SAFETY DATA SHEET

SECTION 1: Identification of the hazardous chemical and of the supplier

Product identifier

Product Name
Printing ink

Other means of identification

Product Code(s) 5157E
UN number or ID number UN1210

Pure substance/ mixture Mixture

Details of the supplier of the safety data sheet

Supplier Address

Company
Inkminic Logo Technology
(Guangzhou) Co., Ltd

Emergency telephone number
AMBIPAR: 020-32954560 (24 Hours)

Section 2: Hazard identification

Emergency Overview

Irritating to eyes
Vapors may cause drowsiness and dizziness
HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames

Color black	**Physical state** Liquid	**Odor** Solvent

Classification of the substance or mixture

Flammable liquids	Category 2
Acute toxicity - Oral	Category 5
Serious eye damage/ eye irritation	Category 2A
Specific target organ toxicity - Single exposure	Category 3

Label elements

Signal word Danger

Hazard statements
Highly flammable liquid and vapor
May be harmful if swallowed
Causes serious eye irritation
May cause drowsiness or dizziness

Precautionary statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/ protective clothing/ eye protection/ face protection
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
Use only outdoors or in a well-ventilated area
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/ bond container and receiving equipment
Use explosion-proof electrical/ ventilating / lighting / equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Response
Call a POISON CENTER or doctor/ physician if you feel unwell
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/ physician if you feel unwell
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/ attention
In case of fire: Use CO_2, dry chemical, or foam for extinction

Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Keep container tightly closed

Disposal
Dispose of contents/ container in accordance with local, regional, national, and international regulations as applicable

Physical and chemical hazards
Highly flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated.

Health hazards
Immediate Health Effects: If large quantities of this material are swallowed, call a physician immediately. If symptoms persist, call a physician. Causes severe irritation (tears, blurred vision and redness). Irritating, but will not permanently injure eye tissue. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Chronic effects: Not applicable.

Environmental hazards
Not applicable

Other hazards which do not result in classification
Repeated exposure may cause skin dryness or cracking

Section 3: Composition and information on ingredients

Substance

Not applicable.

Mixture

Chemical nature Preparation.

Chemical name	Weight-%	CAS No
Methyl ethyl ketone	80 - 90	78-93-3
Chromium, 1-[2-[5-(1, 1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]diazenyl]-2-naphthalenol 1-[2-[2-hydroxy-4(or 5)-nitrophenyl]diazenyl]-2-naphthalenol ammonium sodium complexes	5 - 10	1029600-34-7
Isopropyl alcohol	1 - 5	67-63-0

Chemical Additions In Australia and various Asia countries, the Chromium, 1-[2-[5-(1, 1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]diazenyl]-2-naphthalenol 1-[2-[2-hydroxy-4(or 5)-nitrophenyl]diazenyl]-2-naphthalenol ammonium sodium complexes present in this material is identified by the CAS 61901-87-9.

Section 4: First-aid measures

Description of necessary first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms/effects, acute and delayed Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

For emergency responders Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Note to physicians Treat symptomatically.

Section 5: Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective actions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Precautions to prevent secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Section 7: Handling and storage

Precautions for safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label

instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. See Section 8 for information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

SECTION 8: Exposure controls and personal protection

Occupational exposure limits

Chemical name	China	ACGIH TLV
Methyl ethyl ketone 78-93-3 (80 - 90)	TWA: 300 mg/m³ STEL: 600 mg/m³	STEL: 300 ppm TWA: 200 ppm
Isopropyl alcohol 67-63-0 (1 - 5)	TWA: 350 mg/m³ STEL: 700 mg/m³	STEL: 400 ppm TWA: 200 ppm

Biological occupational exposure limits
No data available

Chemical name	Biological standards	Monitoring and observation processes	ACGIH
Methyl ethyl ketone - 78-93-3			2 mg/L
Isopropyl alcohol - 67-63-0			40 mg/L - urine (Acetone) - end of shift at end of workweek

Monitoring and observation processes
No applicable information was found.

