



GHS SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 201A**

Product Use/Class: **ADHESIVE**

LORD Japan Inc.

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800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 08/10/2014

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquids Category 2

Acute toxicity Oral Category 5 - 35.8% of the mixture consists of ingredient(s) of unknown toxicity.

Acute toxicity Dermal Category 5 - 35.8% of the mixture consists of ingredient(s) of unknown toxicity.

Acute toxicity Inhalation - Dust and Mist Category 4 - 35.8% of the mixture consists of ingredient(s) of unknown toxicity.

Acute toxicity Inhalation - Vapours Category 3 - 35.8% of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Germ cell mutagenicity Category 2

Carcinogenicity Category 2

Reproductive toxicity Category 1B

Specific target organ systemic toxicity (single exposure) Category 3

Specific target organ systemic toxicity (single exposure) Category 3

Specific target organ systemic toxicity (single exposure) Category 1 Cardio-vascular system, Respiratory system, Kidney, Nervous system, Central nervous system, retina, Systemic toxicity, Body, optic nerve

Specific target organ systemic toxicity (repeated exposure) Category 2 Nervous system

Specific target organ systemic toxicity (repeated exposure) Category 1 Hematopoietic System, Cardio-vascular system, Central nervous system, Digestive organs, Kidney, Liver, spleen, thymus, Lungs, retina, Eyes,

Peripheral nervous system

Hazardous to the aquatic environment - acute hazard Category 1

Hazardous to the aquatic environment - chronic hazard Category 1

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.
Suspected of causing genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
May cause drowsiness or dizziness.
May cause respiratory irritation.
Causes damage to organs.(Cardio-vascular system, Respiratory system, Kidney, Nervous system, Central nervous system, retina, Systemic toxicity, Body, optic nerve)
May cause damage to organs through prolonged or repeated exposure.(Nervous system)
Causes damage to organs through prolonged or repeated exposure.(Hematopoietic System, Cardio-vascular system, Central nervous system, Digestive organs, Kidney, Liver, spleen, thymus, Lungs, retina, Eyes, Peripheral nervous system)
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/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.
Avoid release to the environment.

Response

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation 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.
Collect spillage.

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: May be absorbed through the skin in harmful amounts. Poison, may be fatal or cause blindness if swallowed. Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. 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. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. May cause dermatitis. Contains methanol; may be harmful or fatal if swallowed; ingestion of methanol may cause blindness or permanent eye damage. Cannot be made non-poisonous. Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: Prolonged or repeated contact may result in dermatitis. Repeated or prolonged solvent overexposure may result in permanent central nervous system damage. This material contains methanol. Ingestion of methanol may cause permanent eye damage or blindness. May affect the gastrointestinal system. May cause long-term lung damage. May cause liver or kidney damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than
Methyl ethyl ketone	78-93-3	60.0 %
Methanol	67-56-1	10.0 %
Carbon black	1333-86-4	5.0 %
Phenol	108-95-2	5.0 %

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 MSDS 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. Cannot be made non-poisonous.

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>
Methyl ethyl ketone	200 ppm	300 ppm	590 mg/m3 200 ppm	N.E.	N.A.
Methanol	200 ppm	250 ppm	260 mg/m3 200 ppm	N.E.	S
Carbon black	3 mg/m3	N.E.	3.5 mg/m3	N.E.	N.A.
Phenol	5 ppm	N.E.	19 mg/m3 5 ppm	N.E.	S

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:	Solvent	VAPOR PRESSURE:	N.D.
APPEARANCE:	Black	VAPOR DENSITY:	Heavier than Air
PHYSICAL STATE:	Liquid	LOWER EXPLOSIVE LIMIT:	1.4 %(V)
FLASH POINT:	23 °F, -5 °C closed cup	UPPER EXPLOSIVE LIMIT:	36.5 %(V)
BOILING RANGE:	65 - 80 °C	EVAPORATION RATE:	Not Applicable
AUTOIGNITION TEMPERATURE:	N.D.	DENSITY:	0.95 g/cm3
DECOMPOSITION TEMPERATURE:	N.D.	VISCOSITY, DYNAMIC:	N.D.
ODOR THRESHOLD:	N.D.	VISCOSITY, KINEMATIC:	≥26 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Insoluble	VOLATILE BY WEIGHT:	61.23 %
pH:	N.A.	VOLATILE BY VOLUME:	73.58 %
FREEZE POINT:	N.D.	VOC CALCULATED:	4.93 lb/gal, 591 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

