

SAFETY DATA SHEET

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical name (Product name) KIRARI (Solution B)
Product number 300522
SDS Number rdjp71-1
Manufacturer/Supplier SOLAR CO.,Ltd.
Address 1-7,Nunobiki-cho-2-chome,Chuo-ku Kobe 651-0097, Japan
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SECTION 2- HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS Flammable liquid Category 3

HEALTH HAZARDS Acute toxicity(Oral) Category4

Reproductive toxicity Category1B

Hazards not stated here are "Not applicable" or "Classification not possible".

GHS label

Symbols



Signal words Danger

Hazard statements
H226 Flammable liquid and Vapor
H302 Harmful if swallowed.
H360 May damage fertility or the unborn child

Precautionary statements

【Prevention】 Obtain special instructions before use.(P201)

Do not handle until all safety precautions have been read and understood.(P202)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.(P210)

Keep container tightly closed. (P233)

Ground/bond container and receiving equipment.(P240)

Use explosion-proof electrical/ventilating/lighting equipment. (P241)

Use only non-sparking tools. (P242)

Take precautionary measures against static discharge. (P243)

Wash hands thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

Wear protective gloves/eye protection/face protection. (P280)

【Response】

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. (P301+P312)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353)

IF exposed or concerned: Get medical advice/attention.(P308+P313)

Rinse mouth. (P330)

In case of fire: Use appropriate media other than water for extinction.(P370+P378)

【Storage】

Store in well-ventilated place. Keep cool . (P403+P235)

Store locked up.(P405)

【Disposal】

Dispose of contents/container in accordance with the Waste Disposal and Public Cleansing Law and related laws and regulations. (P501)

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Classification of the substance or mixture: Mixture

Chemical name or generic name	Concentration or concentration ranges	Chemical formula	Reference number in gazetted list in Japan		CAS No.
			METI No.	ISHL No.	
			(ENCS No.)		
See below for materials related to three lows of the SDS(Note 1)					

The Industrial Safety and Health Law

Dangerous goods and hazardous substances should be notified name. (Act: Article 57-2, Enforcement Ordinance: Article 18-2-1/2 Attached Table 9)

Methanol(Designated number by Laws:560)(Less than 1%)

SECTION 4- FIRST AID MEASURES

Inhalation

In case of feeling unwell by inhalation of vapor/gas, move into fresh air and keep at rest, and seek medical assistance.

If breathing is difficult or not breathing, give artificial respiration immediately. Get medical advice/attention immediately.

Skin contact

Remove/Take off all contaminated clothing or shoes immediately.

Gently wash with plenty of soap and water.

If abnormal changes are observed in appearance, or irritant or pain persists, or if you feel unwell, seek medical assistance.

Eyes contact

Flush carefully with plenty of clean water for at least 15 minutes immediately. Consult an ophthalmologist.

Hold eyelids open and away from eyeballs with fingers to ensure that all surfaces are flushed thoroughly.

Remove contact lenses, if present and easy to do.

Ingestion	<p>Rinse mouth well with clean water.</p> <p>Do not induce vomiting unless.</p> <p>Never give anything by mouth to an unconscious person.</p> <p>Get medical advice/attention immediately.</p>
Protection for first-aides	Wear safety equipments as indicated in section 8 (EXPOSURE CONTROL/PERSONAL PROTECTION) during handling.

SECTION 5- FIRE FIGHTING MEASURES

Suitable extinguishing media	In case of fire, use foam, powder, carbon dioxide and dry sand.
Unuitable extinguishing media	Rod-like water injection (danger to expand the fire)
Special fire fighting procedures	<p>Use designated extinguishing media.</p> <p>Extinguish the fire from the windward side of the fire.</p> <p>Remove surrounding combustible materials immediately.</p> <p>Cool surrounding equipment with water spray.</p>
Special protective equipment and precautions for fire-fighters	Wear suitable Self-Contained Breathing Apparatus (SCBA), Chemical proof protective clothing.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal precautions (protective equipment and emergency measures)	<p>Provide ventilation adequately until finishing process.</p> <p>Wear suitable protective equipment as indicated in section 8 during handling.</p> <p>Exclude non-essential personnel.</p>
Environmental precautions	Prevent from entering into drains, ditches, basement or closed place.

Methods and materials for containment and cleaning up Absorbed by sand or cloth, then collect in a sealable container.

Prevention measures against secondary accident Properly treat deposits, waste and etc., on the basis of the applicable laws and regulations.

Remove the sources of ignition promptly.

SECTION 7- HANDLING AND STORAGE

Handling	Technical measures	<p>Take equipment measures and wear suitable protective equipment as indicated in section 8 (EXPOSURE CONTROL/PERSONAL PROTECTION) .</p> <p>Use explosion-proof equipment and to implement an electrostatic measures to facilities.</p> <p>Prohibit the use of the high temperature, spark and fire of around.</p>
	Precautions for safe handling	<p>Close container tightly after each use.</p> <p>Do not handle until all safety precautions have been read and understood.</p> <p>Wash body, face, hands, eyes thoroughly after handling.</p>
Storage	Appropriate storage conditions	<p>Keep container tightly closed.</p> <p>Store in a dark, cool and well ventilated area.</p>

SECTION 8- EXPOSURE CONTROL/PERSONAL PROTECTION

Component	Management Concentration	Allowable concentration (Society for Occupational Health)	Allowable concentration (ACGIH)
Methanol	200ppm	200ppm(260mg/m3)(Skin)	TWA 200 ppm, STEL 250 ppm (Skin)

