

Created: March 25, 2016
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Safety Data Sheet

1. Identification of the Substance and of the Company

Product Name

RP Agent (Type AN)

Company	Mitsubishi Gas Chemical Co., Inc.
Address	2-5-2, Marunouchi, Chiyoda-ku, Tokyo
Department in Charge	Information & Advanced Materials Company
Prepared by	Oxygen Absorbers Division
Telephone Number	+81-3-3283-4842
Facsimile Number	+81-3-3287-1785
Emergency Phone Number	+81-3-3283-4842
Applications and Inquiries	https://www.mgc.co.jp/eng/inquiry/products/ageless/
Recommended Use (Restrictions on Use)	Oxygen absorber
Reference Number	1-01-1201-1



2. Hazard Identification (When a wallet ripped.)

GHS Classification

Physical Hazards

Explosives	Not Applicable
Flammable gasses	Not Applicable
Flammable aerosols	Not Applicable
Oxidizing gasses	Not Applicable
Gases under pressure	Not Applicable
Flammable liquids	Not Applicable
Flammable solids	Classification Not Possible
Self-reactive substances/mixtures	Classification Not Possible
Pyrophoric liquids	Not Applicable
Pyrophoric solids	Not Classified
Self-heating substances/mixtures	Not Classified
Substances/mixtures which, in contact with water, emit flammable gases	Classification Not Possible
Oxidizing liquids	Not Applicable
Oxidizing solids	Classification Not Possible
Organic peroxides	Not Applicable
Corrosive to metals	Classification Not Possible

Health Hazards

Acute toxicity (oral)	Not Classified
Acute toxicity (dermal)	Classification Not Possible
Acute toxicity (inhalation: gas)	Not Applicable
Acute toxicity (inhalation: vapor)	Not Applicable
Acute toxicity (inhalation: dust)	Classification Not Possible
Acute toxicity (inhalation: mist)	Not Applicable
Skin corrosion/irritation	Not Classified
Serious eye damage/ eye irritation	Category 1
Respiratory sensitization	Classification Not Possible
Skin sensitization	Classification Not Possible
Germ cell mutagenicity	Classification Not Possible

Carcinogenicity	Classification Not Possible
Reproductive toxicity	Classification Not Possible
STOT/Systemic toxicity (single exposure)	Category 1 (respiratory system)
STOT/Systemic toxicity (repeated exposure)	Classification Not Possible
Aspiration hazard	Classification Not Possible
Environmental Hazards	
Aquatic hazard (acute)	Classification Not Possible
Aquatic hazard (long-term)	Classification Not Possible
Hazardous to the ozone layer	Classification Not Possible
GHS Label Elements	
Pictograms/Symbols	
Signal Word	Danger
Hazard Statements	Serious eye injury Impairment of respiratory system
Precautionary Statements	Do not handle until all the safety precautions in this SDS have been read and understood.
Prevention	Use protective gloves, protective clothing, protective eyewear, and a protective face mask. Do not inhale dust. Do not eat, drink, or smoke while using the product. Wash hands/face thoroughly after handling the product.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Do not induce vomiting. Rinse the mouth thoroughly with water. Call a POISON CENTER or doctor/physician.. IF exposed or concerned: Call a POISON CENTER or
Storage	Store locked up. Store at 30°C below. Protect from sunlight.
Disposal	Dispose of contents/container in accordance with the Waste Management and Public Cleansing Act and other applicable regulations.

3. Composition/Information on Ingredients (Contents)

Single product or mixture	Mixture
Chemical Name/Generic Name	RP Agent (Type AN)
Ingredient	(a) Calcined diatomaceous earth (b) Calcium oxide (c) Hydrocarbon compounds (d) Resin powder
Chemical Formula	(a) The principal ingredient is SiO ₂ .

