

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER

Product Code STP-1120
Product Name WHITE

Product Category SATIN POSTER SERIES SCREEN INK (STP)

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Recommended Use PRINTING OPERATION

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Inktech International Corporation 160 Fenmar Drive, Toronto, Ontario M9L 1M6

Tel: 1-416-743-4111 Fax: 1-416-743-1511

EMERGENCY TELEPHONE NUMBER

Chemtrec 1-613-996-6666

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION

| Acute Toxicity - Oral | Category 4 - (H302) |
|--------------------------------|---------------------|
| Acute Toxicity - Dermal | Category 4 - (H312) |
| Acute Toxicity - Inhalation | Category 4 - (H332) |
| Skin Irritation | Category 2 - (H315) |
| Serious Eye Damage/ Irritation | Category 2 - (H319) |
| Flammable Liquids | Category 3 - (H226) |

LABEL ELEMENTS



SIGNAL WORD: DANGER!

HAZARD STATEMENTS

H226 Flammable Liquid and vapor.

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation

H319 Causes serious eye irritation

H332 Harmful if inhaled

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

May be harmful in contact with skin.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

| COMPONENTS | WEIGHT % | CAS NO. | NOTE |
|--------------------------------------|----------|------------|------|
| TITANIUM DIOXIDE | 20-40 | 13463-67-7 | |
| PETROLEUM NAPHTHA, HEAVY AROMATIC | 10-20 | 64742-94-5 | |
| PETROLEUM NAPHTHA, LIGHT AROMATIC | 30-50 | 64742-95-6 | |
| STODDARD SOLVENT | 5-10 | 8052-41-3 | |
| SILICON DIOXIDE | 1-5 | 7631-86-9 | |
| 1,2,4 TRIMETHYLBENZENE (CONSTITUENT) | <1 | 95-63-6 | |
| XYLENE (MIXED ISOMER) | <1 | 1330-20-7 | |
| CUMENE (CONSTITUENT | <1 | 98-82-8 | |
| ETHYLBENZENE | <1 | 100-41-4 | |

SECTION 4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediately flush with plenty of water. After flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation such as redness, rash, blistering develops, get medical attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.

Ingestion

Do Not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control immediately.

MOST IMPORTANT SYMPTOMS AND EFECTS, BOTH ACCUTE AND DELAYED

None under normal use conditions.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT

Notes to Physician: Treat symptomatically.

SECTION 5. FIRE FIGHTING PROCEDURE

SUITABLE EXTINGUISHING MEDIA

Foam, Carbon Dioxide (CO2), Dry chemical, and Water Spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

UNSUITABLE EXTINGUISHING MEDIA:

No information available.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

As in any fire, wear self contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers/ tanks with water spray. Sealed containers may rupture when heated.

SECTION 6. ACCIDENTAL RELEASE MEASURE

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions

Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from upwind of spill/leak.

Environmental Precautions

Prevent products from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches. Local authorities should be notified if significant spillages cannot be contained.

Methods and Material for Containment and Cleanup

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/ national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Handling

Use personal protective equipment as required. Do not eat, drink, or smoke when using this product. Ensure adequate ventilation.

CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITES

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of reach of children.

Incompatible Products

Strong acids, strong bases, strong oxidizing and reducing agents.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

CONTROL PARAMETERS

Exposure Limits

| Component | ACGIH TLV | OSHA PEL |
|------------------------|---------------------------|-------------------------------------|
| Titanium Dioxide | TWA: 10 mg/m ³ | TWA: 10 mg/m³ (total dust) |
| 13463-67-7 | | TWA: 15 mg/m³ (total dust) |
| Silicon Dioxide | | TWA: 6 mg/m ³ |
| 7631-86-9 | | |
| Stoddard Solvent | TWA:100 ppm | TWA:500 ppm; 2900 mg/m ³ |
| 8052-41-3 | | |
| 1,2,4-Trimethylbenzene | TWA: 25 ppm | |
| 95-63-6 | | |
| Xylene (mixed Isomer) | TWA:100 ppm | TWA: 100ppm |
| 1330-20-7 | | TWA: 445 mg/m ³ |
| Cumene (constituent) | TWA: 50 ppm | TWA: 50 ppm |
| 98-82-8 | | TWA: 245 mg/m ³ |
| | | Skin |
| Ethylbenzene | TWA: 20 ppm | TWA: 100ppm |
| 100-41-4 | | TWA: 445 mg/m ³ |

