drink milk or water. Get medical attention.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops. Wash clothing before reuse.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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#### **5. FIRE-FIGHTING MEASURES**

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Flammable:	no
Means of extinction:	treat surrounding fire
Unsuitable extinguishing media:	Hard water stream
Flash point:	n.a
Upper flammable limit:	n.a
Explosion data impact:	n.a
Lower flammable limit:	n.a
Explosion data static:	n.a
Hazardous combustion products:	Oxides of carbon

Fire fighters should wear SCBA for fighting fires in enclosed areas.

Autoignition temp: n.a

This material is an organic powder.

Care must be taken to avoid dust produced fire or explosion.

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#### **6. ACCIDENTAL RELEASE MEASURES**

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Do not empty large quantities directly into drains. Sweep up and collect in a sealable fiber or plastic container and proceed according to local waste disposal regulations. Avoid dust creation.

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#### **7. HANDLING AND STORAGE**

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Keep container tightly closed and in a cool and well ventilated place.

Ensure adequate ventilation. Avoid contact with skin and eyes.

PRODUCT NAME:

**ULANO B-DEVELOPER POWDER**

Date Prepared: Sept. 5, 2012

**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Occupational exposure limit:

CAS #	Name	OSHA TWA	ACGIH TWA
10486-00-7	Sodium perborate tetrahydrate	Not listed	Not listed

**Engineering controls**

General-	not required
Local exhaust-	recommended
Other-	none

**Personal Protection**

Gloves-	recommended
Respirator-	NIOSH approved powder respirator if dust is created.
Eye-	protective goggles recommended
Protective footwear-	not required
Protective clothing-	not required
Other-	none

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form:	powder
Color:	white
Odor:	odorless
Flash point:	n.a
Ignition temperature:	n.a
Density:	n.a
Viscosity:	n.a
Explosion limits:	n.a
Boiling point:	n.a
Vapour density:	n.a
Vapour pressure:	n.a
Melting Point:	Not known
pH:	n.a
Coefficient of water/ oil distribution: soluble in water	

**Volatile Organic Compounds: less than 0.1%****10. STABILITY AND REACTIVITY**

Stable under recommended storage and handling conditions (See Section 7).  
Store as a non-hazardous solid

INCOMPATIBILITY: Strong oxidizers



PRODUCT NAME:

ULANO B-DEVELOPER POWDER

Date Prepared: Sept. 5, 2012

**11. TOXICOLOGICAL INFORMATION****Effects of acute exposure:**

COMPONENT	CAS#	LD <sub>50</sub>	LC <sub>50</sub>
Sodium perborate tetrahydrate	10486-00-7	1908 mg/kg, oral, rat	No data available

**General information:**

Effects of acute exposure:	Repeated or prolonged contact causes local irritation of skin and mucous membranes, particularly the eyes.
Irritancy of product-	possible
Skin sensitization-	none reported
Respiratory sensitization-	none known
Carcinogenicity-	no
IARC-	no
ACGIH -	no
Reproductive toxicity -	none known
Teratogenicity -	none known
Embryotoxicity -	none known
Mutagenicity -	none known
Name of synergistic products/effects-	none known

**12. ECOLOGICAL INFORMATION**

Do not empty large quantities into drains or release into open water.  
Do not store at public waste disposal sites.

**13. WASTE DISPOSAL INFORMATION**

Dispose of as a non-hazardous solid  
Empty container: scrap recycling or re-conditioning  
Soiled container: (treatment like product itself)

**14. TRANSPORT INFORMATION**

ADR/RID/DOT:	Class: Not regulated UN: n.a
Packaging group:	n.a
IATA	Class: Not regulated UN: n.a
IMDG:	Class: Not regulated EMS: n.a UN: n.a
Marine pollutant:	no
Packaging group:	n.a

**PRODUCT NAME: ULANO B-DEVELOPER POWDER**

**Date Prepared: Sept. 5, 2012**

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**15. REGULATORY INFORMATION**

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Global Inventories (components):

		--Canada--				
Ingredient		TSCA	EC	DSL	NDSL	
Sodium perborate tetrahydrate (10486-00-7		Yes	Yes	Yes	No	
	-SARA 302-	-----SARA 313-----		-RCRA-	CERCLA	-TSCA-
Ingredient	RQ	TPQ	List	RQ	261.33	8(d)
Sodium perborate tetrahydrate	No	No	No	No	No	No

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is not classified as a hazardous material.

**Labeling**

Xi

**R-phrases:**

36 Irritating to eyes

**S-phrases:**

26 In case of contact with eyes, rinse with plenty of water and seek medical advice

**Special labeling:**

National Regulation for Germany:

Water pollution class: 1

---

**16. OTHER INFORMATION**

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**HMIS: Health 3, Flammability 0, Reactivity 1**

Text of risk phrases mentioned in Section 2:

Xi

36 Irritating to eyes

For further information please refer to our technical information sheet. Data in this MSDS correspond with our current level of knowledge, but do not represent any assurance of product properties. The user personally is responsible for compliance with all legal requirements.

**PRODUCT NAME: ULANO B-DEVELOPER POWDER**

**Date Prepared: Sept. 5, 2012**

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