

date of issue : 29/08/2011

## Safety Data Sheet

### 1. Product and Company Identification

Product name :KIRARI Shampoo

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.

Phone :+81-790-49-2366

FAX :+81-790-49-1588

Product code(SDS NO) :EN300530-1

### 2. Hazards Identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Skin corrosion/irritation : Category 3

Eye damage /eye irritation : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity-single exposure : Category 1

Specific target organ toxicity-repeated exposure : Category 1

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment-acute toxicity : Category 3

Hazardous to the aquatic environment-chronic toxicity : Category 3



Signal word : Danger

HAZARD STATEMENT

Causes mild skin irritation.

Causes eye irritation

Suspected of damaging fertility or the unborn child

Causes damage to organs after single exposure.

Causes damage to organs following repeated exposure.

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

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

Wear face protection.

Use personal protective equipment as required.

Response

Get medical advice/attention if you feel unwell.

Specific treatment is required.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

**Storage**

Store locked up.

**Disposal**

Avoid release to the environment.

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

**3. Composition/Information on Ingredients**

Substance/Preparation :Preparation

Ingredient name	content(%)	CAS No.	PRTR law No, Japan
Ethylene glycol	5 - 10	107-21-1	
Hexadecyltrimethylammonium Bromide	0.1 - 1	57-09-0	2-85

**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.

**IF ON SKIN**

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, alcohol-resistant foam, dry powder

**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 neutralization, 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

Use personal protective equipment as required.

Take precautionary measures against static discharge.

### Safety Measures/Incompatibility

Handle in good ventilation.

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

### Conditions for safe storage, including any incompatibilities

#### Recommendation for storage

Keep container tightly closed.

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

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## 8. Exposure Control/Personal Protection

### Adopted value

(Ethylene glycol)

ACGIH(1992) STEL: C 100mg/m<sup>3</sup>(H) (URT & eye irr)

### Appropriate engineering controls

Do not use in areas without adequate ventilation.

Exhaust/ventilator should be available.

### 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

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## 9. Physical and Chemical Properties

### Physical properties

Appearance :liquid

Color :colorless

### Phase change temperature

Boiling point :ca 100

Melting point/Freezing point :ca 0

Flash point :None

Specific gravity :ca 1.00

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## 10. Stability and Reactivity

### Stability

Stable under normal storage/handling conditions.

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## 11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

### Acute toxicity

#### Oral toxicity component(s) data

(Ethylene glycol)

rat LD<sub>50</sub>=4000 mg/kg (CICAD 45 (2002))

(Hexadecyltrimethylammonium Bromide)

rat LD<sub>50</sub> =410mg/kg (RTECS (2006))

### Irritant properties

Skin corrosion/Irritation component(s) data

(Ethylene glycol)

rabbit 555 mg open ; MILD

Serious eye damage /irritation

Eye damage/irritation component(s) data

(Ethylene glycol)

rabbit 500 mg/24H ; MILD rabbit 100 mg/1H ; MILD rabbit 1.44 g/6H ; MODERATE

Carcinogenic effects

(Ethylene glycol)

ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen

Toxicity for reproduction

(Hexadecyltrimethylammonium Bromide) ID554(2006), CERI/NITE hazard assessment No.206 (2005)

Delayed and immediate effects and also chronic effects from short- and long-term exposure

Specific target organ toxicity (single exposure cat.1)

(Ethylene glycol) CNS; kidney; heart; respiratory apparatus/system

Specific target organ toxicity (repeated exposure cat.1)

(Ethylene glycol) CNS; respiratory apparatus/system; heart

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## 12. Ecological Information

Ecotoxicity

Aquatic toxicity

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

(Ethylene glycol)

Fish (top minnow) LC50 > 100mg/L/96hr (EPA\_Japan, 2001)

(Hexadecyltrimethylammonium Bromide)

Algae (Microcystis) EC50=0.03mg/L/96hr (EPA\_Japan, 2004)

Water solubility

(Ethylene glycol)

1000 g/L (PHYSPROP Database, 2005)

Persistence and degradability

(Hexadecyltrimethylammonium Bromide)

BOD\_Degradation : 0%(Registered chemicals safety check & review data, Japan)

Bioaccumulative potential

(Ethylene glycol)

log Pow=-1.93 (ICSC, 1999)

(Hexadecyltrimethylammonium Bromide)

BCF=741 (Check & Review, Japan)

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## 13. Disposal Considerations

Waste residues

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

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

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## 14. Transport Information

UN No, UN CLASS

Not applicable to UN NO.

Sea pollutants control law

Noxious Liquid ; Cat. Y :Ethylene glycol

Special precautions in connection with transport or conveyance

Follow instruction in Handling & Storage.

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## 15. Regulatory Information

Industrial Safety and Health law, Japan

Chemical name et al should be informed : Ethylene glycol

PRTR law, Japan

Listed chemicals Gr.2 :Hexadecyltrimethylammonium Bromide

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#### 16. Other Information/References

##### Reference Book

Recommendations on the TRANSPORT OF DANGEROUS GOODS 16th edit. UN

2008 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2011 TLVs and BEIs. (ACGIH)

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

Supplier's SDS

##### 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