

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **POLYPRINT PD206PL PIGMENT PRE-TREATMENT SOLUTION**

Product Use: Ink-Jet Printing

Company Identification

DISTRIBUTOR:

**POLYPRINT SA**

**190 Agiou Dimitriou str.**

**54638 Thessaloniki, Greece**

**Tel: 0030 2310 246418**

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components (% by weight)

<b>Material %</b>	<b>CAS Number</b>
Water	7732-18-5
65-85	
*Inorganic Nitrate	**
10-20	
Acrylic Polymer	**
5-15	
Formaldehyde	50-00-0
<0.02	

\*Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Components (Remarks)

\*\*The specific identity for each component not identified by a CAS Registry Number is withheld as a trade secret.

### 3. HAZARDS IDENTIFICATION

Potential Health Effects

THIS PRODUCT CAN BE USED SAFELY WHEN USED AS DIRECTED AND WHEN APPLICABLE SAFETY PRECAUTIONS ARE FOLLOWED.

POTENTIAL HEALTH EFFECTS FROM PRODUCT

Potential routes of overexposure to this product are skin contact, eye contact and inhalation of vapor.

**POLYPRINT S.A.**

*Digital Printing Machines and Consumables*

Agiou Dimitriou 190 ◦ 54638 ◦ Thessaloniki ◦ GREECE

Tel. +30 2310 246418 ◦ Fax +30 2310 246419

E-mail: [info@polyprint.gr](mailto:info@polyprint.gr) ◦ Web: [www.polyprint.gr](http://www.polyprint.gr)

Ingestion is not expected to be a significant route of exposure for this product under normal use conditions.

There is no toxicity data available for this specific formulation. Any potential hazards are presumed to be due to exposure to the components.

#### ADDITIONAL HEALTH EFFECTS

Since this mixture has not been tested as a whole to determine the hazards by all routes of exposure, information is provided for each hazardous component of the mixture to meet requirements of OSHA's Hazard Communication Standard (29 CFR 1910.1200). The effects noted occur from exposure to the pure component unless otherwise noted.

#### INFORMATION FOR COMPONENTS

##### INORGANIC NITRATE

Eye Contact - May cause eye corrosion with corneal or conjunctival ulceration.

Skin Contact - May cause skin irritation with discomfort or rash.

Inhalation - May cause irritation of the upper respiratory passages with coughing and discomfort.

Ingestion - Ingestion may cause methemoglobinemia (reduced oxygen carrying capacity of the blood) with headache, weakness or cyanosis (bluish discoloration of the skin) possibly progressing to dizziness, incoordination, shortness of breath, increased pulse rate and loss of consciousness.

##### FORMALDEHYDE

Eye Contact - Can cause irritation or tearing at levels below STEL.

Skin Contact - May cause allergic skin reaction.

Inhalation - May cause respiratory disorders (sensitization). Persons with sensitive airways may react to vapors.

Ingestion – May cause throat irritation.

#### Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material	IARC	NTP	OSHA	ACGIH
Formaldehyde	1	X	X	A2

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## 4. FIRST AID MEASURES

### First Aid

#### INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

#### SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Consult a physician. Wash contaminated clothing before reuse.

#### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

#### INGESTION

Ingestion is not an expected route of exposure during normal use of the product. If ingested, consult a physician.

## 5. FIRE FIGHTING MEASURES

### Flammable Properties

Flash Point : >93.3 °C (>200 °F)

Method: Closed Cup

Approximate Flammable Limits in Air, % by Volume

LEL: Not Available

UEL: Not Available

Autoignition Temperature: Not Available

Product is a nonflammable water-based solution.

Hazardous combustion products (gases/vapors) produced in fire can include carbon monoxide, carbon dioxide, nitrogen oxides and smoke.

### Extinguishing Media

Use media appropriate for surrounding material.

### Fire Fighting Instructions

This product is not flammable. Use normal firefighting procedures for the area.

## 6. ACCIDENTAL RELEASE MEASURES

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#### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

#### Initial Containment

Dike spill.

#### Spill Clean Up

Soak up with absorbent material.

## 7. HANDLING AND STORAGE

#### Handling (Personnel)

Avoid contact with eyes, skin, or clothing.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Personal Protective Equipment

##### EYE/FACE PROTECTION

Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of the material.

##### RESPIRATORS

Respirators are not needed with proper ventilation. Wear an approved respirator (e.g., an organic vapor respirator or a self-breathing apparatus whenever exposure to aerosol, mist, spray, fume or vapor exceed the exposure limit(s) of any chemical substance listed in this MSDS.

##### PROTECTIVE CLOTHING

If there is potential for significant dermal contact wear appropriate impervious clothing and gloves.