	(b) CaO	
	(c) Unpublished	
	(d) Unpublished	
CAS Number	(a) 91053-39-3	
	(b) 1305-78-8	
	(c) Unpublished	
	(d) Unpublished	
Concentration	(a) Calcined diatomaceous earth	10 - 40%
	(b) Calcium oxide	30 - 40%
	(c) Hydrocarbon compounds	5 - 20%
	(d) Resin powder	10 - 30%
Gazette Reference Number		
CSCS	(a) Not Applicable	
	(b) (1)-189	
	(c) Registered	
	(d) Registered	
ISHL	(a) Not Applicable	
	(b) Published	
	(c) Published	
	(d) Published	
TSCA Registration	(a) Registered	
	(b) Registered	
	(c) Registered	
	(d) Registered	
EINECS Number	(a) 293-303-4	
	(b) 215-138-9	
	(c) Unpublished	
	(d) Unpublished	
DSL/NDSL Registration	(a) Registered	
	(b) Registered	
	(c) Registered	
	(d) Registered	
4. First-Aid Measures	(Contents)	
If Inhaled	Immediately move the victim to a location with fresh air and have him rest while keeping him warm. Seek examination or treatment by a physician.	
If On Skin (or Hair)	Wash thoroughly with plenty of water. Seek examination or treatment by a physician.	
If In Eyes	Rinse carefully with water for several minutes. If the person is wearing contact lenses and they can be removed easily, remove them. Continue to wash the eyes. Contact a physician immediately.	
If Swallowed	Do not induce vomiting. Rinse the mouth thoroughly with water, give one to two cups of water or milk, and seek medical attention. If the victim is unconscious, do not attempt to give him anything orally.	
Exposure or fear of exposure	Contact a physician.	
Feelings of sickness	Seek examination or treatment by a physician.	
Most Serious	Eye irritation and pain	
Symptoms/Effects		
5. Fire-Fighting Measures		
Extinguishing Media	Powder, carbon dioxide gas, water mist, foam	
Unsuitable Extinguishing Media	None	
Specific Fire-Fighting Measures	In the case of a fire in a surrounding area, remove containers immediately to a safe place. If containers cannot be removed, cool them by spraying water on them and their surrounding areas.	

Special Protective Actions for Fire-Fighting	In fighting a fire, wear appropriate protection.
6. Accidental Release Measures	(In event of leak of contents)
Personal Precautions, Protective Equipment and Emergency Procedures	Wear proper protective equipment such as a dust-proof respirator, gloves, and eye protection.
Environmental Precautions	Avoid disposing of the product in the natural environment.
Methods and Materials for Containment and Cleaning Up	If the bag ruptures and spills its contents, sweep up as much of the product as possible and collect it in an empty container. Then rinse the contaminated area with a large volume of water. Exercise caution so that concentrated wastewater is not discharged directly into a river or other body of water.
Prevention of Secondary Hazards	Prevent the spill from entering drainages, sewers, basements, or closed sites.
7. Handling and Storage	
Handling	
Technical Measures (Local exhaust/general ventilation, etc.)	No local ventilation equipment is required.
Precautions for Safe Handling (Including incompatibilities)	Do not handle until all the safety precautions in this SDS have been read and understood. Wear protective glasses as conditions merit. Do not open product. Do not inhale product that has spilled from a ruptured bag.
Hygiene measures	Do not eat, drink, or smoke after touching the contents. Thoroughly wash your hands, face, and eyes after handling the contents.
Storage	
Conditions for Safe Storage	Store in a locked facility. Avoid exposure to direct sunlight. Store at 30°C or below. Keep away from fire and store away from flammable materials such as cloth and paper.
Safe Materials for Containers/Packaging	Special containers are not required for storage. However, gas-barrier packaging material should be used to prevent deterioration of product performance.
8. Exposure Controls/Personal Protection	
Exposure Limit	(Contents)
Japan Society for Occupational Health (2019)	Class 1 dust: 0.5 mg/m ³ (diatomaceous earth: respirable dust) 2.0 mg/m ³ (diatomaceous earth: total dust)
ACGIH (2019)	TLV-TWA: 0.025 mg/m ³ (as respirable crystalline silica) TLV-TWA: 2 mg/m ³ (calcium oxide)
Personal Protective Equipment	(When handling contents)
Respiratory Protection	Dust-proof respirator
Hand Protection	Gloves
Eye Protection	Protective glasses, face shield
Skin and Body Protection	Work clothing, helmet, safety boots
9. Physical and Chemical Properties	(Contents)
Appearance	Gray-white powder
Odor (Odor Threshold)	Odorless
pH	Not reported
Melting/Freezing Point	2,580°C (Calcium oxide)
Boiling Point	2,850°C (Calcium oxide)
Flash Point	231°C or higher (Resin powder)