Product: CHEMLOK 201A, Effective Date: 08/10/2014

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:

Chemical Name	LD50/LC50
Methyl ethyl ketone	Oral LD50: Rat 2,737 mg/kg Oral LD50: Rat 2,483 mg/kg Dermal LD50: Rabbit 6,480 mg/kg Dermal LD50: Rabbit 5,000 mg/kg Inhalation LC50: Rat 11700 ppm/4 h
Methanol	Oral LD50: Rat 6,200 mg/kg Dermal LD50: Rabbit 15,800 mg/kg Inhalation LC50: Rat 22500 ppm/8 h
Carbon black	Oral LD50: Rat > 15,400 mg/kg Dermal LD50: Rabbit > 3 g/kg GHS LC50 (vapour): rat 55 mg/l /
Phenol	Oral LD50: Rat 317 mg/kg Oral LD50: Rat 340 mg/kg Dermal LD50: Rabbit 630 mg/kg Inhalation LC50: Rat 316 mg/m3 /4 h

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Methyl ethyl ketone	<u>Fish:</u> Pimephales promelas 3,130 - 3,320 mg/196 h flow-through <u>Invertebrates:</u> Daphnia magna > 520 mg/148 h Daphnia magna 5,091 mg/148 h Daphnia magna 4,025 - 6,440 mg/148 h Static

Methanol	<p><u>Fish:</u> Pimephales promelas 28,200 mg/196 h flow-through Pimephales promelas > 100 mg/196 h Static Oncorhynchus mykiss 19,500 - 20,700 mg/196 h flow-through Lepomis macrochirus 13,500 - 17,600 mg/196 h flow-through</p>
Carbon black	N.D.
Phenol	<p><u>Fish:</u> Pimephales promelas 11.9 - 50.5 mg/196 h flow-through Pimephales promelas 20.5 - 25.6 mg/196 h Static Pimephales promelas 32 mg/196 h Oncorhynchus mykiss 5.449 - 6.789 mg/196 h flow-through Oncorhynchus mykiss 7.5 - 14 mg/196 h Static Oncorhynchus mykiss 4.23 - 7.49 mg/196 h semi-static Oncorhynchus mykiss 5.0 - 12.0 mg/196 h Lepomis macrochirus 13.5 mg/196 h Static Lepomis macrochirus 11.9 - 25.3 mg/196 h flow-through Lepomis macrochirus 11.5 mg/196 h semi-static Poecilia reticulata 34.09 - 47.64 mg/196 h Static Poecilia reticulata 31 mg/196 h semi-static Brachydanio rerio 27.8 mg/196 h Cyprinus carpio 0.00175 mg/196 h semi-static Oryzias latipes 33.9 - 43.3 mg/196 h flow-through Oryzias latipes 23.4 - 36.6 mg/196 h Static <u>Invertebrates:</u> Daphnia magna 4.24 - 10.7 mg/148 h Static Daphnia magna 10.2 - 15.5 mg/148 h <u>Plants:</u> Pseudokirchneriella subcapitata 46.42 mg/196 h Pseudokirchneriella subcapitata 0.0188 - 0.1044 mg/196 h Static Desmodesmus subspicatus 187 - 279 mg/172 h Static</p>

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: Adhesives
DOT HAZARD CLASS: 3
HAZARD CLASS: None
UN-NUMBER: 1133
PACKING GROUP: II
EMS: 3L

IMDG

PROPER SHIPPING NAME: Adhesives
DOT HAZARD CLASS: 3
HAZARD CLASS: None
UN-NUMBER: 1133

Product: CHEMLOK 201A, Effective Date: 08/10/2014

PACKING GROUP: II
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)	YES
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)	YES
US Toxic Substances Control Act (TSCA)	YES

16. OTHER INFORMATION

HMIS RATINGS - HEALTH: **FLAMMABILITY:** **PHYSICAL HAZARD:**

* - Indicates a chronic hazard; see Section 3

Revision: Section 1

Effective Date: 08/10/2014

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.