

## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

#### PRODUCT IDENTIFIER

Product Code                    **GLV-2110**  
 Product Name                   **EX-OPAQUE BLACK**  
 Product Category               **GLOSS VINYL SERIES SCREEN INK (GLV)**

#### 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 - Inhalation	Category 4 - (H332)
Serious Eye Damage/ Irritation	Category 2 - (H319)
Specific Target Organ Toxicity (Single Exposure)	Category 3 - (H335)
Flammable Liquid	Category 3 - (H226)

#### LABEL ELEMENTS



**SIGNAL WORD:     DANGER!**

#### **HAZARD STATEMENTS**

H332     Harmful if inhaled  
 H319     Causes serious eye irritation  
 H335     May cause respiratory irritation  
 H226     Flammable liquid and vapor

#### **PRECAUTIONARY STATEMENTS**

P331 – Do not induce vomiting  
 P210 – Keep away from heat/ sparks/open flames/ hot surfaces – No smoking.

#### **HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)**

May be harmful in contact with skin.

### SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

**Mixture:**

COMPONENTS	WEIGHT %	CAS NO	NOTE
CARBON BLACK	5-10	1333-86-4	
ISOPHORONE	15-40	78-59-1	
PETROLEUM NAPHTHA, HEAVY AROMATIC	10-30	64742-94-5	
2-METHOXY-1-METHYL ETHYL ACETATE	7-13	108-65-6	
DIACETONE ALCOHOL	5-10	123-42-2	

### 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 EFFECTS, 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 (CO<sub>2</sub>), 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 INCOMPATIBILITIES

#### **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
Carbon Black 1333-86-4	TWA: 3 mg/m <sup>3</sup> (inhalable fraction)	TWA: 3.5 mg/m <sup>3</sup>
Isophorone 78-59-1	Ceiling: 5 ppm	TWA: 4 ppm TWA: 23 mg/m <sup>3</sup> TWA: 25 ppm TWA: 140 mg/m <sup>3</sup>
2-Methoxy-1-Methyl Ethyl Acetate 108-65-6	TWA: 50 ppm	
Diacetone Alcohol 123-42-2	TWA: 50 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup>

Component	Ontario TWAEV	Mexico OEL (TWA)
Carbon Black 1333-86-4	TWA: 3.5 mg/m <sup>3</sup>	TWA/LMPE-PPT: 3.5 mg/m <sup>3</sup> STEL/LMPE-CT: 7 mg/m <sup>3</sup>
Isophorone 78-59-1	CEV: 5 ppm	TWA: Peak 5 ppm TWA: Peak 25 mg/m <sup>3</sup>
Diacetone Alcohol 123-42-2	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> STEL: 75 ppm STEL: 360 mg/m <sup>3</sup>	TWA/LMPE-PPT: 50 ppm TWA/LMPE-PPT: 240 mg/m <sup>3</sup> STEL/LMPE-CT: 75 ppm STEL/LMPE-CT: 360 mg/m <sup>3</sup>

**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**

<b>Physical State</b>	Viscous Liquid	<b>Appearance</b>	Colored Liquid
<b>Odor</b>	Sharp	<b>Odor Threshold</b>	No information Available
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks/ Method</u></b>	
PH		No Data Available	
Melting Point/ Freezing Point		No Data Available	
Boiling Point/ Boiling Range	> 145 °C/ 293 °F		
Flash Point	57.8 °C/ 136 °F	Penskey Martens Closed Cup (PMCC)	
Evaporation Rate		No Data Available	
Flammability Limit in Air			
Upper Flammability Limit (% vol)		No Data Available	
Lower Flammability Limit (% vol)		No Data Available	
Vapor Pressure		No Data Available	
Vapor Density		(Air=1) 4.3	
Specific Gravity	1.03		
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**

No information Available

**Chemical Stability**

Stable under normal condition

**Possibility of Hazardous Reactions**

None under normal processing

**Conditions to Avoid**

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 (CO<sub>2</sub>), 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
Carbon Black	1333-86-4	>15400 mg/kg (Rat)
Isophorone	78-59-1	1500 mg/kg (Rat)
Petroleum Naphtha, Heavy Aromatic	64742-94-5	5000 mg/kg (Rat)
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	8532 mg/kg (Rat)
Diacetone Alcohol	123-42-2	4 g/kg (Rat)

