INKTECH INTERNATIONAL CORPORATION

Issue Date
Nov.24, 2016

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER

Product Code	**GLE-1120**
Product Name	**WHITE**
Product Category	**GLOSS ENAMEL INK (GLE)**

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
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EMERGENCY TELEPHONE NUMBER

Chemtrec 1-613-996-6666

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION

Aspiration Toxicity	Category 1 (H304)
Flammable Liquid	Category 4 (H227)

LABEL ELEMENTS

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H304 May be fatal if swallowed and enters airways
H227 Combustible liquid

PRECAUTIONARY STATEMENTS

P331 – Do not induce vomiting
P210 – Keep away from heat/ sparks/open flames/ hot surfaces – No smoking.
P280 – Wear protective gloves/eye protection/ face protection.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

May be harmful in contact with skin.
Ingestion may cause irritation of mouth, throat and stomach. May cause respiratory irritation. Contact with eyes may cause irritation.

SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixture:

COMPONENTS	WEIGHT %	CAS NO	NOTE
HYDROTREATED LIGHT DISTILLATE	10-30	34742-47-8	
TITANIUM DIOXIDE	10-30	13463-67-7	
SILICON DIOXIDE	1-5	7631-86-9	
ALUMINUM HYDROXIDE	1-5	21645-51-2	
BARRIUM SULFATE	10-30	7727-43-7	
ETHYL BENZENE (CONSTITUENT)	<0.50	34742-47-8	
COBALT COMPOUNDS	<0.50	TRADE SECRET	

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
Aspiration Hazard – Material may cause lung inflammation or damage if it enters lungs through vomiting or swallowing. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal. Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects. Direct eye contact may cause temporary redness, ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May have laxative effects.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT
Notes to Physician: Treat symptomatically. Aspiration hazard.

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:
Do not use a solid water stream as it may scatter and spread fire.

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
Hydrotreated Light Distillate 64742-47-8	TWA: 200 mg/m³ (as total hydrocarbon vapor)	PEL- N/A STEL- N/A
Titanium Dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 10 mg/m³ (total dust) TWA: 15 mg/m³ (total dust)
Barium Sulfate 7727-43-7	TWA: 10 mg/m³	TWA: 10 mg/m³ (total dust) TWA: 15 mg/m³ (total dust) TWA: 5 mg/m³ (respirable fraction)
Ethyl Benzene (constituent) 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL 545 mg/m³
Silicon Dioxide 7631-86-9		TWA: 6 mg/m³

Component	Ontario TWAEV	Mexico OEL (TWA)
Titanium Dioxide 13463-67-7	TWA: 10 mg/m³ (total dust)	TWA/LMPE-PPT: 10 mg/m³ (as Ti) STEL/LMPE-CT: 20 mg/m³ (as Ti)
Barium Sulfate 7727-43-7	TWA: 10 mg/m³ (total dust)	
Ethyl Benzene (constituemt) 100-41-4	TWA: 100 ppm STEL: 125 ppm	TWA/LMPE-PPT: 100 ppm TWA/LMPE-PPT: 435 mg/m³ STEL/LMPE-CT: 125 ppm STEL/LMPE-CT: 545 mg/m³

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	Liquid	**Appearance**	Colored Liquid
Odor	Mild Petroleum Odor	**Odor Threshold**	No information Available

Property	**Values**	**Remarks/ Method**
PH		No Data Available
Melting Point/ Freezing Point		No Data Available
Boiling Point/ Boiling Range	< 149 ˚C/ 300 ˚F	
Flash Point	46 ˚C/115˚F	Seta Closed Cup
Evaporation Rate		No Data Available
Flammability Limit in Air		
Upper Flammability Limit (% vol)	10.5 %	
Lower Flammability Limit (% vol)	1.5 %	
Vapor Pressure		No Data Available
Vapor Density	4.5 (Air=1)	
Specific Gravity	1.34	
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
Not normally reactive

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 (CO2), Carbon Monoxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	No information available
Eye Contact	No information available
Skin Contact	No information available
Ingestion	No information available

Component	CAS No.	Oral LD50
Hydrotreated Light Distillate	64742-47-8	>5000 mg/kg (Rat)
Titanium Dioxide	13463-67-7	>10000 mg/kg (Rat)
Aluminum Hydroxide	21645-15-2	>5000 mg/kg (Rat)
Silicon Dioxide	7631-869	>5000 mg/kg (Rat)
Ethyl Benzene (constituent|)	100-41-4	3500 mg/kg (Rat)

Component	CAS No.	LD50 Dermal
Hydrotreated Light Distillate	64742-47-8	>2000 mg/kg (Rabbit)
Silicon Dioxide	7631-869	>2000 mg/kg (Rabbit)
Ethyl Benzene (constituent)	100-41-4	15354 mg/kg (Rabbit)

Component	CAS No.	Inhalation LC50
Hydrotreated Light Distillate	64742-47-8	>6.03 mg/L (aerosol)
Silicon Dioxide	7631-869	>2.2 mg/L (Rat) 1h
Ethyl Benzene (constituent)	100-41-4	17.2 mg/L (Rat) 4h

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	Primary irritation (Rabbit): 1.2 (Max. score is 8.0)
Eye Damage/ Irritation	Primary irritation (Rabbit): 1 hour; 3.0 (Max. score is 110.0)
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	May be fatal if swallowed and enters airways.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as carcinogen.