| Component | Ontario TWAEV | Mexico OEL (TWA) |
|---------------------------------|----------------------------|-------------------------------------|
| Titanium Dioxide | TWA: 10 mg/m³ (total dust) | TWA/LMPE-PPT: 10 mg/m³ (as Ti) |
| 13463-67-7 | , , , | STEL/LMPE-CT: 20 mg/m³ (as Ti) |
| Cumene (constituent) | TWA: 50 ppm | TWA/LMPE-PPT: 50 ppm |
| 98-82-8 | | TWA/LMPE-PPT: 245 mg/m ³ |
| | | STEL/LMPE-CT: 75 ppm |
| | | STEL/LMPE-CT: 365 mg/m ³ |
| Xylene (Mixed Isomer) 1330-20-7 | | STEL: 150 ppm |

APPROPRIATE ENGINEERING CONTROLS

Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows, etc. Controlled ventilation means air is supplied or removed by powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

INDIVIDUAL PROTECTION MEASURES SUCH AS PERSONAL PROTECTIVE EQUIPMENT

Eye /Face Protection:

Wear safety glasses with side shields (or goggle). If splashes are likely to occur, wear suitable face shield. Ensure the eye wash stations and safety showers are close to the workstation location.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent contact.

Respiratory Protection:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State Viscous Liquid Appearance Colored Liquid

Odor Mild Odor Threshold No information Available

<u>Property</u> <u>Values</u> <u>Remarks/ Method</u>

PH No Data Available Melting Point/ Freezing Point No Data Available

Boiling Point/ Boiling Range > 163 °C/ 325 °F

Flash Point 40 °C/ 104 °F Penskey Martens Closed Cup (PMCC)

Evaporation Rate No Data Available

Flammability Limit in Air

Upper Flammability Limit (% vol)

Lower Flammability Limit (% vol)

Vapor Pressure

No Data Available

No Data Available

Vapor Density (Air=1) 4.5

Specific Gravity No Data Available Water Solubility No Data Available Solubility in Other Solvents No Data Available Partition Coefficient: N-Octanol/ Water No Data Available Auto Ignition Temperature No Data Available **Decomposition Temperature** No Data Available Kinetic Viscosity No Data Available Dynamic Viscosity No Data Available **Explosive Property** No Data Available Oxidizing Property No Data Available

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical Stability

No information Available Stable under normal condition

Possibility of Hazardous Reactions Conditions to Avoid

None under normal processing Keep away from open flames, hot surfaces and sources of ignition

Incompatible Materials

Strong acids, strong bases, reducing agent. **Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors, Carbon Dioxide (CO2), Carbon Monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation There is no data for this product Eye Contact There is no data for this product Skin Contact There is no data for this product Ingestion There is no data for this product

| Component | CAS No. | Oral LD50 |
|---------------------------------------|------------|--------------------|
| Titanium Dioxide | 13463-67-7 | >10000 mg/kg (Rat) |
| Silicon Dioxide | 7631-86-9 | >5000 mg/kg (Rat) |
| Petroleum Naphtha, Light Aromatic | 64742-95-6 | 8400 mg/kg (Rat) |
| Petroleum Naphtha, Heavy Aromatic | 64742-94-5 | 3000 mg/kg (Rat) |
| Stoddard Solvent | 8052-41-3 | >5000 mg/kg (Rat) |
| 1,2,4- Trimethylbenzene (Constituent) | 95-63-6 | 3400 mg/kg (Rat) |
| Cumene (Constituent) | 98-82-8 | 2910 mg/kg (Rat) |
| Xylene (mixed Isomer) | 1330-20-7 | 3523 mg/kg (Rat) |
| Ethylbenzene | 100-41-4 | 3500 mg/kg (Rat) |

