#### **Trans-bond Adhesion Promoter**

## 1. Identification

Product Name: TRANSBOND ADHESION PROMOTER

Product Identifier: Printing Ink; Mixture

Use: For Industrial Use Only by Qualified Personnel

Manufacturer: Inkcups Corporation
Address: 310 Andover Street
Danvers, MA. 01923

Emergency Phone Number: (+1) 978-646-8980

Date Updated: 08/30/13

## 2. Hazards Identification

GHS Classification: Flammable Liquids Not Classified

Acute Toxicity(Oral) Category 4 Acute Toxicity(Dermal) Not Classified Acute Toxicity(Inhalation, mist) Not Classified Skin Corrosion/Irritation Not Classified Serious eye damage/eye irritation Not Classified Repiratory or Skin Sensitization Category 1 Germ Cell Mutagenicity Not Classified Reproductive Toxicity Not Classified Hazardous to the aquatic environment (Acute) Category 2 Hazardous to the aquatic environment(Chronic) Not Classified

GHS Label elements:

Pictograms or Symbols:



Signal Word: Warning

Hazard Statement: Harmful if swallowed.

May cause allergic skin reaction

Toxic to aquatic life.

**Precautionary Statements:** 

Do not eat, drink, or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Contaminated work clothing should not be allowed out of the workplace.

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Avoid release to the environment

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel

unwell. Rinse mouth

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/attention. Specific treatment is urgent.

Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container according to local/regional/national/international regulations.

# 3. Composition/Information on Ingredients

Hazards Identification	CAS#	Weight %
2-(2-Vinyloxyethoxy) ethyl acrylate	86273-46-3	> 75
Propoxylated Neopentyl Glycol Diacrylate Esters	84170-74-1	1-10%
Phosphine Oxide	162881-26-7	1-10%
Carbon Black	1333-86-4	0-5%

#### 4. First Aid Measures

#### Skin:

Wash with soap and water and rinse thoroughly for 15 minutes. Get medical attention if blisters or inflammation are present on the skin.

## Eyes:

Flush eyes and under eyelids for 15 minutes with water. Seek medical attention if irritation or redness persists.

#### Inhalation:

Move to fresh air. Seek medical attention if irritation persists.

#### Ingestion:

Do not induce vomiting. Rinse mouth with water but do not swallow and get medical attention. Call Poison Control or Physician immediately.

## 5. Fire Fighting Measures

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Flammable Properties: Flash Point: 118C (245F)

Extinguishing Media: Water spray for cooling, foam, carbon dioxide, dry

chemical, or Halon for fire suppression.

Hazardous Combustion Products: Material is a flammable liquid but must be

preheated for combustion. May burn in fire

conditions releasing products, which may be toxic

(CO, CO2, and volatile organics).

Fire Fighting Procedures: Wear approved MSHA/NIOSH breathing apparatus

and full protective clothing.

## 6. Accidental Release Measures

Personal Precautions:

Evacuate personnel from the area. Shut off all sources of ignition; No flares, smoking, or flames in the area. Wear protective equipment.

**Environmental Precautions:** 

Do not flush to sewer or waterways.

Dike with soil. Cover with a sheet to prevent expanding odor.

Methods for Cleaning up:

For small spills, use absorbent media. Dispose of the absorbent media according to local, regional, and national regulations.

For large spills, enclose the spilled liquid with sand. Recover the liquid while covering it with an oil-resistant antistatic sheet. Dispose of material according to local, regional, and national regulations.

## 7. Handling and Storage

In accordance with good industrial practices, handle with care and avoid personal contact.

Wear protective gloves, safety goggles, and other protective clothing.

Avoid contact with skin, eyes, and clothing.

Keep out of direct sunlight and away from heat source.

Keep tightly closed.

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Keep from freezing.

Keep from oxidizing agents.

Use adequate ventilation.

# 8.Exposure Controls/Personal Protection

### **Engineering Controls:**

Facilities storing or utilizing this substance should be equipped with an eyewash facility and a safety shower.

