

SAFETY DATA SHEET

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical name (Product name) GALLELION 2500
Product number 101400
SDS Number rdjp432-4
Manufacturer/Supplier SOLAR CO.,Ltd.
Address 1-7,Nunobiki-cho-2-chome,Chuo-ku Kobe 651-0097, Japan
Division Technical development department.
Phone +81-790-49-2366
Fax +81-790-49-1588

SECTION 2- HAZARDS IDENTIFICATION

GHS classification
PHYSICAL HAZARDS Flammable liquid Not classified
HEALTH HAZARDS Skin sensitization Category 1
Specific target organ toxicity (Single exposure)
Category 3 (Respiratory tract irritation)
Specific target organ toxicity (repeated exposure)
Category 1 (Lung)
Specific target organ toxicity (repeated exposure)
Category 2 (Respiratory system/Nervous system)
ENVIRONMENTAL HAZARDS Hazardous to the aquatic environment (Acute) Not classified
Hazardous to the aquatic environment (Long term)
Not classified
Hazards not stated here are "Not applicable" or "Classification not possible".

GHS label
Symbols



Signal words Danger
Hazard statements H317 May cause an allergic skin reaction
H335 May cause respiratory irritation

H372 Causes damage to organs through prolonged or repeated exposure

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements

【Prevention】

Do not breathe gas.(P260)

Do not breathe mist/vapours/spray.(P260)

Do not breathe dust/fumes.(P260)

Wash hands thoroughly after handling. (P264)

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

Use only outdoors or in a well-ventilated area. (P271)

Contaminated work clothing should not be allowed out of the workplace.(P272)

Wear protective gloves.(P280)

【Response】

IF ON SKIN: Wash with plenty of soap and water.(P302+P352)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)

Call a POISON CENTRE or doctor/physician if you feel unwell. (P312)

Get medical advice/attention if you feel unwell.(P314)

Specific measures is required. (P321)

If skin irritation or rash occurs: Get medical advice/attention.(P333+P313)

Take off contaminated clothing and wash it before reuse. (P362+P364)

【Storage】

Store in well-ventilated place. Keep container tightly closed. (P403+P233)

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)

Diethanolamine (Designated number by Laws: 219) (Less than 1%)

Mineral spirits (including mineral thinner, petroleum spirit, white spirit and mineral turpentine.) (Designated number by Laws: 551) (1%~10%)

Mineral oil (Designated number by Laws: 168) (1%~10%)

Aluminum oxide (Designated number by Laws: 189) (20%~30%)

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, Immediately give artificial respiration. Get immediate medical advice/attention.

Skin contact

Remove/Take off immediately all contaminated clothing or shoes.

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

Do not rub or close eyes tightly.

Immediately flush carefully with plenty of clean water for at least 15 minutes. 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

Rinse mouth well with clean water.

Do not induce vomiting unless.

Never give anything by mouth to an unconscious person.

Get medical advice/attention immediately.

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 water spray, foam, powder, carbon dioxide and dry sand.

Special fire fighting procedures

Use designated extinguishing media.

Extinguish the fire from the windward side of the fire.

Remove surrounding combustible materials immediately.

Cool surrounding equipment with water spray.

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)

Provide ventilation adequately until finishing process.

Wear suitable protective equipment as indicated in section 8 during handling.

	Exclude non-essential personnel.
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	Take equipment measures and wear suitable protective equipment as indicated in section 8 (EXPOSURE CONTROL/PERSONAL PROTECTION) .
		Prohibit the use of the high temperature, spark and fire of around.
	Precautions for safe handling	Close container tightly after each use. Do not handle until all safety precautions have been read and understood. Wash body, face, hands, eyes thoroughly after handling.
Storage	Appropriate storage conditions	Keep container tightly closed. Store in a dark, cool and well ventilated area. Don't freeze.

SECTION 8- EXPOSURE CONTROL/PERSONAL PROTECTION

Component	Management Concentration	Allowable concentration (Society for Occupational Health)	Allowable concentration (ACGIH)

Aluminum oxide		Dust allowable concentration Degree ; Dust(1st kind) Respirable dust: 0.5mg/m ³ , Total dust:2mg/m ³	unset
Diethanolamine			TWA 1 mg/m ³ (IFV), STEL - (Skin)
Mineral spirits			TWA 100 ppm, STEL -

Facility Protection

If dust is generated in the polishing work, etc., place local ventilation system.

Personal protection equipments

Respiratory protection

Install shower, hand-wash, cleansing facilities close to handling location, and clearly display the position.
Use dust masks.

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

Viscous Liquid

Color

White

pH

ca 8.8

Flush point

96°C(Cleveland Open Cup)

Specific gravity (Density)

ca 1.10

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

Skin sensitization

Based on the component of Category 1 Skin sensitization are $\geq 1\%$. It is corresponding to the Category 1.

Specific target organ
toxicity (Single
exposure)

Based on the component of Category 3 (Respiratory tract irritation) specific target organ toxicity are $\geq 20\%$. It is corresponding to the Category 3.

Specific target organ
toxicity
(Repeated exposure)

Based on the component of Category 1 Specific target organ toxicity (Respiratory system) are $\geq 1\%$ to $<10\%$. It is corresponding to the Category 2 (Respiratory system).

Based on the component of Category 1 Specific target organ toxicity (Nervous system) are $\geq 1\%$ to $<10\%$. It is corresponding to the Category 2 (Nervous system).

Based on the component of Category 1 Specific target organ toxicity (Lung) are $\geq 10\%$. It is corresponding to the Category 1 (Lung).

SECTION 12- ECOLOGICAL INFORMATION

Hazardous to the
aquatic environment
(Acute)

Based on the LL50(96h) in the mixture are $>100\text{mg/L}$. It is not corresponding to the Hazardous to the aquatic environment (Acute).

Hazardous to the
aquatic environment
(Long term)

Based on the LL50(96h) in the mixture are $>100\text{mg/L}$. It is not corresponding to the Hazardous to the aquatic environment (Long term).

SECTION 13- DISPOSAL CONSIDERATIONS

Residual waste

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

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.

Contaminated containers and packaging

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	Not applicable
	Marine Pollutant	Not applicable
	Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code.	Not applicable
Domestic regulation	Air Transport	Not applicable
	Land transport	Follow Fire Service Act and Road law
	Marine transport	Not applicable
	Marine Pollutant	Not applicable
	Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code.	Not applicable
	Air Transport	Not applicable
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.		None

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	Third kind organic solvent, etc. (Enforcement ordinance; attached table 6-2, Ordinance on the Prevention of Organic Solvent Poisoning; article 1-1-5)

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 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)

Water Pollution Control Act	Designated Substances (Article 2-4 Enforcement Order 3-3).
Fire Service Act	Specify combustibles,Flamable liquilds
Water Supply Act	Hazardous substance (Act: article 4-2), Water quality standard (Ministerial ordinance 101, 2003)
PRTR and Promotion of Chemical Management Law (PRTR Law)	Not applicable
Poisonous and Deleterious Substances Control Act	Not applicable

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.