| Component | CAS No. | LD50 Dermal |
|---------------------------------------|------------|-----------------------|
| Silicon Dioxide | 7631-86-9 | >2000 mg/kg (Rabbit) |
| Petroleum Naphtha, Light Aromatic | 64742-95-6 | >2000 mg/kg (Rabbit) |
| Petroleum Naphtha, Heavy Aromatic | 64742-94-5 | >2000 mg/kg (Rabbit) |
| Stoddard Solvent | 8052-41-3 | >3000 mg/kg (Rat) |
| Xylene (mixed Isomer) | 1330-20-7 | >4200 mg/kg (Rabbit) |
| 1,2,4- Trimethylbenzene (Constituent) | 95-63-6 | >3160 mg/kg (Rabbit) |
| Cumene (Constituent) | 98-82-8 | >3160 mg/kg (Rabbit) |
| Ethylbenzene | 100-41-4 | 15,400 mg/kg (Rabbit) |

| Component | CAS No. | Inhalation LC50 |
|---------------------------------------|------------|----------------------|
| Petroleum Naphtha, Light Aromatic | 64742-95-6 | 3400 ppm (Rat) 4h |
| | | >5.2 mg/L (Rat) 4h |
| Petroleum Naphtha, Heavy Aromatic | 64742-94-5 | >590 mg/m³ (Rat) 4h |
| Stoddard Solvent | 8052-41-3 | >5.5 mg/L |
| 1,2,4- Trimethylbenzene (Constituent) | 95-63-6 | 18 g/m³ (Rat) 4h |
| Xylene (mixed Isomer) | 133020-7 | 6700ppm (Rat) 4h |
| Cumene (Constituent) | 98-82-8 | 39000 mg/m³ (Rat) 4h |
| Ethylbenzene | 100-41-4 | 4000 ppm (Rat) 4h |
| Silicon Dioxide | 7631-869 | >2.2 mg/L (Rat) 1h |

Information on Toxicological Effects

Symptoms There is no data for this product.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure.

Skin Corrosion/ Irritation There is no data for this product. Eye Damage/ Irritation There is no data for this product. There is no data for this product Irritation Corrositivity There is no data for this product. Sensitization There is no data for this product. Mutagenic Effects There is no data for this product. Reproductive Effects There is no data for this product. STOT – Single exposure There is no data for this product. STOT- Repeated Exposure There is no data for this product. Chronic Toxicity There is no data for this product. Aspiration Hazard There is no data for this product.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No. | IARC | ACGIH | OSHA |
|----------------------|------------|----------|-------|------|
| Titanium Dioxide | 13463-67-7 | Group 2B | | х |
| Cumene (Constituent) | 98-82-8 | Group 2B | | х |
| Ethylbenzene | 100-41-4 | Group 2B | | |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: None known

| Component | CAS No. | Algae/ Aquatic Plants | |
|-----------------------------------|------------|---|--|
| Silicon Dioxide | 7631-86-9 | 72 h EC50 Pseudokirchneriella Subcapitata: 440 mg/L | |
| Cumene (constituent) | 98-82-8 | 72 h EC50 Pseudokirchneriella Subcapitata: 2.6 mg/L | |
| Stoddard Solvent | 8052-41-3 | 72 h EC50 : 0.58-1.2 mg/L | |
| Xylene (mixed Isomer) | 1330-20-7 | 72 h EC50 Selenastrum Capricormutum: 2.2 mg/l | |
| Component | CAS No. | Fish | |
| Silicon Dioxide | 7631-86-9 | 96 h LC50 Brachydanio rerio: 5000 mg/L (static) | |
| Petroleum Naphtha, light aromatic | 64742-95-6 | 96 h LC50 Oncorhynchus Mykiss: 9.22 mg/L | |
| | | | |