Engineering controls
Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves. Impervious gloves.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Color	black
Physical state	Liquid
Odor	Solvent
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	Not applicable	
Melting point / freezing point	-85 °C	
Initial boiling point and boiling range	75 °C	
Flash point	-9 °C	
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	12.0	
Lower flammability or explosive limits	1.8	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	0.87	
Water solubility	partly soluble	
Solubility(ies)	No data available	None known
Partition coefficient	log P(o/w) = 0.26	
Autoignition temperature	400 °C	
Hyphen	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Additional information

Explosive properties	No information available
Oxidizing properties	No information available

Section 10: Stability and reactivity

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Sensitivity to mechanical impact None.
Sensitivity to static discharge Yes.

Hazardous polymerization no.

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known based on information supplied.

Hazardous decomposition products none.

Section 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	3,859.70 mg/kg
ATEmix (dermal)	5,863.70 mg/kg
ATEmix (inhalation-vapor)	1,055.70 mg/l

Unknown acute toxicity

7.45 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
7.45 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
9.82 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
7.45 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
9.82 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone	2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
Isopropyl alcohol	= 5840 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	> 10000 ppm (Rat) 6 h

Skin corrosion/ irritation May cause skin irritation.

Serious eye damage/ eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity

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

Chemical name	China	IARC
Isopropyl alcohol	-	Group 3

Legend
IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

Specific target organ toxicity (single exposure) May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) No information available.

Target organ effects Blood. Central nervous system. Eyes. Kidney. Liver. Lungs. Respiratory system. Skin.

Aspiration hazard No information available.

Section 12: Ecological information

Ecotoxicity

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/ aquatic plants	Fish	Crustacea
Methyl ethyl ketone	-	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50: >520mg/L (48h, Daphnia magna) EC50: =5091mg/L (48h, Daphnia magna) EC50: 4025 - 6440mg/L (48h, Daphnia magna)
Isopropyl alcohol	>1000: 96 h Desmodesmus subspicatus mg/L EC50 >1000: 72 h Desmodesmus subspicatus mg/L EC50	LC50: =9640mg/L (96h, Pimephales promelas) LC50: =11130mg/L (96h, Pimephales promelas) LC50: >1400000µg/L (96h, Lepomis macrochirus)	EC50: =13299mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulative potential There is no data for this product.

Component Information

Chemical name	Partition coefficient
Methyl ethyl ketone	0.3
Isopropyl alcohol	0.05

Mobility in soil No information available.

SECTION 13: Disposal information

Waste chemicals Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

SECTION 14: Transportation information

IMDG

UN number or ID number UN1210
UN proper shipping name Printing ink
Transport hazard class(es) 3
Packing group II
EmS-No F-E, S-D
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

IATA

UN number or ID number UN1210
UN proper shipping name Printing ink
Transport hazard class(es) 3
Packing group II

UN number or ID number UN1210
UN proper shipping name Printing ink

Special precautions for user
Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

Safety, health and environmental regulations/ legislation specific for the substance or mixture

National regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalog of occupational hazard factors: Listed. Chemical hazards.
Catalog of occupational diseases: Listed. Occupational poisoning.

Chemical name	Category
Methyl ethyl ketone	Chemical hazards
Chromium, 1-[2-[5-(1, 1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]diazenyl]-2-naphthalenol 1-[2-[2-hydroxy-4(or 5)-nitrophenyl]diazenyl]-2-naphthalenol ammonium sodium complexes	Chemical hazards
Isopropyl alcohol	Chemical hazards

Regulations on the Control over Safety of Hazardous Chemicals
Inventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed. Verify that license requirements are met.

Flammable liquid - Category 2 Weight-% 87

Chemical name	Inventory of hazardous chemicals
Methyl ethyl ketone	Listed
Isopropyl alcohol	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals

Category	Threshold quantity (T)
Flammable liquids	1000

List of hazardous chemicals under priority management Not applicable

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used
Inventory of highly toxic goods Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals
List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances Contact supplier for inventory compliance status.

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Other information

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Revision Note The symbol (*) in the margin of this SDS indicates that this line has been revised.

Abbreviations and acronyms
Legend Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

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End of Safety Data Sheet