Use Process enclosures, local exhaust ventilation, or other engineering controls.

#### Control parameters:

ACGIH -Not Established

OSHA -Not Established

### Respiratory protection:

Chemical cartridge respirator for an organic vapor, or pressure self-contained breathing apparatus.

### Hand protection:

Chemical resistant gloves made of Butyl rubber or Polyethylene-polyvinyl alcohol laminated rubber.

## Eye protection:

Safety Glasses with side shields, goggles, or face shield.

### Skin and body protection:

Suitable safety clothes, aprons, shoes and protective boots.

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# 9. Physical and Chemical Properties of Ink

General Information: Colored liquid with mild odor.

pH: Not applicable

Boiling point: 94° C Melting point: -71° C

Flash point: >119° C (closed cup)

Autoflammability: None Oxidizing properties: None

Vapor density: > 3 (air = 1)

Density: 1.03-1.06 g/ml (20° C)

Solubility in Water: 18 g/L Viscosity: 2 – 10 cps VOC: None

# 10. Stability and Reactivity

Stability: Stable under normal conditions.

Conditions to avoid: Avoid heat and freezing temperatures.

Materials to avoid: Strong Oxidizing materials, peroxides, acids or iron.

Hazardous decomposition products: Will decompose to form carbon oxides when

burned.

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# 11. Toxicology and Health Hazards

Routes of toxicology: Eye, skin, inhalation, and oral.

Acute Health Hazards: Overexposure of eye surface to ink may be mildly irritating.

Overexposure of skin to ink may cause irritation, redness and swelling.

Inhalation or overexposure to ink vapors may result in respiratory tract irritation

and anesthesia.

Ingestion may cause upset stomach.

Chronic Health Hazards: None known.

Mutagenicity: The components are not reported to produce mutagenic effects in humans.

Carcinogenicity: The components are not reported to produce carcinogenic effects in humans.

Irritancy of product: Exposure of ink to eye, skin, and inhalation may irritate tissue.

Acute Toxicity Estimates:

Acute oral toxicity:

LD 50 2026 mg/kg (male rat)

1790 mg/kg (female rat)

Species rat

Method OECD-Guideline No. 401

Acute dermal toxicity:

LD50 > 2000 mg/kg

Species rat

Method 440/2008/EEC B. 3, OECD-Guideline No. 402

Acute inhalation toxicity (mist):

LC50 5.82 mg/L (4hr)

Species rat

Skin and Eve:

Skin corrosion/irritation:

Evaluation Slightly irritating (P.I.I. = 2.0)

Species Rabbit

Method OECD-Guideline No. 404

Serious eye damage/eye irritation

Evaluation Non-irritant Species Rabbit

Method 92/69/EEC B. 5, OECD-Guideline No. 405

Sensitization:

Evaluation Skin sensitizer

Species Mouse

Method OECD-Guideline No. 429 (Local Lymph Node Assay)

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Mutagenicity:

AMES test:

Value Negative

Species Salmonella typhimurium TA98, TA100, TA1535, TA1537,

Escherichia coli WP2 uvr A

Method Testing New Chemical Substances (Japan, Kampoan No. 287, Eisei No. 127:

October 31, 1997; Kikyoku No. 2: October 31, 1997)

Chromosome Aberration test in vitro:

Value Negative

Species Chinese hamster lung cells (CHL/IU)

Method 2000/32/EC L1362000 Annex 4A, OECD-Guideline No. 473

Micronucleous test in vivo:

Value Non-genotoxic

Species Mouse

Method 440/2008/EEC B. 12, OECD-Guideline No. 474

L5178Y TK +/- Mouse lymphoma assay:

Value Non-mutagenic

Species L5178Y mouse lymphoma cell line

Method 440/2008/EEC, OECD-Guideline No. 476

Carcinogenicity:

Not Established IARC, NTP, EU, OSHA and ACGIH.

