

Material Safety Data Sheet

1. Product and Company Identification

Product name :KIRARI (Solution B)

Name of supplier :SOLAR CO., LTD.

Address :1-7, Nunobiki-cho-2-chome, Chuo-ku, Kobe, Hyogo-Pref. 651-0097 JAPAN

Division :R & D DEPT.

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Product code(MSDS NO) :EN300522-2

2. Hazards Identification

GHS classification and label elements of the product

GHS classification

PHYSICAL HAZARDS

Flammable liquids : Category 3

HEALTH HAZARDS

Reproductive toxicity : Category 1B



Signal word :Danger

HAZARD STATEMENT

Flammable liquid and Vapor

May damage fertility or the unborn child

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

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

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

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment and non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/eye protection/face protection.

Use personal protective equipment as required.

Response

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

IF exposed or concerned: Get medical advice/attention.

In case of fire: Use appropriate media other than water for extinction.

Storage

Store locked up.

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container in accordance with local/national regulation.

Class name of hazardous chemicals for MSDS in Japan

Flammable liquids

3. Composition/Information on Ingredients

Substance/Preparation :Preparation

Ingredient name	content(%)	CAS No.	PRTR law No, Japan
Polysiloxane	60 - 65		
Organosilane	25 - 30		
Methanol	0.1 - 1	67-56-1	
Dimethyl siloxane	10 - 15		

4. First-Aid Measures

IF INHALED :

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

Skin contact

Never use solvent or thinner.

Wash with plenty of soap and water.

If you observe unusual symptom, have irritation/pain and/or feel unwell, seek medical advice.

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.

IF SWALLOWED :

Rinse mouth.

Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor/physician.

5. Fire-Fighting Measures

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder or CO₂.

Specific fire-fighting measures

Use appointed fire extinguisher.

Remove flammable matters quickly from nearby.

Apply water from a safe distance to cool and protect surrounding area.

Special protective equipment and precautions for fire-fighters

Fire extinguishing work has to be done from windward.

Wear proper protective equipment.

6. Accidental Release Measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Keep unauthorized personnel away.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for containment and cleaning up

Place in a covered container.

Use non-sparking tools to collect absorbed material.

Preventive measures for secondary accident

Prepare extinguishers before catching fire.

7. Handling and Storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Use personal protective equipment as required.

(Protective measures against fire & explosion)

Take precautionary measures against static discharge.

Safety Measures/Incompatibility

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

Handle in good ventilation.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Protect from sunlight. Store in a well-ventilated place.

8. Exposure Control/Personal Protection

Control parameters e.g. occupational exposure limit values or biological limit values

Control value

(Methanol)Japan control value (1995)<= 200ppm

Adopted value

(Methanol)JISOH(1963) 200ppm; 260mg/m³ (dermal)

(Methanol)ACGIH (1992) TWA: 200ppm STEL: 250ppm (Skin)(Headache; eye dam)

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Exhaust/ventilator should be available.

Individual protection measures, such as personal protective equipment

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective gloves/clothing

9. Physical and Chemical Properties

Physical properties

Appearance :liquid

Color :colorless clear

Flash point :37 (Closed style)(Ref.value/Polysiloxane)

Specific gravity :No data

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral toxicity component(s) data

(Methanol)rat LD50 5628 mg/kg

Inhalation toxicity component(s) data

(Methanol)rat LC50 64000ppm/4H

Irritant properties

Skin corrosion/Irritation component(s) data

(Methanol)rabbit 20 mg/24H ; MODERATE

Serious eye damage /eye irritation

Eye damage/irritation component(s) data

(Methanol)rabbit 40 mg ; MODERATE 100 mg/24H ; MODERATE

12. Ecological Information

Ecotoxicity

Aquatic toxicity(component(s) data)

(Methanol)Crustacea (Brine shrimp) LC50=900.73 mg/L/24hr (EHC196, 1998)

Water solubility

(Methanol)miscible (ICSC, 2000)

Bioaccumulative potential

(Methanol)log Pow=-0.82/-0.66 (ICSC, 2000)

13. Disposal Considerations

Description of waste residues and information on their safe handling and methods of disposal

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN No :1993

UN CLASS :3

PG :III

Proper shipping name :FLAMMABLE LIQUID, N.O.S.

ERG GUIDE NO :128

Noxious Liquid ; Cat. Y :Methanol

Special precautions in connection with transport or conveyance

Follow instruction in Handling & Storage.

15. Regulatory Information

Industrial Safety and Health law, Japan

Harmful substances to be indicated :Methanol

Chemical name et al should be informed :Methanol

Labor standard law, Japan; Toxic :Methanol

Fire protection law, Japan

Petroleum Gr.2, (Class III)

Ship cargo control law, Japan

Flammable liquids

Air cargo control law, Japan

Flammable liquids

Clean air act, Japan

Specific substance

Methanol

16. Other Information/References

Reference Book

Recommendations on the TRANSPORT OF DANGEROUS GOODS 15th edit. UN

2008 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2008 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/monoeval/grlist.html>

JIS Z 7250 2005

Supplier's SDS

ezCric(Retrieval System/ Japan Chemical Database Ltd.)

Other information

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own test