

Preparation date, Version 1: August 24, 2021

Safety Data Sheet

1. Chemical Product and Company Identification

Name of chemical product:

Product name: Fine Cleaner

Company name, address, and telephone number of the supplier:

Company name of the supplier: NIPPON TAKKYU Co., Ltd.

Address: 1-2-8 Kandaizumicho Chiyoda-ku Tokyo 101-0024, Japan

Telephone number: +81-3-3862-0911

2. Hazards identification

GHS classification and GHS label elements of chemical product

GHS classification

Physicochemical hazards

Aerosols: Category 2

Health hazards

Specific target organ toxicity (single exposure): Category 2

Specific target organ toxicity (repeated exposure): Category 2

GHS label elements



Signal words: Warning

Hazard statements

Flammable aerosol

High-pressure container: May rupture on heating.

May cause organ damage.

May cause organ damage by long-term or repeated exposure.

Precautionary statements

Safety measures

Keep away from heat, high-temperature materials, sparks, open flames, and other ignition sources. No smoking.

Do not spray open flames or other ignition sources.

Do not pierce or burn, even after use.

Do not breathe dust/fumes/gases/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

Do not eat, drink, or smoke when using this product.

First aid measures

If feeling unwell, consult a physician and receive treatment.

Exposure or fear of exposure: Consult a physician.

Storage

Store locked up.

Protect from sunlight and do not expose to a temperature of 50 °C or above.

Disposal

Dispose of contents/containers in accordance with local/national regulations.

Specific physical and chemical hazards

Contains high pressure flammable gas. May rupture if heated, shocked, etc.

Contains flammable gas. May explode if the gas is not able to escape.

3. Composition and information on ingredients

Chemical substance or mixture:

Mixture

Ingredient name	Content (%)	CAS No.	CSCL No.
n-butane	1-10	106-97-8	2-4
Propane	1-10	74-98-6	2-3
Isobutane	1-10	75-28-5	2-4

Note: These values are not the product specification values.

For ingredients falling under the Industrial Safety and Health Act and the Law concerning Pollutant Release and Transfer Register (PRTR), see "15. Regulatory information."

4. First aid measures

Description of first aid measures

If inhaled:

Remove person to fresh air and keep comfortable for breathing.

If you feel unwell, seek medical advice.

If on skin (or hair):

Immediately wipe it off with a clean, dry cloth.

Do not use solvent or thinner.

If on skin: Wash with plenty of water/appropriate agent.

Get medical advice if the appearance changes, irritation or pain occurs, or any discomfort occurs.

If in eyes:

Wash carefully with water for several minutes. Remove contact lenses, if easily removable.

Then continue washing.

Thoroughly wash the eyes with sufficient water.

If the irritation to eyes persists: Get medical advice/attention.

If swallowed:

Do not let the victim swallow the vomit.

Do not induce vomiting unless directed by a physician.

Keep the victim at rest and immediately get medical advice.

Protection of people providing first aid

The rescuer should wear protective equipment such as rubber gloves and sealed goggles.

Ensure appropriate ventilation.

5. Fire-fighting measures

Extinguishing media

Appropriate extinguishing media

In case of fire, use foam, powder, and carbon dioxide.

Prohibited extinguishing media

Prohibited extinguishing media: No data available.

Recommendations for people who extinguish a fire

Specific fire-fighting methods

Cool containers exposed to high temperatures with water.

Extinguish a fire from the windward.

Immediately remove surrounding combustible materials.

Keep a sufficient distance when extinguishing a fire because aerosol products may rupture due to high temperatures.

Protective equipment and preventive measures for people who extinguish a fire

Wear appropriate protective equipment (heat resistant clothing, etc.).

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) during work.

Prohibit unauthorized people from the surrounding area to prevent secondary accidents.

Environmental precautions

Prevent environmental impact caused by discharge into rivers, etc.

Methods and materials for containment and cleaning up

Collect leakage in a sealed container and move it to a safe place.