Component	CAS No.	LD50 Dermal
Carbon Black	1333-86-4	>3 g/kg (Rabbit)
Isophorone	78-59-1	1200 mg/kg (Rabbit)
Petroleum Naphtha, Heavy Aromatic	64742-94-5	>2000 mg/kg (Rabbit)
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	>19200 mg/kg (Rabbit)
Diacetone Alcohol	123-42-2	13500 mg/kg (Rabbit)

Component	CAS No.	Inhalation LC50
Isophorone	78-59-1	7 mg/L (Rat) 4h
Petroleum Naphtha, Heavy Aromatic	64742-94-5	>590 mg/m <sup>3</sup> (Rat) 4h
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	>5320 ppm (28.7 mg/L)(Rat) vapour

**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.
Irritation	There is no data for this product.
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
Carbon Black	1333-86-4	Group 2B

Component	CAS No.	ACGIH
Carbon Black	1333-86-4	A3
Isophorone	78-59-1	A3

Component	CAS No.	OSHA
Carbon Black	1333-86-4	X

## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

None known

0% of the mixture consists of components of unknown hazards to the aquatic environment.

Component	CAS No.	Algae/ Aquatic Plants
Isophorone	78-59-1	96 h EC50 Pseudokirchneriella Subcapitata: 51.1 – 342 mg/L
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	96 h EC50 >1000 mg/L or 72h (Green Algae)

Component	CAS No.	Fish
Isophorone	78-59-1	96 h LC50 Pimephales Promelas: 132-156 mg/L (flow through) 96 h LC50 Lepomis Macrochirus: 180-250 mg/L (static) 96 h LC50 Pimephales Promelas: 213-271 mg/L (static)
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	96 h LC50 Flathead Minnow: 161 mg/L
Diacetone Alcohol	123-42-2	96 h LC50 Lepomis Macrochirus: 420 mg/L 96 h LC50 Lepomis Macrochirus: 420 mg/L (static)

Component	CAS No.	Crustacea
Carbon Black	1333-86-4	24h EC50 daphnia Magna: >5600 mg/L
Isophorone	78-59-1	48 h EC50 Daphnia Magna: 117 mg/L
2-Methoxy -1 Methyl Ethyl Acetate	105-65-6	48 h EC50 Daphnia Magna: 408 mg/L
Diacetone Alcohol	123-42-2	24 h EC50 Daphnia Magna: 8750 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
Isophorone	78-59-1	1.66
Diacetone Alcohol	123-42-2	1.03

**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.

<b>SECTION 14. TRANSPORT INFORMATION</b>
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**DOT**

In Canada and US, this material may 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/ Clear Language Part 1.33]

UN/ ID No. UN 1210  
 Proper Shipping name: Printing Ink  
 Hazard Class: 3  
 Packing Group: III

**ICAO/ IATA/ IMDG/ IMO**

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<b>SECTION 15. REGULATORY INFORMATION</b>
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**International Inventories**

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

**US Federal Regulations****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 %
Isophorone	78-59-1	15-40

**U.S. State Regulations**

Component	CAS NO.	Massachusetts Right to Know
Carbon Black	1333-86-4	X
Isophorone	78-59-1	X
Diacetone Alcohol	123-42-2	X

Component	CAS NO.	Minnesota Right to Know
Carbon Black	1333-86-4	X
Isophorone	78-59-1	X
Diacetone Alcohol	123-42-2	X

Component	CAS NO.	New Jersey Right to Know
Carbon Black	1333-86-4	X
Isophorone	78-59-1	X
Diacetone Alcohol	123-42-2	X

Component	CAS NO.	Pennsylvania Right to Know
Carbon Black	1333-86-4	X
Isophorone	78-59-1	X
Diacetone Alcohol	123-42-2	X

Component	CAS NO.	Pennsylvania Right to Know
Carbon Black	1333-86-4	X
Isophorone	78-59-1	X
Diacetone Alcohol	123-42-2	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.

Component	California Prop. 65
Carbon Black	Carcinogen

**Canada**

Component	NPRI – National Pollutant Release Inventory
Isophorone 78-59-1	Part 4. Substance as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999
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
Diacetone Alcohol 123-42-2	Part 4. Substance as set out in Section 65 of the List of Toxic Substance in Schedule 1 of the Canadian Environmental Protection Act 1999

<b>SECTION 16. OTHER INFORMATION</b>
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<b>HMIS</b>	Health	Flammability	Reactivity	Personal Protection
	2*	2	0	x

**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 Known Carcinogen  
 Reasonably Anticipated to be a Human Carcinogen

**OSHA** Occupational Health and Safety Administration  
 X Present

**Date** Nov. 24, 2016

**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**