Date of revision : 2026/01/06

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:
- Product name: ZIG FUDEBIYORI
- SDS No. :G_FW_5-2
- Product No. :CBK-55N/48V,24V,12V,6V,-xxx

Relevant identified uses of the substance or mixture and uses advised against
- Relevant identified uses of the product: Drawing

Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Kuretake Co.,Ltd.
- Address: 576, Minamikyobate-cho, 7-chome, Nara-shi, 630-8670 Japan
- Division: Technical Department
- Telephone number: +81-742-50-2053
- FAX: +81-742-50-2073

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture
- HEALTH HAZARDS
  - Specific target organ toxicity - single exposure: Category 2
  - Specific target organ toxicity - repeated exposure: Category 2

Label elements

Signal word: Warning

HAZARD STATEMENT
- H371 May cause damage to organs after single exposure
- H373 May cause damage to organs through prolonged or repeated exposure

PRECAUTIONARY STATEMENT

Prevention
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash contaminated parts thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.

Response
- P314 Get medical advice/attention if you feel unwell.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.

Storage
- P405 Store locked up.

Disposal
- P501 Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name	CAS No.	Content (%)
ECNO		
Sodium bisulfate	7681-38-1	< 1
231-665-7		
Propylene glycol	57-55-6	5 - 10
200-338-0		

Components contributing to the hazard

Hazardous components related to GHS classification

Sodium bisulfate , Propylene glycol

Components corresnpond to health hazard symbol

Propylene glycol

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF exposed or concerned: Call a POISON CENTER or doctor/physician.

IF INHALED

Remove the victim to the fresh air area. If feel bad, see a doctor.

IF ON SKIN (or hair)

Put off the all polluted clothes immediately. Clean with the proper temp. and slow flowing water
for over 15 minutes. If have irritate the skin, see a doctor. Call a doctor if feel bad.
Before re-use
the put off clothes, clean it up and remove the pollution.

IF IN EYES

Put off the contacts if possible, and continue to clean. Clean the eyes carefully for a few minutes.
If the eyes get this product, clean the eye immediately and wash away completely. If the cleaning
eyes not enough, it may cause irreversible eye damage.
If irritate to the eyes continue, see a doctor.

IF SWALLOWED

Call a doctor, if feel bad. Rinse the mouth out. Do not have the victim vomit.

Protective measures for first aid

Rescuer must wear proper protective equipment according to the situation.

Indication of any immediate medical attention and special treatment needed

(Affected/injured region(s)/organ(s))

Sialorrhea, face flash, cough, dizzy, lethargy, headache, sore throat, deliquim animi barf, vomition

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.
Small fire / Carbon dioxide, dry chemical extinguishing media, water spray, alcoholic resistance foam.

Unsuitable extinguishing media

Cylindrical pouring water.

Specific hazards arising from the substance or mixture

The irritative, toxicity and corrosive gas is generated by fire. The container will be burst by heating. If it is not dangerous, move the container from the fire area.

If it is impossible to move, cool the container and around by spraying water. After extinguishing a fire, cool the container completely by large quantity of water.

Advice for firefighters

Specific fire-fighting measures

If it is not dangerous, move the container from the fire area.
If it is impossible to move, cool the container and around by spraying water. After extinguishing a fire,

Special protective equipment and precautions for fire-fighters

For fighting fire, wear compressed air open-circuit SBCA and protect equipment for chemical. Fight a fire from up wind.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

The worker must wear proper protector (refer to section 8) not to get the paint on the skin or into eyes. Do not touch the leakage material or walk into it. Keep the proper distance in all direction as the leakage area immediately. No unauthorized entry. If leakage but not occur a fire, wear the occlusive and impervious protect wear. Stay in the wind. Move away from the low ground.

Ventilate before enter the sealed area.

Environmental precautions

Prevent from influx into the drain ditch, sewer, basement and closed area.
Take notice not to affect the environment by discharge the paint into the river.