Auto-ignition/Ignition Temperature	Not reported
Flammability or Explosive Limits	Not reported
Vapor Pressure	Not reported
Specific Gravity (Density)	0.45 - 0.65 g/ml
Solubility	0.14 g/100 ml water (25°C) (Calcium oxide)
Partition Coefficient: octanol/water	Not reported
Decomposition Temperature	Not reported
10. Stability and Reactivity	
Reactivity/Stability	Reacts with oxygen in the air to generate heat. Reacts with moisture in the air to generate calcium hydroxide.
Possibility of Hazardous Reactions	Reacts vigorously upon contact with oxidizers such as hydrogen peroxide. Reacts violently upon contact with water and emits a large amount of heat. Reacts violently with acids.
Conditions to Avoid	Contact with water, excessive heat
Incompatible Materials	Water, oxidizer, acid
Hazardous Decomposition Products	None
11. Toxicological Information	
Acute Toxicity	(Contents)
Oral rat LD ₅₀	>5,000 mg/kg (a)*1) >5,000 mg/kg (b)*2) The product was not classified due to its estimated acute toxicity value of 4.530 mg/kg.
Skin Corrosion/Irritation	Since similar substances that also contain Category 1 calcium oxide have been described as minor irritants with a PII of 1.0 (which places them outside the range of the classification as defined)*3), and due to its low calcium oxide content compared to those substances, the product was not classified.
Serious Eye Damage/ Eye Irritation	The calcium oxide contained in the product has been given a GHS classification of 1 for serious eye injury/irritancy by a liaison conference of government ministries in accordance with the GHS Classification Guidance (February 10, 2006, edition).*2) Based on the percentage of calcium oxide contained in the product, the product has been given a GHS classification of 1 for serious eye injury/irritancy.
Respiratory sensitization	Not reported
Skin sensitization	Not reported
Germ Cell Mutagenicity	Not reported
Carcinogenicity	Under certain conditions, some of the calcined diatomaceous earth contained in the product exists as crystalline silica. Although there are descriptions in the literature indicating carcinogenicity in humans of crystalline silica when inhaled as quartz or cristobalite from an occupational source*1) and despite the fact that the GHS ministry liaison conference gave crystalline silica a carcinogenicity rating of 1A based on GHS classification guidance (February 10, 2006, edition)*2), the product was determined to be "classification not possible" based on the absence of toxicity data evaluating the risk of calcined diatomaceous earth and a comprehensive assessment of hazards posed by other substances contained in the product.
Reproductive toxicity	Not reported

