

OFF-FLAVOR KIT II (Butyric Acid)

Hayashi Pure Chemical Ind.,Ltd.

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SDS code: T6-14

14 Version: 01

Safety Data Sheet

1. Chemical product and company identification

| Product name | : | OFF-FLAVOR KIT II (Butyric Acid) |
|------------------|----------------------|--|
| SDS code | : | T6-14 |
| | oma Iani oc-j. | chi, Chuo-ku, Osaka, Osaka, Japan ning Group, Reagent & Chemical Product Department |
| Emergency number | | 06-6910-7305 |

2. Hazards identification

GHS classification

| Ono classification | | |
|--------------------|--|---|
| Physical hazards | Desensitized eplosives | classification not possible |
| | Explosives | No classification |
| | Flammable gases | No classification |
| | Aerosol | No classification |
| | Oxidizing gases | No classification |
| | Gases under pressure | No classification |
| | Flammable liquids | No classification |
| | Flammable solids | No classification |
| | Self-reactive substances and mixtures | No classification |
| | Pyrophoric liquids | No classification |
| | Pyrophoric solids | No classification |
| | Self-heating substances and mixtures | classification not possible |
| | Substances and mixtures which in contact with water emit flammable gases | No classification |
| | Oxidizing liquids | No classification |
| | Oxidizing solids | No classification |
| | Organic peroxides | No classification |
| | Corrosive to metals | classification not possible |
| Health hazards | Acute toxicity (oral) | No classification |
| | Acute toxicity (dermal) | No classification |
| | Acute toxicity (inhalation:gas) | classification not possible |
| | Acute toxicity (inhalation:vapors) | classification not possible |
| | Acute toxicity (inhalation:dust/mist) | classification not possible |
| | Skin corrosion/irritation | No classification |
| | Serious eye damage/eye irritation | No classification |
| | 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 |
| | Specific target organ toxicity (single exposure) | Category 1 (blood system, central nervous system) |
| | Specific target organ toxicity (single exposure) | Category 3 (Narcosis) |
| | | |

| Environmental hazards | Specific target organ toxicity (repeated exposure) Aspiration hazard Hazardous to the aquatic environment, short-term (acute) Hazardous to the aquatic environment, long-term (chronic) Hazardous to the ozone layer | | | Category 1 (respiratory system, central nervous system) classification not possible No classification No classification classification not possible | |
|----------------------------------|---|---|--|---|--|
| Hazard pictograms (GHS JP) | ! . | | | | |
| Signal word (GHS JP) | GHS07 | G | HS08 Danger | | |
| Hazard statements (G | GHS JP) : M C C | | May cause drowsiness or dizziness (H336) Causes damage to organs (blood system, central nervous system) (H370) Causes damage to organs (respiratory system, central nervous system) through prolonged or repeated exposure (H372) | | |
| Precautionary stateme | ents (GHS JP) | | | | |
| Prevention | | : | Wash hands, fore Do not eat, drink of | ist/fume/gas/mist/vapors/spray. (P260) arms and face thoroughly after handling. (P264) or smoke when using this product. (P270) s or in a well-ventilated area. (P271) | |
| Response | | : | breathing (P304+I IF exposed or con (P308+P311) | nove person to fresh air and keep comfortable for P340) ncerned: Call a POISON CENTER or doctor. re/attention if you feel unwell. (P314) | |
| Storage | | : | | ntilated place. Keep container tightly closed. | |
| Disposal | | : | | ts/container to hazardous or special waste collection ce with local, regional, national and/or international | |

3. Composition/information on ingredients

Distinction of substance or mixture : Substance

| | Concentration or | | Kanpo | | |
|------------------|------------------------|---------|---------|-----------------------------------|----------|
| Name | Concentration range | Formula | CSCL no | ISHL no | CAS RN |
| Propylene glycol | ≧99% | C3H8O2 | (2)-234 | 2-(8)-321,2- (8)-323 | 57-55-6 |
| Butyric Acid | ≦3% | C4H8O2 | (2)-608 | Existing Chemical Substance | 107-92-6 |

The above concentration or concentration range are not product specification.

All percentages listed in the above concentration or concentration range are mass%, unless otherwise specified.