| Silicon Dioxide | 7631-86-9 | 96 h LC50 Brachydanio rerio: 5000 mg/L (static) |
|---------------------------------------|------------|--|
| Petroleum Naphtha, light aromatic | 64742-95-6 | 96 h LC50 Oncorhynchus Mykiss: 9.22 mg/L |
| | | |
| 1,2,4- Trimethylbenzene (constituent) | 95-63-6 | 96 h LC50 Pimephales Promelas: 7.19-8.28 mg/L (flow-through) |
| Cumene (constituent) | 98-82-8 | 96 h LC50 Pimephales Promelas: 6.04-6.61 mg/L (flow-through) |
| | | 96 h LC50 Oncorhynchus Mykiss: 2.7 mg/L (semi-static) |
| | | 96 h LC50 Oncorhynchus Mykiss: 4.8 mg/L (flow through) |
| | | 96 h LC50 Poecilia Reticulata: 5.1 mg/L (semi-static) |
| Stoddard Solvent | 8052-41-3 | 96 h LC50 Bluegill Sunfish: 2.1-4.2 vmg/L |
| Xylene (mixed Isomer) | 1330-20-7 | 96 h LC50 Oncorhynchus Mykiss: 2.6 mg/l |
| Ethylbenzene | 100-41-4 | 96 h LC50 Sheepshead Minnow: 275 mg/l |
| | | 96 h LC50 Flathead Minnow: 42.3-48.5 mg/l |
| | | 96 h LC50 Guppy: 97.1 mg/l |

| Component | CAS No. | Crustacea |
|---------------------------------------|-----------|---|
| Silicon Dioxide | 7631-86-9 | 48 h EC50 Ceriodaphnia Dubia: 7600 mg/L |
| 1,2,4- Trimethylbenzene (constituent) | 95-63-6 | 48 h EC50 Daphnia Magna: 6.14 mg/L |
| Cumene (constituent) | 98-82-8 | 48 h EC50 Daphnia Magna: 7.9-14.1 mg/L (static) |
| | | 48 h EC50 Daphnia Magna: 0.6 mg/L |
| Stoddard Solvent | 8052-41-3 | 48 h EC50 Water Flea: 0.42-2.3 mg/L |
| Xylene (mixed Isomer) | 1330-20-7 | 24 h EC50: Water Flea: >3.4 mg/l |

Persistence and Degradability

No information Available

Bioaccumulation

No information Available

| Component | CAS No. | Partition Coefficient |
|---------------------------------------|------------|-----------------------|
| Petroleum Naphtha, Heavy aromatic | 64742-94-5 | 4.5 |
| Stoddard Solvent | 8052-41-3 | 3.16-7.06 |
| 1,2,4 –Trimethylbenzene (constituent) | 95-63-6 | 3.63 |
| Cumene (constituent) | 98-82-8 | 3.55 |
| Xylene (mixed Isomer) | 1330-20-7 | 3.12 |

Other Adverse Effects: No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Treatments Methods

Waste Disposal Methods Contain and dispose of waste according to local regulations.

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT NFORMATION

DOT In US and Canada, this material can be reclassified as a combustible liquid and is not regulated, via surface transportation, in containers less than 119 gallons or 450 liters [per 49 CFR 173.150 (f)] [per Transportation of Dangerous Goods Regulations Part 1.33].

UN/ID No: UN1210
Proper Shipping name: Printing Ink

Hazard Class: 3
Packing Group: III
ICAO/ IATA/ IMDG/ IMO

UN/ID No: UN1210 **Proper Shipping name**: Printing Ink

Hazard Class: 3 Packing Group: III

SECTION 15. REGULATORY INFORMATION

International Inventories

All components are listed on the TSCA Inventory. For further information, please contact: Supplier (manufacturer/importer/downstream user/ distributor.