Component	CAS No.	ACGIH	IARC	OSHA
Titanium Dioxide	13463-67-7	A3	Group 2B	X
Ethyl Benzene (cons.)	100-41-4		Group 2B	X
Cobalt Compounds			Group 2B	X

SECTION 12. ECOLOGICAL INFORMATION

Etoxicity:

Not expected to harmful to aquatic organisms. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. See the following tables for the substance`s ecotoxicity. Do not allow this material to drain into sewers/water supplies.

Component	CAS No.	Toxicity to Algae
Hydrotreated Light Distillate	64742-47-8	N/A
Silicon Dioxide	7631-86-9	72 h EC50 Pseudokirchneriella Subcapitata: 440 mg/L
Ethyl Benzene	100-41-4	96 h EC50 Pseudokirchneriella Subcapitata: 1.7-7.6 mg/L (static) 72 h EC50 Pseudokirchneriella Subcapitata: 2.6-11.3 mg/L (static) 72 h EC50 Pseudokirchneriella Subcapitata: 4.6 mg/L 96 h EC50 Pseudokirchneriella Subcapitata: >438 mg/L

Component	CAS No.	Toxicity to Fish
Hydrotreated Light Distillate	64742-47-8	96 h LC50 Fatheadminnow: 45 mg/L
Silicon Dioxide	7631-86-9	96 h LC50 Brachydario rerio: 5000 mg/L (static)
Ethyl Benzene (constituent)	100-41-4	96 h LC50 Oncorhynchus mykiss: 11.0-18.0 mg/L (static) 96 h LC50 Pimephales Promelas: 7.55-11 mg/L (flow through) 96 h LC50 Pimephales Promelas: 9.1-15.6 mg/L (static) 96 h LC50 Lepomis Macrochirus: 32 mg/L (static) 96 h LC50 Oncorhynchus mykiss: 4.2 mg/L (semi-static) 96 h LC50 Poecilia Reticulata: 9.6 mg/L (static)

Component	CAS No.	Toxicity to Crustacia
Silicon Dioxide	7631-86-9	48 h EC50 Ceriodaphnia Dubia: 7600 mg/L
Ethyl Benzene (constituent)	100-41-4	48 h EC50 Daphnia Magna 1.8-2.4 mg/L

Persistence and Degradability
No information available.

Bioaccumulation
No information Available

Component	CAS No.	Partition Coefficient
Hydrotreated Light Distillate	64742-47-8	5.1 – 8.8
Ethyl Benzene (constituent)	100-41-4	3.118

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 INFORMATION

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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SECTION 15. REGULATORY INFORMATION

International Inventories
All Components are listed on the TSCA Inventory. For further information, please contact: Supplie.

US Federal Regulations

SARA 313
Section 313 of the 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 o the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS NO.	Weight %	SARA 313- Threshold Value
Ethyl Benzene (constituent)	100-41-4	<0.5	0.1

U.S. State Regulations

Component	CAS NO.	Massachusetts Right to Know
Hydrotreated Light Distillate	64742-47-8	x
Titanium Dioxide	13463-67-7	x
Silicon Dioxide	7631-86-9	x
Barium Sulfate	7727-43-7	x
Ethyl Benzene (constituent)	100-41-4	x

Component	CAS NO.	Minnesota Right to Know
Hydrotreated Light Distillate	64742-47-8	x
Titanium Dioxide	13463-67-7	x
Silicon Dioxide	7631-86-9	x
Barium Sulfate	7727-43-7	x
Ethyl Benzene (constituent)	100-41-4	x

Component	CAS NO.	New Jersey Right to Know
Hydrotreated Light Distillate	64742-47-8	x
Titanium Dioxide	13463-67-7	x
Silicon Dioxide	7631-86-9	x
Barium Sulfate	7727-43-7	x
Ethyl Benzene (constituent)	100-41-4	x
Cobalt Compounds		x

Component	CAS NO.	Pennsylvania Right to Know
Hydrotreated Light Distillate	64742-47-8	x
Titanium Dioxide	13463-67-7	x
Silicon Dioxide	7631-86-9	x
Barium Sulfate	7727-43-7	x
Ethyl Benzene (constituent)	100-41-4	x
Cobalt Compounds		x

Component	CAS NO.	Rhode Island Right to Know
Hydrotreated Light Distillate	64742-47-8	x

Component	CAS NO.	California Right to Know
Hydrotreated Light Distillate	64742-47-8	x

California Prop. 65

This product does not contain 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
Titanium Dioxide	Carcinogen
Ethyl Benzene (constituent)	Carcinogen

Canada:

Component	NPRI – National Pollutant Release Inventory
Ethyl Benzene 100-41-4 (constituent)	Part 1, Group A Substance Part 4 Substance as set out in Section 65 of the list of Toxic Substances in Schedule 1 of The Canadian Environmental Act 1999.
Cobalt Compounds	Part 1, Group A Substance total of the pure element and the Equivalent weight of the element contained in any Compound,

SECTION 16. OTHER INFORMATION

HMIS	Health	Flammability	Reactivity	Personal Protection
	1*	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 November 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