



SAFETY DATA SHEET

1. Chemical Product and Company Identification

ProductName Na2ZrO3 (Powder, Code #:NAF50PB)

Reference NO. NAF37PAG-001

Creation Date 2025/12/24

Company information	Name : Kojundo Chemical Laboratory Co.,Ltd.
	Address : 5-1-28, Chiyoda, Sakado , Saitama, 350-0284, Japan
	Name of Section : Quality Assurance Dept.
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Product Use	For research purposes
Restriction of use	Seek expert judgment when using the product for applications other than those recommended

2. Hazards identification

[GHS CLASSIFICATION]

PHYSICAL HAZARDS

Not Classification criteria.

HEALTH HAZARDS

Skin corrosion/irritation : Category2

Serious eye damage/Eye Irritation : Category2

Specific target organ toxicity(single exposure) : Category3(Respiratory tract irritation)

ENVIRONMENTAL HAZARDS

Not Classification criteria.

[GHS LABEL ELEMENTS]

Pictogram :



Signal Word : Warning

Hazard Statement : Causes skin irritation(H315)

: Causes serious eye irritation(H319)

: May cause respiratory irritation(H335)

Precautionary Statement

Safety measures : Avoid breathing dust/fume/gas/mist/vapours/spray.(P261)
: Wash the competent authority to specify parts of the body to be washed after handling. thoroughly after handling.(P264)
: Use only outdoors or in a well-ventilated area.(P271)
: Wear protective gloves/protective clothing/eye protection/face protection.(P280)

First aid measures : Call a POISON CENTER/doctor if you feel unwell.(P312)
: Specific treatment.(P321)
: IF ON SKIN: Wash with plenty of water(P302+P352)

- : IF INHALED: Remove person to fresh air and keep 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 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)

Storage : Store locked up.(P405)

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

Disposal : Dispose of contents/container in accordance with local/regional/national/international regulation.(P501)

3. Composition/information on ingredients

Classification of the substance or mixture	: Substance	
Chemical name	Concentration(%)	CAS RN®
Disodium zirconate	100.00	12201-48-8

4. First aid measures

Inhalation	: Remove the exposed person immediately and provide fresh air. Get medical attention.
Skin contact	: Promptly flush contaminated skin with soap or mild detergent and water. Contact Dermatologist if irritation continues.
Eye contact	: Rinse cautiously with water for 15 minutes. Get medical attention from an ophthalmologist. When washing your eyes, hold your eyelids open with your fingers to allow water to reach every corner of your eyeballs and eyelids.
Ingestion	: Rinse mouth and throat with water. Get medical attention immediately.
Necessary precautions for protection of person performing first aid measures	: Rescue workers wear appropriate eye and skin protection equipment according to the situation.
Special precautions for doctors	: The doctor should carry out treatment that corresponds to the patient's symptoms.

5. Fire fighting measures

Suitable extinguishing media	: Use media appropriate for surrounding fire.
Unsuitable extinguishing media	: If there are overlapping items between "Suitable extinguishing media" and "Unsuitable extinguishing media", the use of that extinguishing media is prohibited.
Special protective equipment and precautions for fire-fighters	: Wear appropriate respiratory air and the protective clothing (heat resistance).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	<ul style="list-style-type: none"> : Remove all ignition sources.
Environmental precautions	<ul style="list-style-type: none"> : Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Methods and material for containment and cleaning up	<ul style="list-style-type: none"> Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd.
Measures to prevent secondary disasters	<ul style="list-style-type: none"> : Prevent flow out to river, etc. so as not to badly affect. : Shut off leak if without risk. Avoid unnecessary contacts with spills. : Gather up, pack in closed DOT-approved waste container as much as possible. Carefully collect remnant and move to a safe place.
	<ul style="list-style-type: none"> : Prevent leakage into sewer, rivers and etc., and take measures to prevent environmental pollution.

7. Handling and storage

Handling	
Technical measures	<ul style="list-style-type: none"> : No information available
Precautions for safe handling	<ul style="list-style-type: none"> : If dust is generated. Use explosion-proof electrical/ventilating/lighting equipment. Fine powder originated from the products (excluding non-oxidizing oxides) has very high reactivity.
Avoid contact	<ul style="list-style-type: none"> : Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen. Avoid prolonged or repeated exposure.
Hygiene measures	<ul style="list-style-type: none"> : Do not eat, drink or smoke when using this product. : Wash hands thoroughly after handling.
Storage	
Safe storage conditions	<ul style="list-style-type: none"> : Store the material in a sealed container. Store in a cool, dry, well ventilated and dark place away from incompatible materials. : Store molded products such as targets in an unopened condition.
Safe container packaging materials	<ul style="list-style-type: none"> : No information available

8. Exposure controls / Personal protection

Control parameters			
Chemical name		ACGIH	OSHA
Disodium zirconate		<ul style="list-style-type: none"> TWA:5mg/m³ TWA:Zirconium [74 40-67-7] and compounds, as Zr STEL:10mg/m³ STEL:Zirconium [74 40-67-7] and compounds, as Zr 	<ul style="list-style-type: none"> TWA:5mg/m³ TWA:Zirconium compounds as Zr
Equipment		<ul style="list-style-type: none"> : Install the appropriate general ventilation equipment, local exhaust ventilation in the workplace. 	
Personal protection			
Respiratory protection		<ul style="list-style-type: none"> : Wear appropriate NIOSH/MSHA-approved respirator. 	
Hand protection		<ul style="list-style-type: none"> : Wear appropriate NIOSH/MSHA-approved impervious gloves. 	
Eye and face protection		<ul style="list-style-type: none"> : Wear appropriate NIOSH/MSHA-approved safety goggles. 	