Dispose of adhered materials, waste, etc. according to the relevant laws and regulations.

Prevention measures for secondary accidents

Prepare appropriate fire extinguishers in case of ignition.

Remove nearby ignition sources/high temperature bodies and nearby combustibles immediately.

7. Handling and storage

Handling

Technical measures

(Prevention of exposure of handlers)

Do not breathe dust/fumes/gases/mist/vapors/spray.

(Prevention of fire/explosion)

Keep away from heat, high-temperature materials, sparks, open flames, and other ignition sources. No smoking.

Do not spray open flames or other ignition sources.

Precautions for safe handling

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not pierce or burn, even after use.

Avoidance of contact

Avoid contact with oxidizing substances.

Hygiene measures

Wash contaminated parts thoroughly after handling.

Do not eat, drink, or smoke when using this product.

Storage

Safe storage conditions

Store in a well-ventilated place. Seal the container. Store locked up.

(Storage conditions to avoid)

Protect from sunlight.

Do not store at temperatures above 40 °C.

Safe container and packaging materials: No data available.

8. Exposure controls/Personal protection

Control index

Occupational Exposure Limits

(n-butane)

Japan Society for Occupational Health (1988) 500 ppm; 1200 mg/m³

(Isobutane)

Japan Society for Occupational Health (1988) 500 ppm; 1200 mg/m³

(n-butane)

ACGIH (2017) STEL: 1000 ppm(EX) (Central nervous system disorder)

(Propane)

ACGIH: Appendix F Reference: minimum oxygen concentration (D, EX) (suffocating)

(Isobutane)

ACGIH(2017) STEL: 1000 ppm (EX) (Central nervous system disorder)

Exposure controls

Equipment measures

Handle in a place with appropriate ventilation.

Install exhaust/ventilation equipment.

Protective equipment

Respiratory protection

Wear respiratory protective equipment.

Hand protection

Wear protective gloves.

Eye protection

Wear protective glasses/face protective equipment.

Skin and body protection

Wear protective clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor: Characteristic odor

Melting/Freezing point: No data available.

Boiling point or Initial boiling point: No data available.

Boiling range: No data available.

Flammability (gas, liquid, and solid): Ignitable

Upper/lower limits of explosion/limits of flammability: No data available.

Flash point: No data available.

Autoignition point: No data available.

Decomposition temperature: No data available.

pH: No data available.

Kinematic viscosity: No data available.

Vapor pressure: No data available.

Density and/or relative density: 0.95 ± 0.02 g/cm³

Relative gas density (air = 1): No data available.

Relative density of the vapor/air-mixture at 20 °C (air = 1): No data available.

10. Stability and reactivity

Reactivity

Reactivity: No data available.

Chemical stability

Cans of aerosol products may rupture at 40 °C or above.

Possibility of hazardous reactions

Reactions may occur on contact with oxidizing substances, etc.

Conditions to avoid

Avoid heating, sparks, open flames, and other ignition sources.

Incompatible materials

Oxidizing substances

Hazardous decomposition products

Hazardous gases, including carbon monoxide, nitroxide and other low molecular monomers, are produced by combustion.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Acute toxicity (inhalation)

(n-butane)

gas: rat LC₅₀ = 276798.8 ppm/4 hr (DFGOT vol.20, 2003)

(Isobutane)

gas: mouse LC₅₀ = 376696 ppm/4 hr (cal.) (DFGOT vol. 20, 2003)

Local effect

Skin corrosion/irritation: No data available.

Serious eyes damage/Eyes irritation: No data available.

Respiratory sensitization or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Specific target organ toxicity

Specific target organ toxicity (Single exposure)

[Category 1]

(Isobutane)

Circulatory system

[Category 3 (anesthetic action)]

(n-butane)

Anesthetic action

(Propane)

Anesthetic action

(Isobutane)

Anesthetic action

Specific target organ toxicity (repeated exposure)

[Category 1]

(n-butane)

Central nervous system

Aspiration hazard: No data available.