Reproductive Toxicity:

Route of Exposure Oral Species rat

NOAEL value 400 mg/kg/d NOEL Value 400 mg/kg/d

Method OECD-Guideline No. 422

Chronic toxicity or long term toxicity:

Route of Exposure Oral Species rat Duration of exposure 28 d

NOAEL value 160 mg/kg/d NOEL Value 50 mg/kg/d

Method 92/69/EEC B.7, OECD-Guideline No. 407

Aspiration hazard:

Not Available.

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# 12. Ecological Information

**Ecotoxicity:** 

Fish

LC50 6.8 mg/L LC100 10 mg/L NOEC 2.2 mg/L LOEC 4.6 mg/L

Species Brachydanio rerio

Duration of exposure 96 hr

Method 92/69/EEC C.1, OECD-Guideline No. 203

Crustacea

EC50 55 mg/L
EC100 100 mg/L
NOEC 25 mg/L
Species Daphnia magna

Duration of exposure 48 hr

Method 92/69/EEC C.2, OECD-Guideline No. 202

Algae or other aquatic plants

EC50 Biomass 5 mg/L, Growth rate 10 mg/L
EC100 Biomass 1.4 mg/L, Growth rate 3.2 mg/L
EC90 Biomass 18 mg/L, Growth rate 33 mg/L
NOEC Biomass 0.78 mg/L, Growth rate 0.78 mg/L
LOEC Biomass 2.7 mg/L, Growth rate 2.7 mg/L

Species Scenedesmus subspicatus

Duration of exposure 72 h

Method 92/69/EEC C.3, OECD-Guideline No. 201

EC50 741 mg/L

Species Aerobic activated sludge

Duration of exposure 3 hr

Method 88/302/EEC C.11, OECD-Guideline 209

Persistence/degradability:

Hydrolysis degradability

t ½ 1.8 hr at pH=4.0 and 25C t ½ 200.1 hr at pH=7.0 and 25C t ½ 66.9 hr at pH=9.0 and 25C

Method 96/69/EEC C.7, OECD-Guideline No. 111

Biodegradability

Evaluation Readily biodegradable

Value BOD 82.1 %, TOC 84.4%, GC 100.0%

Duration of Exposure 28 days

Method OECD-Guideline No. 301C

Bioaccumulation:

Value Log Po/w 1.7

Method 92/69/EEC A. 8, OECD-Guideline No. 117



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Mobility:

Evaluation very high mobility
Value Koc= 15 (logKoc=1.2)

Method 2001/59/EEC C. 19, OECD-Guideline No. 121

## 13. Disposal Considerations

Waste from residues:

Burn in a chemical incinerator equipped with an afterburner and scrubber. Consult an expert on the disposal of recovered material.

Any contaminated packaging:

Do not put other material into the used container and do not use it for other purpose.

Wash the inside of the container before disposal.

Comply with all federal, state and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

## 14. Transport Information

The UN classification number

UN Class: Not applicable UN Number: Not applicable

Proper shipping Name: Not applicable

Packing Group: Not applicable Marine Pollutant: Not applicable

Specific precautionary transport measures and conditions:

Avoid falling, dropping, shocking and dragging a container.

Protect a container from direct sunlight.

By 49 CFR 172.101 published by the US department of Transportation, this product is **not** considered

Dangerous Goods.

DOT listing: None

Packing group: None

DOT Labels required: None

Marine pollutant: Components are not listed as marine pollutants.

# 15. Regulatory Information

All components are on TSCA, EINECS/ELINCS, AICS, DSL, ENCS, and ECL.

All components are REACH registered and not listed in Annex XIV of EC No., 1907/2006 REACH Restriction.

All components are not listed on SARA Title III 313.

Regulatory information with regard to this product in your country or region should be examined by the end user.

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# 16. Other Information

The above information is believed to be correct but does not purport to be all-inclusive and shall only be used as a guide. Inkcups Corp. offers this information as a service to our customers and shall not be held liable for any damage resulting from handling or from contact with the above product.

**END OF SDS**