Skin and body protection

: Wear appropriate NIOSH/MSHA-approved impervious protective wear, protective boots.

Special precautions

: Regularly check your protective gear.

: The notes for the table are as follows.

D: Dust, M: Mist, F: Fumes, I: Inhalable particles, R: Respirable particles, IFV: Inhalable particles and vapors, T: Total dust, V: Vapors, C: Ceiling limit

9. Physical and chemical properties

Physical state

: Solid

Color

: Colorless

Odour

: No information available

Melting point/Freezing point

: No information available

Boiling point, initial boiling point and boiling range

: No information available

Flammability

: Non-combustible

Range of explosion (lower bound - upper bound)

: No information available

Flash point

: No information available

Autoignition temperature

: No information available

Decomposition temperature

: No information available

pH

: No information available

Kinematic viscosity

: No information available

Solubility

: Decomposition(It decomposes in water to form sodium hydroxide and zirconium oxide.)

Partition coefficient (n-octanol/water)

: No information available

Vapor pressure

: No information available

Density/Specific gravity

: No information available

Relative vapor density

: No information available

Particle characteristics

: No information available

Other

: F.W. : 185.2

Oxidizing : None

10. Stability and reactivity

Reactivity

: No information available

Chemical stability

: Stable when stored in sealed container (at room temperature).

Possibility of hazardous reactions

: No information available

Conditions to avoid

: Keep away from direct sunlight. Store in a cool, dark place.

Incompatible materials

: No information available

Hazardous decomposition products

: No information available

11. Toxicological information

Acute toxicity(oral)

No information available

Acute toxicity(dermal)

No information available

Acute toxicity(inhalation:gases)

 No information available

Acute toxicity(inhalation:vapours)

 No information available

Acute toxicity(inhalation:dusts and mists)

 No information available

Skin corrosion/Skin irritation

 Disodium zirconate : Category2

Serious eye damage/Eye Irritation

 Disodium zirconate : Category2A

Respiratory sensitizer

 No information available

Skin sensitizer

 No information available

Germ cell mutagenicity

 No information available

Carcinogenicity

 No information available

Toxic to reproduction/Effects on or via lactation

 No information available

Specific target organ toxicity(single exposure)

 Disodium zirconate : Category3(Respiratory tract irritation)

Specific target organ toxicity(repeated exposure)

 No information available

Aspiration hazard

 No information available

12. Ecological information

Hazard to the aquatic environment (acute)

 No information available

Hazard to the aquatic environment (chronic)

 No information available

Hazardous to the ozone layer

 No information available

Ecotoxicity/Fish toxicity

 No information available

Ecotoxicity/ Invertebrate toxicity

 No information available

Ecotoxicity/ Algal toxicity

 No information available

Persistence and degradability

 No information available

Bioaccumulative potential

 No information available

Mobility in soil

 No information available

13. Disposal considerations

Remained waste

 : Discard in accordance with the standards of the local government and relevant legislation.

A polluted container and packing : When disposing of empty containers, empty containers are processed in accordance with the standards of the local government as well as the related laws and regulations and waste disposal method after contents are completely removed.

14. Transport information

UN number	: No information available
Guideline Number	: -
Shipping name	: No information available
UN Class	: No information available
Packing group	: No information available
Subsidiary risk(s)	: -
MARINE POLLUTANT	: Not applicable
Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code	: Not applicable
Special safety measures for transport or means of transport	<ul style="list-style-type: none">: Follow "7. Handling and storage": Check no leak of container, handle without overturning, falling and damaging, then reliably prevent from cargo shift.
Domestic regulations	<ul style="list-style-type: none">Ground transport : Follow the transportation method specified in the Fire Service Law and the Industrial Safety and Health Law.Marine transport : Follow the transportation method specified in the Ship Safety Law.Air transport : Follow the transportation method specified in the Aviation Law.

15. Regulatory information

Follow relevant national and local regulations.

16. Other information

This " Safety Data Sheet(SDS)" is for provision of information, and it does not represent a guarantee the properties or safeties of the product.

Since not all materials and literature have been investigated, information may be omitted, and changes may occur in the content due to the discovery of new findings or corrections of previous theories.

The information contained herein is based on information in our possession, but we do not guarantee the completeness of the information.

It is subject to revision based on changes in laws and regulations and new findings.

When using this information for important decisions, we recommend that you carefully review the source of the information or verify it through testing.

Values of ingredients, content, physicochemical properties, etc., are not quality assurance values.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used.

The information is intended for ordinary usage, in case of special handling, sufficient care should be taken.

Special Notes (displayed only if applicable)