#### Applicable Exposure Limits and Exposure Data

##### WATER

PEL (OSHA): None Established

TLV (ACGIH): None Established

AEL\* (Manufacturer): None Established

LD<sub>50</sub> (rat, oral): >90 mL/kg (RTECS)

LC<sub>50</sub> (rat, inhalation/4 hr.): No data available

##### INORGANIC NITRATE

PEL (OSHA): None Established

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TLV (ACGIH): None Established  
AEL\* (Manufacturer): 5mg/m<sup>3</sup>, 8 Hr. TWA, total dust  
LD<sub>50</sub> (rat, oral): 3,900 mg/kg (supplier)  
LC<sub>50</sub> (rat, inhalation/4 hr.): No data available

#### FORMALDEHYDE

STEL (OSHA): 2 ppm  
TWA (OSHA): 0.75 ppm  
ACTION LEVEL (OSHA): 0.5 ppm  
STEL (ACGIH): 0.3 ppm CEILING  
AEL\* (Manufacturer): 0.5 ppm 8 and 12 Hr. TWA  
LD<sub>50</sub> (rat, oral): 100 mg/kg (supplier)  
LD<sub>50</sub> (rabbit, dermal): 270 mg/kg (supplier)

\* AEL is Manufacturer's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

Form: Liquid  
Color: Clear  
Odor: Odorless  
Solubility in Water: Miscible  
pH: 5.9  
Specific Gravity: About 1

### Other Information

Flash Point : >93.3 °C (>200 °F)  
Method: Closed Cup  
Approximate Flammable Limits in Air, % by Volume  
LEL: Not Available  
UEL: Not Available  
Autoignition Temperature: Not Available

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable at normal temperatures and storage conditions.

### Incompatibility with Other Materials

None reasonably foreseeable.

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## Decomposition

Decomposition does not occur during normal use.  
Polymerization

Polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Animal Data

No data available for product.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicological Information

No data available for product.

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal

DO NOT DISCARD INTO ANY SEWERS, INTO ANY BODY OF WATER, OR ON THE GROUND. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local laws and regulations.

## 14. TRANSPORTATION INFORMATION

(Not meant to be all inclusive)

DOT (Domestic Surface, U.S.A.): Not regulated

ICAO/IATA (Air): Not regulated

IMO/IMDG (Ocean): Not regulated

## 15. REGULATORY INFORMATION

(Not meant to be all inclusive - selected regulations represented)

### U.S. Regulations

#### Federal Regulations

TSCA Inventory Status - All components of this product are listed, or exempt from listing, on the TSCA 8(b) chemical inventory.

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## State Regulations

### State Right-To-Know

WARNING - SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM (California Proposition 65)

Formaldehyde (50-00-0) < 0.02 wt. %

## European Union Regulations

EU Inventory Status - All components of this product are listed, or are exempt from listing, on the EINECS chemical inventory.

Transport Information - This product is not classified as dangerous within the meaning of transport regulations.

Labeling - This product does not need to be labeled in accordance with EC-Directive 1999/45/EC.

## Switzerland

Switzerland VOC Regulations (Ordinance 814.018, *Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen*, as of 28 December 2000)

This product is exempt from Swiss VOC regulations.

## 16. OTHER INFORMATION

HMIS<sup>®</sup> Rating

Health: 2

Flammability: 0

Reactivity: 0

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

### MSDS Contact Information

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### Revision History

16 June 2005: New MSDS

7 June 2006: Formulation Change and Review

### Key

ACGIH American Conference of Governmental Industrial Hygienists

Cmpds Compounds

AEL Acceptable Exposure Limit (manufacturer)

DOT Department of Transportation (U.S.A.)

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ET Eastern Time (U.S.A.)  
EU European Union  
HMIS<sup>®</sup> Hazardous Material Information System (National Paint and Coatings Association)  
IARC International Agency for Research on Cancer  
IATA International Air Transport Association  
ICAO International Civil Aviation Organization  
IEL Indicative Exposure Limit (EU Directive 2000/39/EC)  
IMDG International Maritime Dangerous Goods  
IMO International Maritime Organization  
LEL or LFL Lower Explosive Limit or Lower Flammable Limit  
M-F Monday through Friday  
NA North America  
NIOSH National Institute of Occupational Safety and Health (U.S.A.)  
NOHSC National Occupational Health and Safety Commission  
(Worksafe Australia)  
NOS Not Otherwise Specified  
NTP National Toxicology Program (U.S.A.)  
OEL Occupational Exposure Limit  
OSHA Occupational Safety and Health Administration (U.S.A.)  
PEL Permissible Exposure Limit  
RTECS Registry of Toxic Effects of Chemical Substances (NIOSH)  
STEL Short Term Exposure Limit  
TLV Threshold Limit Value  
TSCA Toxic Substances Control Act (U.S.A.)  
TWA Time-weighted Average  
UEL or UFL Upper Explosive Limit or Upper Flammable Limit  
U.S.A. United States of America  
VOC Volatile Organic Compound(s)  
WEEL Workplace Environmental Exposure Level

End of MSDS

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