Methods and materials for containment and cleaning up

Collect Neutralization: In small quantity case, absorb the leakage material by dry sand and non flammable material or collect it in the sealed type container then dispose it. In small quantity case, collect the absorbed material by clean antistatic tools. In large quantity case, yard the leakage material by mound to prevent flow out and lead it into safety area then collect it. In large quantity case, water spray lower the steam temperature but it may not inhibit combustion at the sealed area. Containment or Depurant and Equipment: If it is not danger, stop the leakage. Ground all equipment which need for handle the leakage material. Use steam retard foam for lower the steam concentration. Precaution of Second Disaster: Clear away all ignition source immediately (Do not smoking near around, forbid firework and flame). In case large steam generating, retard it by mist spray. Call related agency and ask the help.
If it is not danger, stop the leakage. Ground all equipment which need for handle the leakage material.

Use steam retard foam for lower the steam concentration.
The worker must wear proper protector (refer to section 8) not to get the paint on the skin or into eyes.
Do not touch the leakage material or walk into it. Keep the proper distance in all direction as the leakage area immediately.
No unauthorized entry. If leakage but not occur a fire, wear the occlusive and impervious protect wear.
Stay in the wind. Move away from the low ground.
Ventilate before enter the sealed area.

Preventive measures for secondary accident

Clear away all ignition source immediately (Do not smoking near around, forbid firework and flame)
In case large steam generating, retard it by mist spray. Call related agency and ask the help.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Exhaust/ventilator)

Use this product outside or well ventilated area only. Avoid touching, refer to the section 10.
Do the local exhaust ventilation and whole ventilation described on section 8.

Safety Measures

Take the equipment measures described in ″8. Exposure Prevention and Protective Measures″ and wear protective equipment.
Obtain the instruction manual before use.
Do not handle until you have read and understood all safety precautions.
Be careful of fire.
Do not touch, inhale or swallow.
Ventilate for exhaust to keep the concentration in the air below the exposure limit.
Wash your hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do the equipment measure described on the section 8 and wear protector.
Prevent leakage the liquid and steam as possible.
This product irritate the eyes so that care not to get it into the eyes. This product may cause sleep or vertigo, irritate the apparatus respiratorius and damage organ parts so that do not touch, inhale and swallow it. Do not fall, drop, shock or drag the container. Clean hands well after use this product.
Keep away from high temperature materials spark and fire, and avoid touching oxidizer peroxide.
Container material: Use the container regulated by fire law and UN transportation law.

Any incompatibilities

Refer to the section 10.

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.

Storage

Conditions for safe storage

Store locked up.
The storage location should be made of non-combustible material, covered with metal plate or other lightweight non-combustible material, and no ceiling should be provided.

The floor of the storage location shall have a structure that does not allow water to penetrate or penetrate the floor.
The floor of the storage place should be structured so that dangerous substances do not penetrate, and it should be sloped appropriately and stored appropriately.
To provide.
The storage area will be provided with daylighting, lighting and ventilation equipment necessary to store or handle dangerous goods.
Store away from oxidants.
Lock and store.
Keep the container airtight and stock it in well ventilated place. Stock in the fulfilled and ventilated and cool place. Keep away from oxidant. Keep away from direct sunlight and fire. The inventory location must be fire-proof construction and the floor must be impermeable to prevent permeate the basement and spill to outside. Lock up the container.

(Incompatibilities)

Refer to the section 10.

8. Exposure controls/personal protection

Control parameters

Exposure controls

Appropriate engineering controls

Install the eyewashing devices and safety shower where handle or stock this product.

Individual protection measures

Respiratory protection

Wear proper respiratory protect equipment such as gas mask for organic gas (if high concentration, wear air-supplied respirator).

Hand protection

Wear the gloves designated by manufacturer.

Eye protection

Wear the eye protector designated by manufacturer.

Skin and body protection

Wear protect boots, oil resistant apron (impermeable and antistatic) and protect clothes (antistatic) designated by manufacturer.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid
Odor data is not available.
Melting point/Freezing point data is not available.
Boiling point or initial boiling point data is not available.
Flammability (gases, liquids and solids) data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Flash point data is not available.
Auto-ignition temperature data is not available.
Decomposition temperature data is not available.
pH data is not available.
Kinematic viscosity data is not available.
Solubility:
Solubility in water data is not available.
Solubility in solvent data is not available.
n-Octanol/water partition coefficient data is not available.
Vapor pressure data is not available.
Vapor density data is not available.

