

SAFETY DATA SHEET

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical name (Product name) Magic Putty 930 (standard type)

Product number 400651

SDS Number rdjp107-2

Manufacturer/Supplier SOLAR CO.,Ltd.

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SECTION 2- HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS Flammable solid Category 1

HEALTH HAZARDS Acute toxicity(Dermal) Category4

Acute toxicity (inhalation: vapors) Category4

Skin corrosion/irritation Category2

Serious eye damage/eye irritation Category2A

Germ cell mutagenicity Category2

Reproductive toxicity Category1B

Specific target organ toxicity (Single exposure)
Category 1 (Central nervous system)

Specific target organ toxicity (Single exposure)
Category 3 (Respiratory tract irritation)

Specific target organ toxicity (Repeated exposure)
Category 1 (Liver, Blood system, Respiratory tract,
Nervous system)

ENVIRONMENTAL HAZARDS Hazardous to the aquatic environment (Acute)
:Category2

Hazardous to the aquatic environment (Long term)
:Category3

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

GHS label

Symbols



Signal words

Danger

Hazard statements

H228 Flammable solid.

H312+H332 Harmful in contact with skin,if inhaled

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H341 Suspected of causing genetic defects

H360 May damage fertility or the unborn child

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.

H401 Toxic to aquatic life

H412 Harmful to aquatic life with long-lasting effects

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.(P210)

Ground/bond container and receiving equipment.(P240)

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

Do not breathe gas.(P260)

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

Do not breathe dust/fumes.(P260)

Wash hands thoroughly after handling. (P264)

Wash eyes 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)
Avoid release to the environment. (P273)

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

【Response】

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

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

IF IN EYES: Rinse cautiously with water for several
minutes. Remove contact lenses, if present and
easy to do. Continue rinsing. (P305+P351+P338)

If exposed: Call a POISON CENTER or
doctor/physician.(P308+P313)

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

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

Specific treatment. (P321)

If skin irritation occurs: Get medical advice/attention.
(P332+P313)

If eye irritation persists: Get medical
advice/attention. (P337+P313)

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

In case of fire: Use suitable extinguishing media for
extinction. (P370+P378)

【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)

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)

Cobalt and its compounds (Designated number by Laws: 172) (Less than 1%)

Silica (Designated number by Laws: 312)(Less than 5%)

Styrene (Designated number by Laws: 323)(20%~30%)

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

Class I Designated Chemical Substances Article 2 paragraph (2) Enforcement OrdeArticle 1 Appended Table 1

Styrene (Designated number by Laws: 240)(23%)

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. Do not use solvents, thinner.

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

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 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) .

Use explosion-proof equipment and to implement an electrostatic measures to facilities.

Prohibit the use of the high temperature, spark and fire of around.

Precautions for safe handling

Close container tightly after each use.

Soak mixture of putty base and curing agent, deposits of curing agent, polishing powder and etc. in water before discarding.

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.

SECTION 8- EXPOSURE CONTROL/PERSONAL PROTECTION

Component	Management Concentration	Allowable concentration (Society for Occupational Health)	Allowable concentration (ACGIH)
2-ethylhexanoic acid, cobalt salt		0.05mg/m ³ (as Co)	Not established.
Styrene	20ppm	20ppm(85mg/m ³) (Skin)	TWA 20 ppm, STEL 40 ppm

Facility Protection

For the indoor workplaces, install the equipment or local exhaust ventilation to seal the divergent sources of steam.

If the dust is generated in the grinding work of the cured product, install a local exhaust ventilation or dust collector.

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

Personal protection equipments

Respiratory protection

Use dust mask in the grinding work of the cured product.

Use gas masks for organic vapor or supplied-air respirator.

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	Paste
	Color	Silver
Flush point		31°C(Closed style)(ref.Styrene)
Specific gravity (Density)		ca1.28

SECTION 10- STABILITY AND REACTIVITY

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

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity	Dermal	Based on the acute toxicity estimate of mixtures of $\geq 1000\text{mg/kg}$ to $<2000\text{mg/kg}$. It was set as Category 4.
	Inhalation	Based on the acute toxicity estimate of mixtures of $\geq 2500\text{ppm}$ to $<20000\text{ppm}$. It was set as Category 4.
Skin corrosion/irritation		Based on the Category 2 skin irritation is present in the mixture as all ingredient at a concentration $\geq 10\%$. It was set as Category 2.
Serious eye damage/eye irritation		Based on the Category 2A Serious eye damage/eye irritation is present in the mixture as all ingredient at a concentration $\geq 10\%$. It was set as Category 2A.
Germ cell mutagenicity		Based on the Category 2 mutagen is present in the mixture as ingredient at a concentration $\geq 1\%$. It was set as Category 2.
Reproductive toxicity		Based on the Category 1B Reproductive toxicant is present in the mixture as all ingredient at a concentration $\geq 0.3\%$. It was set as Category 1B.

