

MATERIAL SAFETY DATA SHEET

KOREA KUMHO PETROCHEMICAL CO., LTD.

Quality Assurance Team

#680 Sangkae-Dong, Nam-ku, Ulsan-Si, Korea

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KOSYN 1502

REVISION DATE : MAR. 2005

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1. Identification of the substance/preparation and company

Product details :

Trade Name : KOSYN 1502 / 1502LL / 1502NF / 1502G

Supplier details : KOREA KUMHO PETROCHEMICAL CO., LTD.

#680 Sangkae-Dong, Nam-ku, Ulsan-Si, Korea

Information provided by : Kumho Bldg., #57 Sinmunno 1-Ga, Jongro-Gu, Seoul, Korea

Emergency Telephone Number : +82-2-6303-3280

2. Composition/information on ingredients

Chemical characterization : Styrene-Butadiene Cold Emulsion Copolymer, with Mixed fatty acid/rosin acid emulsifier.

CAS No. : 9003-55-8

3. Hazards Identification

Plants, Preservatives, and Solvent	%	TLV (Units)	Alloys and Metallic Coatings	%	TLV (Units)
Pigments NONE			Base Metal NONE		
Catalyst (CAS NO. 7720-78-7) Fe	0.001	-	Alloys NONE		
Vehicle CONTAINER			Metallic Coatings NONE		
Solvents NONE					
Additives (CAS NO. 61788-44-1) STYRENATED PHENOLS	0.6	-	Filler Metal NONE		
			Plus Coating or Core Flux NONE		
Others			Others		

Oral (Ingestion)

NOT ESTABLISHED

LC50(Inhalation)

NOT ESTABLISHED

LD50(Skin Contact)

NOT ESTABLISHED

Threshold Limit Value (TLV)

NOT APPLICABLE

Effects of Overexposure

Hot material can cause severe burns. Processing fumes may cause irritation to the eyes, skin, and respiratory tract, and in case of severe over-exposure, nausea and headache.

Ingestion, skin contact, eye contact, Inhalation of

Short term effects

NO INFORMATION IS AVAILABLE.

Long term effects

NO INFORMATION IS AVAILABLE.

4. First aid measures

Inhalation

Remove from exposure area to fresh air immediately. Perform artificial respiration if necessary.

Keep person warm and quiet. Treat symptomatically and supportively. Get medical attention.

Skin contact

Remove contaminated clothing and shoes. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15~20 minutes). Get medical attention.

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Eye contact

Wash eyes with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15~20 minutes). Get medical attention.

Ingestion

If vomiting occurs keep head lower than hips to help prevent aspiration. Treat symptomatically and supportively. Get medical attention if needed.

All chemicals should be handled so as to prevent eye contact and excessive or repeated skin contact.

Appropriate eye and skin protection should be employed. Inhalation of dusts and vapors should be avoided.

5. Fire-fighting measures

Suitable extinguishing media :

WATER, DRY CHEMICAL, CO₂,FOAM

Special Fire Fighting Procedures

Move container from fire area if you can do it without risk. Keep away from heat, sparks and flame. Avoid contamination by any source. Handle with caution.

Unusual Fire and Explosion Hazards

When exposed to flame, emits acrid fumes. No explosive hazards expected.

6. Accidental release measures

Steps to be taken in case material is released or spilled

Sweep up and place in suitable containers for disposal or reuse

Do not flush spilled material into sewer.

7. Handling and storage

Precaution to be taken in Handling and Storage

Store away from incompatible substances.

Keep away from excessive heat and open flame

Handling

Make efforts to keep the workplace clean and tidy

Since there is possibility of volatile matter generating during work, it may cause irritation to the eyes.

After work, before smoking or eating, wash the hands well, and gargle.

Storage

In order to prevent deterioration, avoid the following

Exposure to the direct sun rays

High temperature, high humidity

Outdoor storage

Even in the case of indoor storage, avoid storing in high temperature area or near UV emitting lights

such as the incandescent lamps and mercury lamps.

8. Exposure controls/personal protection

Ventilation

Provide local exhaust ventilation. Ventilation equipment should be explosion - proof if explosive concentrations of dust, vapor or fume are present.

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Eye protection

Employee should wear splash - proof or dust - resistant safety goggles to prevent eye contact with this substance.

Clothing

Employee should wear appropriate protective clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves

Employee should be wear appropriate protective gloves to prevent contact with this substance.

Respirator

The respirators are recommended based on information found in the PHYSICAL DATA, TOXICITY and HEALTH EFFECTS section. They are ranked in order form minimum to maximum respiratory protection.

9. Physical and chemical properties

Appearance AMBER COLORED BALE	Odor NONE	Melt Point NOT APPLICABLE	Specific Gravity 0.94
Vapor Density (Air=1) NOT APPLICABLE	% Volatile by Volume 0.2	Bulk Density NOT APPLICABLE	Boiling Point NOT APPLICABLE
Vapor Pressure NOT APPLICABLE	%Solubility in Water INSOLUBLE	Flash Point NOT APPLICABLE	

10. Stability and reactivity

Condition causing stability & reactivity

Material is stable. Stable under normal temperature and pressure.

Incompatibility (Materials to avoid)

May burr NOT APPLICABLE

UEL : NOT APPLICABLE

Hazardous decomposition products.

Thermal decomposition : more than 360°C(heating rate : 10°C/min 50 ~ 600°C, atmosphere : 100ml/min in air)

Thermal decomposition products may include toxic fume of styrene and toxic oxides of carbon and nitrogen

Special sensitivity

NOT APPLICABLE

11. Toxicological information

Carcinogen status : No data available

Acute toxicity level : No data available

Target effects : No data available

Health effects :

Inhalation

Acute exposure : No data available

Chronic exposure : No data available

Skin contact

Acute exposure : No data available

Chronic exposure : No data available

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Eye contact

Acute exposure : No data available

Chronic exposure : No data available

Ingestion

Acute exposure : No data available

Chronic exposure : No data available

12. Ecological information

Acute aquatic toxicity : No data available

Degradability : No data available

Log Bioconcentration factor : No data available

Log Octanol/Water partition coefficient : No data available

13. Disposal considerations

Observe all federal, state and local regulations when disposing of this substance

Disposal must be in accordance with standards applicable to generators of hazardous waste.

14. Transport information

No classification currently assigned

15. Regulatory information

Cercla section 103 (40CFR302.4) : None

Sara section 302 (40CFR355.30) : None

Sara section 304 (40CFR355.40) : None

Sara section 313 (40CFR372.65) : None

California proposition 65 : None

16. Other information

Final determination of safety and suitability of any material is the sole responsibility of the keeper and user.

All materials may present unknown hazards, and therefore should be handled with adequate caution.

Although certain hazards are described herein, they may not be the only hazards in relation to the products.