Density and/or relative density data is not available.
Relative vapor density (Air=1) data is not available.
No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity
Reactivity data is not available.
Chemical stability
Under usually storage condition, it is stable.
Possibility of hazardous reactions

Conditions to avoid
Avoid heat and source of ignition.
Incompatible materials

Hazardous decomposition products
Generates harmful gas such as carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on toxicological effects
Acute toxicity data is not available.
Irritant properties
Skin corrosion/irritation data is not available.
Serious eye damage/irritation data is not available.
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenic effects data is not available.
Teratogenic effects data is not available.
Reproductive toxicity data is not available.
STOT
STOT-single exposure data is not available.
STOT-repeated exposure
[GHS Classification scheme based on ingredients information]
Ingredients classified as Category 1
Propylene glycol
10% > Category 1 >= 1%, accordingly Category 2
[cat.1]
[GHS Cat. Japan, base data]
(Propylene glycol)
central nervous system; respiratory system (PATTY 6th, 2012; IPCS PIM 443, Accessed Oct. 2018; MOE risk assessment vol.6, 2008)
Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity
Ecotoxicity data is not available.
Water solubility
(Propylene glycol)
miscible (ICSC, 2014)
(Sodium bisulfate)
108 g/100 ml (IUCLID, 2000)

Persistence and degradability
(Propylene glycol)
Degrade rapidly (BOD_Degradation : 90% (CSCL DB, 1991))
Bioaccumulative potential
(Propylene glycol)
log Pow=−0.92 (ICSC, 2014)
Mobility in soil
Mobility in soil data is not available.
Other adverse effects
Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
Waste treatment methods
Dispose of contents/container in accordance with local/national regulation.
For dispose, follow the related regulation and standard of local governments. Ask the licensed industrial waste disposal company or local governments.

Residue Waste: For dispose, follow the related regulation and standard of local governments. Ask the licensed industrial waste disposal company or local governments.
For Burning: Spray the incinerator with waste liquid directly or mix with flammable solvent in small quantity to burn. Activated sludge process.
Contaminated packing
Clean the container and recycle or treat it in accordance with the related regulation or local governments. If dispose the container, remove the content completely.

14. Transport Information

UN No., UN CLASS
UN No. or ID No.: Not applicable
UN Proper Shipping Name : Not applicable
Class or division (Transport hazard class) : Not applicable
Packing group : Not applicable
Not applicable to IMDG Code
Not applicable to IATA Dangerous Goods Regulations
Environmental hazards
MARPOL Annex III – Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no
Special precautions for user
Make sure the container is free of damage, corrosion, leaks, etc. before shipping.
Dangerous goods should not fall or the transport container containing the dangerous goods should fall, fall or be damaged.
To load.
Avoid tipping, impact, friction, crushing, leakage, etc. when moving.
If a disaster occurs due to an accident during transportation, etc., notify the fire department or other related organizations.
Carry a yellow card during transportation.
Common: Please follow the section7. Check if there are no leakage from container and take cargo without falling, dropping and damage.
Land Transportation: In case of fall under the Fire Law, Industrial Safety and Health Law, Poisonous Material Control Law follow each relevant mode of transportation.
Marine Transportation: Please follow the Law for Safety of Vessel.

Air Transportation: Please follow the Aviation Law and regulation of ICAO.

Maritime transport in bulk according to IMO instruments

Non Noxious Liquid ; Cat. OS

Propylene glycol

15. Regulatory Information

Chemical safety assessment

No chemical safety assessment has been carried out for this product.

16. Other information

GHS classification and labelling

STOT SE 2: H371 May cause damage to organs after single exposure

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

EU REGULATION (EC) No. 1272/2008 (CLP), amended by COMMISSION REGULATION (EU) 2019/521

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

Supplier's data/information

General Disclaimer