12. Ecological information

Ecotoxicology

Ecotoxicology: No data available.

Aqueous solubility

(n-butane)

0.0061 g/100 mL (20°C) (ICSC, 2003)

(Propane)

0.007 g/100 mL (20°C) (ICSC, 2003)

(Isobutane)

Insoluble (ICSC, 1998)

Persistence/degradability

Persistence/degradability: No data available.

Bioaccumulation

(n-butane)

log Pow = 2.89 (ICSC, 2003)

(Propane)

log Pow = 2.36 (ICSC, 2003)

(Isobutane)

log Pow = 2.8 (ICSC, 1998)

Mobility in soil

Mobility in soil: No data available.

Other hazardous effects

Hazards to the ozone layer: No data available.

Other information

Handle carefully because it may affect the environment at leakage or disposal.

Especially, prevent products and rinse water from being directly discharged into ground, rivers, and drain ditches.

13. Disposal considerations

Information on safe and environmentally sound disposal or recycling of chemical products, contaminated containers, and packaging

Waste disposal method

Avoid release to the environment.

Dispose of contents/containers in accordance with local/national regulations.

Do not incinerate aerosol products.

For aerosol products, empty the container completely, press the button until no injection sound is heard to degas outdoors without fire, and then dispose of the container.

Never dispose of containers containing contents.

Avoid fire and inhalation of mist when degassing.

Contaminated containers and packaging

Do not pierce or burn, even after use.

14. Transport information

UN number and UN classification

UN number or ID number: 1950

Proper shipping name:

Aerosol, flammable

Class or division: 2.1

Packing group: Not applicable.

Guidebook number: 126

Special provision number: 63; 190; 277; 327; 344; 381

Environmental hazards

MARPOL 73/78 Annex III - Prevention of pollution by harmful substances carried by sea in packaged form

Marine pollutant (Applicable/Not applicable): Not applicable

Special safety measure

Special safety measures: No data available.

Information on domestic regulations, if any:

Ship Safety Act

Class 2 Gases, Division 2-1 Flammable gases

Civil Aeronautics Act

Class 2 High pressure gas, Division 2-1 Flammable gases

15. Regulatory information

Legislation/regulations concerning safety, health, and environment specific to such product

Not falling under the Poisonous and Deleterious Substances Control Act.

Industrial Safety and Health Act

Product not falling under the Specified Chemical Ordinance

Product not falling under organic solvents, etc.

Dangerous and toxic substances subject to indicate or notify their names, etc.

Dangerous/toxic substances subject to indicate their names

n-butane; Isobutane

Dangerous/toxic substances subject to notify their names

n-butane; Isobutane

Appended Table 1 Dangerous substances (Related to Articles 1, 6, and 9-3)

Dangerous substances, combustible gas (Item (5) of Appended Table 1)

Not falling under the Law concerning Pollutant Release and Transfer Register (PRTR).

Not falling under the Fire Service Act.

High Pressure Gas Safety Act

This aerosol product is exempted from the High Pressure Gas Safety Act, because the volume and the pressure in the container at temperature of 35 °C are one liter or less and 0.8 MPa or under, respectively, and this aerosol product falls under Article 4-3 of the Notices relative to enforcement order of High Pressure Gas Safety Act.

Chemical Safety Assessment

Chemical Safety Assessment for this product was not performed.

16. Other information

References

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 62th Edition (2021)
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2021 TLVs and BEIs. (ACGIH)
JIS Z 7252 : 2019
JIS Z 7253 : 2019
Recommendation of Occupational Exposure Limits, etc. (2020) (Japan Society for Occupational
Health)
Supplier's data/information
Hazard Communication Standard - 2012 (29 CFR 1910.1200)

Limitation of liability

The contents of this document are based on currently available information and data and may be revised according to new findings. The precautions are for the usual handling, and thus take proper safety measures for special use of this product.