STOT/Systemic Toxicity - Single Exposure	<p>The calcium oxide contained in the product has been given GHS classifications of 1 (respiratory system) for specific target organ/systemic toxicity (single exposure) by a liaison conference of government ministries in accordance with the GHS Classification Guidance (February 10, 2006, edition). *2)</p> <p>Based on the percentage of calcium oxide contained in the product, the product has been given GHS classifications of 1 (respiratory system) for specific target organ/systemic toxicity (single exposure).</p>
STOT/Systemic Toxicity - Repeated Exposure	<p>Under certain conditions, some of the calcined diatomaceous earth contained in the product exists as crystalline silica. Although there are descriptions in the literature indicating that crystalline silica affects respiratory organs and the kidneys when inhaled*1), and despite the fact that the GHS ministry liaison conference gave crystalline silica a specific organ toxicity (repeated exposure) rating of 1 (respiratory system, kidneys) based on GHS classification guidance (February 10, 2006, edition)</p> <p>Meanwhile, the calcium oxide contained in the product has been given a GHS classification of 1 (respiratory system) for specific target organ/systemic toxicity (repeated exposure) by a liaison conference of government ministries in accordance with the GHS Classification Guidance (February 10, 2006, edition). *2) However for this product to be sealed up and used, single time could be exposed to contents, but repetition could not. So the product was determined to be "classification not possible"</p>
Aspiration hazard	Not reported.
12. Ecological Information	
Ecotoxicity	Not reported
Persistence/Degradability	Not reported
Bioaccumulative Potential	Not reported
Mobility in Soil	Not reported
Hazardous to the Ozone Layer	Not reported (Ingredients are not listed in the annex of the Montreal Protocol.)
13. Disposal Considerations	
Waste Residues	<p>Dispose of contents/container in accordance with the Waste Management and Public Cleansing Act and other applicable regulations.</p> <p>Do not tear packets of RP agent during disposal.</p> <p>Dispose of any unused RP agent as well as any RP agent that retains its efficacy as follows:</p> <p>After separating the product from other waste, collect it in a small, hole-free polypropylene bag. Take steps to prevent exposure to water, for example by tying the bag closed, and incinerate.</p> <p>Do not place RP agent in the same polypropylene bag as flammable materials such as cloth or paper scraps.</p> <p>In light of the fact that large quantities of the product may give off heat if collected together, limit the amount of RP agent collected in any single polypropylene bag to about 500 g.</p> <p>Take steps to ensure that any heat generated by polypropylene bags or other containers holding RP agent will dissipate and store apart from other waste.</p> <p>Avoid storing RP agent tagged for disposal in locations where it would be exposed to high temperatures, for example due to heat of fire or direct sunlight.</p>
Contaminated Containers and Packaging	After removing deposits, dispose of containers. Treat waste liquid used for cleaning in the same way for waste residues.
14. Transportation Information	

International Regulation

UN Class Not applicable*3) *4)

UN Number Not applicable

Marine pollutant Not applicable

Japanese Regulation

Transport by Land Does not belong to the dangerous goods.

Transport by Sea Does not belong to the dangerous goods.

Transport by Air Does not belong to the dangerous goods.

Special safety measures and conditions Prevent wetting by rainwater using a sheet. Verify that containers are leak-free when transporting the product. Carefully load the product while preventing dropping, damage, and collapse.

Emergency response guide no. Not applicable

15. Regulatory Information

(Contents)

Industrial Safety and Health Law

Article 57 Paragraph 2: Notifiable substance (silica [calcined diatomaceous earth], calcium oxide)

Article 594 of the Ordinance on Industrial Safety and Health: Substances harmful to skin (calcium oxide)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, Poisonous and Deleterious Substances Control Act, Fire Service Act, Ship Safety Act, and Civil Aeronautics Act are not applicable.

16. Other Information

References

*1) Website of Chemical Management Center of National Institute of Technology and Evaluation (NITE ID:H27-A-041/C-112A_P)

*2) Website of Chemical Management Center of National Institute of Technology and Evaluation (NITE ID:H28-B-011,C-014B)

*3) Test results from our Niigata Research Laboratory (PIT-9613)

*4) Corrosion Testing Laboratories, Inc., Reference No. 23100 (date of

Subject

This Safety Data Sheet includes information about the product as shipped in small packages.

Disclaimer

The contents herein are based on materials, information, and data available as of today. However, concentrations, physicochemical properties, and hazards in this SDS are not guaranteed. As precautions are described on the subject of the normal use and handling, please take appropriate safety measures for special use and handling.

Furthermore, GHS classifications were made in accordance with Japanese standards; and therefore, some of the results may be different from those done according to overseas standards.