Facility Protection		Install shower, hand-wash, cleansing facilities close to handling location, and clearly display the position.
Personal protection equipments	Hand protection	Use impermeable protective groves (rubber groves).
	Eye protection	Wear safety glasses (safety glasses with side wall, safety goggles).
	Skin and body protection	Wear work clothes, boots and apron.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical form	Liquid
	Color	Colorless and transparent
Flash point		37°C(Closed-style/ref.)
Specific gravity (Density)		ca0.91

SECTION 10- STABILITY AND REACTIVITY

Stability		Stable at normal conditions of handling.
Possibility of hazardous reaction		No information available.
Condition to avoid		No information available.
Hazardous decomposition products		No information available.

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity	Oral	ATEmix in the mixture >300mg/kg to \leq 2000mg/kg . It is corresponding to the Category4.
Reproductive toxicity		Based on the component of Category 1B Reproductive toxicity are \geq 0.3%. It is corresponding to the Category 1B.

SECTION 12- ECOLOGICAL INFORMATION

No data

SECTION 13- DISPOSAL CONSIDERATIONS

Residual waste	Waste disposal should be in accordance with existing federal, state and local environmental control laws.
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Contaminated containers and packaging

Entrust disposal to officially recognized expert traders or disposal dealers with the permission of the prefectural governor, or entrust to local public entities if they are dealing disposal.

Recycle used containers by cleaning or dispose appropriately in accordance with official regulation.

Dispose of empty container after eliminating contents completely.

SECTION 14- TRANSPORT INFORMATION

International regulation	Marine transport	Follow IMO provisions
	UN No.	1993
	Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.
	Class	3
	Packing Group	III
	Marine Pollutant	Not applicable
	Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code.	Not applicable
	Air Transport	Follow ICAO/IATA provisions
	UN No.	1993
	Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.
	Class	3
	Packing Group	III
Domestic regulation	Land transport	Follow Fire Service Act and Road law
	Marine transport	Follow Ship Safety Act
	UN No.	1993
	Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.
	Class	3

	Packing Group	III
	Marine Pollutant	Not applicable
	Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code.	Not applicable
	Air Transport	Follow Aviation Law
	UN No.	1993
	Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.
	Class	3
	Packing Group	III
Special safety measure		Follow the description in the SECTION 7- HANDLING AND STORAGE Make sure no leakage of the container, loading to avoid fall/damage and ensure a prevention of collapse of cargo at the transportation.
Emergency Response Guide No.		128

SECTION 15- REGULATORY INFORMATION

Chemical Substances Control Law	Priority Assessment Chemical Substances (Laws and regulations Article 2 Paragraph 5)
The Industrial Safety and Health Law	The working environment assessment standard (Article 65-2 (1)). Dangerous goods and hazardous substances should be displayed the name, etc. (Act: article 57-1, Enforcement ordinance: article 18-1/2, attached table 9) Dangerous/Flammable substances (Enforcement Order Appended Table 1-4). Dangerous goods and hazardous substances should be notified of the names and the like (Act: article 57-2, Enforcement ordinance: article 18-2-1/2, attached table 9)
Fire Service Act	Class 4 second petroleum (water insoluble)
Air Pollution Control Act	Specific substance (Article 17 (1), Cabinet order 10)

	<p>Volatile Organic Compound (Act 2-4) (Notification from the Ministry of the Environment to the prefectural).</p>
Ship Safety Act	<p>Flammable liquid (Dangerous Goods Regulations third Article dangerous goods notice Attached Table 1)</p>
Aviation Law	<p>Flammable liquids (Enforcement Regulations Article 194 of dangerous goods notice Attached Table 1)</p>
Act on Port Regulations	<p>Hazardous materials, flammable liquid compounds (law Article 21 2, law Article 12, Dangerous goods notice Attached Table)</p>
Road Law	<p>Limit of passage of the Road Law vehicle (13, of the Enforcement Ordinance Article 19 (Germany) Japan highway ownership and debt repayment mechanism notice No. 12, Appendix Table 2)</p>
Labor Standards Act	<p>Illness chemical substances (Article 75-2 of the Act, Enforcement Regulation Article 35 Appended Table 1-2 item 4-1).</p>
PRTR and Promotion of Chemical Management Law(PRTR Law)	<p>Not applicable</p>
Poisonous and Deleterious Substances Control Act	<p>Not applicable</p>

SECTION 16- OTHER INFORMATION

References and sources Database of Japan chemical database Ltd.

SDS of raw materials.

Disclaimer: This safety data sheet (SDS) is based on the latest sources and data which are currently available. It may be updated based on new scientific findings.

The precautions herein are for normal handling.

As cautions described are for normal usage, and it is assumed any chemical product has unknown hazard, extreme caution is required for handling. It is the user's responsibility to determine safe conditions for use of this product. For special handling, please use it in the light of suitable safety measures for application and usage.

Please contact our sales department, Inquiry for this SDS of detailed Information on ingredients and regulatory Information.

Three lows of the SDS (Note.1);

Law concerning Reporting, etc. of Release to the Environment of Specific Chemical Substances and Promoting Improvements in their Management (PRTR act).

Industrial Safety and Health Act (Article 57-2).

Poisonous and Deleterious Substances Control Act.