4. First aid measures

First aid measures

| First-aid measures after inhalation | : | Remove person to fresh air and keep comfortable for breathing. |
|-------------------------------------|---|--|
| | | Get immediate medical advice/attention. |
| First-aid measures after skin | : | Remove/Take off immediately all contaminated clothing. |
| contact | | Gently wash with plenty of soap and water. |
| | | Get immediate medical advice/attention. |

| First-aid measures after eye contact | : | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|--------------------------------------|---|--|
| | | Get immediate medical advice/attention. |
| First-aid measures after ingestion | : | Do NOT induce vomiting. |
| | | Rinse mouth. |
| | | Get immediate medical advice/attention. |
| | | |

5. Fire fighting measures

| Suitable extinguishing media | : | Use proper extinguishing media depending on peripheral fire, Water spray, Alcohol-resistant foam, Carbon dioxide, Dry powder, Sand. |
|---|---|--|
| Unsuitable extinguishing media | : | Do not use a heavy water stream. |
| Hazardous decomposition products in case of fire | : | In case of fire, product may produce irritative or toxic fumes/gases. |
| Firefighting instructions | : | If ignited, for the initial fire-fighting, cut off combustion sources, extinguish fire at a stroke using appropriate fire-extinguishers. |
| | | In the case of peripheral fire, quickly remove movable containers to safe places. |
| | | If unable to be moved containers, sprinkle water to containers and surrounding equipment, etc. to cool. |
| Protection during firefighting | : | Wear appropriate fire-resistant clothing including self contained- compressed air breathing apparatus. |

6. Accidental release measures

| Personal Precautions, Protective Equipment and Emergency Procedures | | | |
|---|----|--|--|
| General measures | : | Before entering, ventilate the area. | |
| | | Do not let unauthorized persons come close to the area. | |
| | | Immediately place the leakage area in isolation, with taking proper distances for all directions. | |
| | | Wear appropriate personal protective devices to prevent inhalation and contact with eye, skin, and clothing, and never attempt to work on the lee. | |
| Environmental precautions | | | |
| Environmental precautions | : | Avoid release to the environment. | |
| | | Prevent entry to sewers and public waters. | |
| Methods and Equipment for Contain | nm | ent and Cleaning up | |
| Methods for cleaning up | : | Clean up any spills as soon as possible, using an absorbent material to collect it. | |
| | | Collect leaking and spilled liquid in sealable containers as far as possible. | |
| | | Wash out the spilled area with large amounts of water. | |
| 7. Handling and storage | | | |
| Technical measures | : | Work with appropriate personal protective equipment to prevent inhalation or contact to eyes, skin, and clothing. | |
| | | Handle with care to prevent leakage, overflowing, or scattering, minimize generation of mist or vapor, and thoroughly ventilate. | |
| Precautions for safe handling | : | Do not eat, drink or smoke when using this product. | |
| | | Thoroughly wash your hands and gargle after handling. | |
| | | Ensure good ventilation of the work station. | |
| | | Do not contact, breathe or swallow. | |
| Prevents handling of incompatible substances or mixtures | : | Avoid prolonged or repeated exposure. | |
| Storage | | | |
| Storage conditions | : | Store locked up. | |
| | | Store in a well-ventilated place, away from direct sunlight. Keep container tightly closed and keep away from fire and heat sources. | |
| Material used in packaging/containers | : | Light shielding airtight container. | |

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| Technical measures | : | Comply with applicable regulations. |
|---------------------|---|-------------------------------------|
| Storage temperature | : | Refrigerate: 2-10°C |

8. Exposure controls / Personal protection equipment

| Appropriate engineering controls | : Cover up tightly the generation source at the handling place or install local exhaust equipment or overall ventilation equipment. Install safety showers and eye-fountains near a handling place. Clearly indicate the location. |
|----------------------------------|--|
| Protective equipment | |
| Respiratory protection | : Gas mask for organic gases |
| Hand protection | : Impervious protective gloves |
| Eye protection | : Protective glasses (general glasses, glasses with side-shields, goggles) |
| Skin and body protection | : Impervious aprons, Impervious work clothing, Protective long boots |

9. Physical and chemical properties

| - | - | • |
|---------------------------|---|---------------------|
| Physical state | : | Liquid |
| Appearance | : | Liquid |
| Color | : | No data available |
| Odor | : | characteristic odor |
| рН | : | No data available |
| Melting point | : | No data available |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Vapor pressure | : | No data available |
| Relative density | : | No data available |
| Density | : | No data available |
| Relative gas density | : | No data available |
| Solubility | : | No data available |
| Partition coefficient n- | : | No data available |
| octanol/water (Log Pow) | | |
| Explosive limits (vol %) | : | No data available |
| Viscosity, kinematic | : | No data available |
| Particle characteristics | : | No data available |
| | | |

10. Stability and reactivity

| Reactivity | : | No data available |
|-------------------------------------|---|--|
| Chemical stability | : | Stable under normal handling conditions. hygroscopicity. |
| Possibility of hazardous reactions | : | It may react with strong oxidizing agents, causing heat generation and ignition. |
| Conditions to avoid | : | Sunlight, moisture, heat. Ignition sources such as flame, spark, and static electricity. Contact with strong oxidizing agents. |
| Incompatible materials | : | Strong oxidizing agents |
| Hazardous decomposition products | : | No data available |

11. Toxicological information

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The information in this section is based on the "GHS Classification Results" by NITE.