Specific target organ toxicity (Single exposure)

Based on the Category 3 (Respiratory tract irritation) specific target organ toxicity is present in the mixture as ingredient at a concentration $\geq 20\%$. It was set as Category 3 (Respiratory tract irritation).

Based on the Category 1 (Central nervous system) specific target organ toxicant is present in the mixture as ingredient at a concentration $\geq 10\%$. It was set as Category 1 (Central nervous system).

Specific target organ toxicity (Repeated exposure)

Based on the Category 1 (Liver) specific target organ toxicant is present in the mixture as ingredient at a concentration $\geq 10\%$. It was set as Category 1 (Liver).

Based on the Category 1 (Blood system) specific target organ toxicant is present in the mixture as ingredient at a concentration $\geq 10\%$. It was set as Category 1 (Blood system).

Based on the Category 1 (Respiratory tract) specific target organ toxicant is present in the mixture as ingredient at a concentration $\geq 10\%$. It was set as Category 1 (Respiratory tract).

Based on the Category 1 (Nervous system) specific target organ toxicant is present in the mixture as ingredient at a concentration $\geq 10\%$. It was set as Category 1 (Nervous system).

SECTION 12- ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (Acute)

Based on the (Toxicity multiplying factor $\times 10 \times$ Category 1 Hazardous to the aquatic environment (Acute)) and Category 2 are present in the mixture as all ingredient at a concentration $\geq 25\%$. It was set as Category 2 (Hazardous to the aquatic environment (Acute)).

Hazardous to the aquatic environment (Long term)

Based on the (Toxicity multiplying factor $\times 100 \times$ Category 1 Hazardous to the aquatic environment (Long term)) $+10 \times$ Category 2 and Category 3 are present in the mixture as all ingredient at a concentration $\geq 25\%$. It was set as Category 3 (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

Follow IMO provisions

UN No. 1325

Proper Shipping Name FLAMMABLE SOLID, ORGANIC, N.O.S.

Class 4.1

Packing Group II

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. 1325

Proper Shipping Name FLAMMABLE SOLID, ORGANIC, N.O.S.

	Class	4.1
	Packing Group	II
Domestic regulation	Land transport	Follow Fire Service Act and Road law
	Marine transport	Follow Ship Safety Act
	UN No.	1325
	Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.
	Class	4.1
	Packing Group	II
	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.	1325
	Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.
	Class	4.1
	Packing Group	II
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.	133

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	Class II Specified chemical substances, Specified organic solvents (Specified Chemical Ordinance Article 2 paragraph (1) No. 2, paragraph (3) No. 2, paragraph (3) No. 3).

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).

Publication substances of Prevent Health Impediment Guidelines (Article 28-3/Guidelines of Ministry of Health, Labour and Welfare).

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)

Specified chemical substances, Specified management substances (Specified Chemical Ordinance 38-3).

Water Pollution Control Act	Designated Substances (Article 2-4 Enforcement Order 3-3).
Fire Service Act	Class II Flammable solids.
Offensive Odor Control Act	Specified odor substance (Enforcement Order Act 1).
Air Pollution Control Act	May be applicable as Hazardous Air Pollutants (The ninth central environmental council report).
	Volatile Organic Compound (Act 2-4) (Notification from the Ministry of the Environment to the prefectural).
Ship Safety Act	Flammable Substances/Flammable Substance (Regulations for the carriage and storage of dangerous goods in ship. Articles 2 to 3 Hazardous material Appended Table 1).
Aviation Law	Flammable Substances/Flammable Substance (Enforcement Regulation Article 194 Hazardous material Appended Table 1).

Act on Port Regulations	Dangerous goods/Flammable Substance (Article 21-2 of the Act, Article 12 of the Enforcement Regulation, Appended Table 2 No.547, 1979).
PRTR and Promotion of Chemical Management Law (PRTR Law)	Class I Designated Chemical Substances (Article 2-2, Enforcement Regulation Article 1 Appended Table 1).
Labor Standards Act	Illness chemical substances (Article 75-2 of the Act, Enforcement Regulation Article 35 Appended Table 1-2 item 4-1).
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.