



LORD JAPAN INC. GHS SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **JMC-700K**
Product Use/Class: **COATING**

LORD Japan Inc.
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EFFECTIVE DATE: 01/09/2015

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquid Category 2
Acute toxicity Oral Category 5 - 22.8% of the mixture consists of ingredient(s) of unknown toxicity.
Acute toxicity Dermal Category 5 - 25.4% of the mixture consists of ingredient(s) of unknown toxicity.
Acute toxicity Inhalation - Dust and Mist Category 4 - 25.0% of the mixture consists of ingredient(s) of unknown toxicity.
Acute toxicity Inhalation - Vapours Category 3 - 25.0% of the mixture consists of ingredient(s) of unknown toxicity.
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1
Carcinogenicity Category 2
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (repeated exposure) Category 2 Blood, brain, Hematopoietic System, Kidney, Liver
Specific target organ systemic toxicity (repeated exposure) Category 1 Nervous system, Body
Hazardous to the aquatic environment - acute hazard Category 2
Hazardous to the aquatic environment - chronic hazard Category 3

GHS LABEL ELEMENTS:

Symbol(s)



Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapor.
May be harmful if swallowed.
May be harmful in contact with skin.

Harmful if inhaled.
Toxic if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.
May cause drowsiness or dizziness.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure in contact with skin.(Blood, brain, Hematopoietic System, Kidney, Liver)
Causes damage to organs through prolonged or repeated exposure.(Nervous system, Body)
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - 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.
Wear protective gloves/protective clothing/eye protection/face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/eye protection/face protection.
Use personal protective equipment as required.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: refer to section 5 of SDS for extinguishing media.
Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Take off contaminated clothing and wash before reuse.

Storage

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

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. May be absorbed through the skin in harmful amounts. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. May cause severe eye irritation on contact, with conjunctivitis and potential corneal injury if not promptly and adequately treated. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath.

Chronic: Prolonged or repeated contact may result in dermatitis. ACGIH considers isophorone to be an A3 carcinogen (confirmed animal carcinogen with unknown relevance in humans). IARC has designated carbon black as Group 2B - inadequate evidence for carcinogenicity in humans, but sufficient evidence in experimental animals. IARC has designated Methyl isobutyl ketone to be in Group 2B - possibly carcinogenic to humans.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than
Isophorone	78-59-1	45.0 %
Epoxy resin	PROPRIETARY	20.0 %
Methyl isobutyl ketone	108-10-1	20.0 %
Carbon black	1333-86-4	1.0 %

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNSUITABLE EXTINGUISHING MEDIA: High volume water jet

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form. Contain and remove with inert absorbent material.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

STORAGE: Do not store or use near heat, sparks, or open flame. Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements. Store only in well-ventilated areas. Do not puncture, drag, or slide container. Keep container closed when not in use.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH TLV-STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>	<u>Skin</u>
Isophorone	5 ppm Ceiling	N.E.	140 mg/m ³ 25 ppm	N.E.	N.A.
Epoxy resin	N.E.	N.E.	N.E.	N.E.	N.A.
Methyl isobutyl ketone	50 ppm	75 ppm	410 mg/m ³ 100 ppm	N.E.	N.A.
Carbon black	3 mg/m ³	N.E.	3.5 mg/m ³	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency

situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Organic, solvent	VAPOR PRESSURE:	N.D.
APPEARANCE:	Black	VAPOR DENSITY:	Heavier than Air
PHYSICAL STATE:	Liquid	LOWER EXPLOSIVE LIMIT:	1.4 %(V)
FLASH POINT:	73 °F, 23 °C	UPPER EXPLOSIVE LIMIT:	7.5 %(V)
BOILING RANGE:	114 - 218 °C	EVAPORATION RATE:	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	DENSITY:	1.07 g/cm ³
DECOMPOSITION TEMPERATURE:	N.D.	VISCOSITY, DYNAMIC:	≥3,000 mPa.s @
ODOR THRESHOLD:	N.D.	VISCOSITY, KINEMATIC:	≥2,804 mm ² /s @ 25 °C
SOLUBILITY IN H₂O:		VOLATILE BY WEIGHT:	60.59 %
pH:	N.A.	VOLATILE BY VOLUME:	73.24 %
FREEZE POINT:	N.D.	VOC CALCULATED:	5.36 lb/gal, 643 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Product: JMC-700K, Effective Date: 01/09/2015

Chemical Name	LD50/LC50
Isophorone	Oral LD50: Rat 1,870 mg/kg Dermal LD50: Rat 1,390 mg/kg Dermal LD50: Rat 1,700 mg/kg Inhalation LC50: Rat 7 mg/l /4 h
Epoxy resin	Oral LD50: Rat 11,400 mg/kg
Methyl isobutyl ketone	Oral LD50: Rat 2,080 mg/kg Dermal LD50: Rabbit 3,000 mg/kg Inhalation LC50: Rat 8.2 mg/l /4 h
Carbon black	Oral LD50: Rat > 15,400 mg/kg Dermal LD50: Rabbit > 3 g/kg GHS LC50 (vapour): rat 55 mg/l /

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Isophorone	<u>Fish</u> : Pimephales promelas 132 - 159 mg/196 h flow-through Lepomis macrochirus 180 - 250 mg/196 h Static Pimephales promelas 213 - 271 mg/196 h Static <u>Invertebrates</u> : Daphnia magna 117 mg/148 h <u>Plants</u> : Desmodemus subspicatus 475.4 mg/172 h Pseudokirchneriella subcapitata 51.1 - 342 mg/196 h
Epoxy resin	N.D.
Methyl isobutyl ketone	<u>Fish</u> : Pimephales promelas 496 - 514 mg/196 h flow-through <u>Invertebrates</u> : Daphnia magna 170 mg/148 h <u>Plants</u> : Pseudokirchneriella subcapitata 400 mg/196 h
Carbon black	N.D.

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

14. TRANSPORT INFORMATION

IATA Cargo

PROPER SHIPPING NAME: Paint

Product: JMC-700K, Effective Date: 01/09/2015

DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1263
PACKING GROUP: III
EMS: 3L

IMDG

PROPER SHIPPING NAME: Paint
DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1263
PACKING GROUP: III
EMS: F-E

The listed transportation classification applies to IATA Cargo and IMDG non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors for your country or particular locality. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

INVENTORIES

Australia Inventory of Existing Chemical Substances (AICS)	NO
Chinese Inventory of Existing Chemical Substances (IECSC)	YES
Japan Existing and New Chemical Substances (ENCS)	YES
Korean Inventory of Existing and Evaluated Chemical Substances (KECI)	YES
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	NO
US Toxic Substances Control Act (TSCA)	YES

16. OTHER INFORMATION

Effective Date: 01/09/2015

DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.