| Propylene glycol | |
|-------------------------|-------------------|
| Acute toxicity (oral) | No classification |
| Acute toxicity (dermal) | No classification |
| Acute toxicity (gas) | No classification |

| Propylene glycol | | | | |
|---------------------------------------|----------------------------------|--|--|--|
| Acute toxicity (vapour) | classification not possible | | | |
| Acute toxicity (inhalation:dust/mist) | classification not possible | | | |
| Skin corrosion/irritation | No classification | | | |
| Serious eye damage/irritation | No classification | | | |
| Respiratory sensitization | classification not possible | | | |
| Skin sensitization | No classification | | | |
| Germ cell mutagenicity | classification not possible | | | |
| Carcinogenicity | classification not possible | | | |
| Reproductive toxicity | classification not possible | | | |
| STOT-single exposure | Category 1 Category 3 (Narcosis) | | | |
| STOT-repeated exposure | Category 1 | | | |
| Aspiration hazard | classification not possible | | | |
| Butyric Acid | | | | |
| Acute toxicity (oral) | No classification | | | |
| Acute toxicity (dermal) | Category 3 | | | |
| Acute toxicity (gas) | No classification | | | |
| Acute toxicity (vapour) | classification not possible | | | |
| Acute toxicity (inhalation:dust/mist) | classification not possible | | | |
| Skin corrosion/irritation | Category 1 | | | |
| Serious eye damage/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-single exposure | Category 2 | | | |
| STOT-repeated exposure | classification not possible | | | |
| Aspiration hazard | classification not possible | | | |

12. Ecological information

The information in this section is based on the "GHS Classification Results" by NITE.

:

| Propylene glycol | | | |
|---|-------------------------------------|--|--|
| Hazardous to Aquatic Environment - Acute Hazard | No classification | | |
| Hazardous to Aquatic Environment - Chronic Hazard | No classification | | |
| Persistence and degradability | No data available | | |
| Bioaccumulative potential | No data available | | |
| Mobility in soil | No data available | | |
| Hazardous to the ozone layer | classification not possible | | |
| | | | |
| Butyric Acid | | | |
| Butyric Acid Hazardous to Aquatic Environment - Acute Hazard | Category 3 | | |
| Hazardous to Aquatic Environment - | Category 3 No classification | | |
| Hazardous to Aquatic Environment - Acute Hazard Hazardous to Aquatic Environment - | | | |
| Hazardous to Aquatic Environment - Acute Hazard Hazardous to Aquatic Environment - Chronic Hazard | No classification | | |
| Hazardous to Aquatic Environment - Acute Hazard Hazardous to Aquatic Environment - Chronic Hazard Persistence and degradability | No classification No data available | | |

13. Disposal considerations

Ecology - waste materials

With the detail information of the waste, subcontract its disposal to a waste disposer authorized by a Prefectural Governor.

| Contaminated container and | : Empty the packaging completely prior to disposal. |
|----------------------------|--|
| packaging | Empty containers should be taken for recycle, recovery or waste in |
| | accordance with local regulation. |

Not applicable Not applicable Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

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14. Transport information

International Regulations

Transport by sea(IMDG)

Air transport(IATA)

| UN-No. (IATA) |
|-----------------------------------|
| Proper Shipping Name (IATA) |
| Packing group (IATA) |
| Transport hazard class(es) (IATA) |
| |

Marine pollutant

Regulations in Japan

| Regulatory information by sea | : Not applicable |
|-------------------------------|---|
| Regulatory information by air | : Not applicable |
| Special transport precautions | : When transporting, load containers so that they do not tip over, |
| | damage, drop or collapse. Make sure there is no leak in containers. |

15. Regulatory information

National law

| Chemical Substances Control Law Industrial Safety and Health Law | : | Priority Assessment Chemical Substances (Law Article 2, Para.5) Not applicable |
|---|---|---|
| Japanese Poisonous and Deleterious Substances Control Law | : | Not applicable |
| Fire Service Law | : | Group 4 - Flammable liquids - 3rd Class petroleums - soluble (Law Art.2 Para.7, Attached Table 1, Group 4) |
| Offensive Odor Control Law | : | Specified Offensive Odor Substances (Law Art.2-1, Enforcement Order Art.1) |
| Law Relating to Prevention of Marine Pollution and Maritime Disasters | : | Noxious Liquid Substances - Category Z (Law Art.3(3), Enforcement Order, Art.1-2, Attached Table No.1 Item 3) |
| Foreign Exchange and Foreign Trade Control Act | : | Export Trade Control Ordinance appendix 1-16 |
| Japanese Pollutant Release and | : | Not applicable |

Transfer Register Law (PRTR Law)

16. Other information

Data sources

Other information

- Handbook of 17221 Chemical Products, The Chemical Daily Co, Ltd. International Chemical Safety Cards.
 National Institute of Technology and Evaluation (NITE).
 2016 Emergency Response Guidebook (ERG 2016).
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