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | CAS NO. | Weight % | SARA 313 Threshold Values |
|---------------------------------------|-----------|----------|---------------------------|
| 1,2,4, Trimethylbenzene (constituent) | 95-63-6 | 1-5 | 1.0 |
| Cumene (constituent) | 98-82-8 | <1 | 1.0 |
| Xylene (mixed Isomer) | 1330-20-7 | <0.1 | 1.0 |
| Ethylbenzene | 100-41-4 | <0.5 | 0.1 |

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

This product contains the following substances which are listed hazardous pollutants (HAPS) under section 112 of the Clear Air Act.

| Component | CAS NO. | Weight % |
|-----------------------|-----------|----------|
| Cumene (constituent) | 98-82-8 | <1 |
| Xylene (mixed Isomer) | 1330-20-7 | <0.1 |
| Ethylbenzene | 100-41-4 | <0.5 |

U.S. State Regulations

| Component | CAS NO. | Massachusetts Right to Know | Minnesota Right to Know |
|--------------------------------------|------------|-----------------------------|-------------------------|
| Titanium Dioxide | 13463-67-7 | X | x |
| Silicon Dioxide | 7631-86-9 | X | X |
| Stoddard Solvent | 8052-41-3 | X | X |
| 1,2,4-Trimethylbenzene (constituent) | 95-63-6 | X | Х |
| Cumene (constituent) | 98-82-8 | X | X |
| Ethylbenzene | 100-41-4 | X | Х |

| Component | CAS NO. | New Jersey Right to Know | Pennsylvania Right to Know |
|---------------------------------------|------------|--------------------------|----------------------------|
| Titanium Dioxide | 13463-67-7 | Х | X |
| Silicon Dioxide | 7631-86-9 | X | X |
| Stoddard Solvent | 8052-41-3 | Х | X |
| 1,2,4-Trimethyl Benzene (constituent) | 95-63-6 | Х | Х |
| Cumene (constituent) | 98-82-8 | Х | X |
| Ethylbenzene | 100-41-4 | Х | X |

California Prop. 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

| Toproductive name | |
|----------------------|---------------------|
| Component | California Prop. 65 |
| Titanium Dioxide | Carcinogen |
| Cumene (constituent) | Carcinogen |
| Ethylbenzene | Carcinogen |

Canada

| Component | NPRI – National Pollutant Release Inventory |
|---|--|
| Petroleum Naphtha, Light Aromatic 64742-95-6 | Part 5. Other Groups and Mixtures |
| Petroleum Naphtha, Heavy Aromatic 647-42-94-5 | Part 5. Other Groups and Mixtures. Part 4 Substances as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999 |
| 1,2,4 Trimethylbenzene (constituent) 95-63-6 | Part 1. Group A substance, Part 5 Individual Substance, Part 4, Substances as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999 |
| Cumene (constituent) 98-82-8 | Part 1. Group A substance, Part 5 Individual Substance, Part 4, Substances as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999 |
| Ethylbenzene 100-41-4 | Part 1. Group A substance, Part 5 Individual Substance, Part 4, Substances as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999 |
| Xylene (Mixed Isomer) 1330-20-7 | Part 5. Other Groups and Mixtures |

SECTION 16. OTHER INFORMATION

HMISHealthFlammabilityReactivityPersonal Protection2*20x

Key or legend to abbreviations and acronyms used in safety data sheet.

Legend – Section 8: Exposure Controls/Personal Protection

TWA Time Weighted Average STEL Short Term Average Ceiling Maximum Limit Value

ACGIH American Conference of Governmental Industrial Hygienist

A1 Known Human Carcinogen
A2 Suspended Human Carcinogen

A3 Animal Carcinogen

IARC International Agency for Research on Cancer

Group 1 Carcinogenic to Humans

Group 2A Probably Carcinogenic to Humans Group 2B Possibly Carcinogenic to Human

NTP National Toxicity Program
Known Carcinogen

Reasonably Anticipated to be a Human Carcinogen

OSHA Occupational Health and Safety Administration

X Present

Date JUN. 15, 2019

DISCLAIMER

This information provided in this Safety Data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS