Safety Data Sheet (SDS)

1 Product and company information

Product identification

Brand name	**JetSwan**
Product classification	Aerosol Pretreatment agent for the optical no-contact measurement

Company information

Company information	FUJIOKA CO.,Ltd
Address	3-8-36 Takaida, Higashiosakashi, Osaka, Japan
Telephone No	06-6618-6181
Date of Revision	2021/5/24

2 Summary of hazard and harmfulness

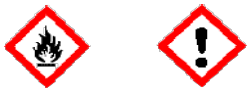
GHS classification

Physical・chemical hazard	Combustible・inflammable aerosol	Category 1
	Inflammable liquid	Category 2
Harmfulness to the health		
	Serious damage on eyes・eyes irritation	Cannot be classified※
	Toxic to reproduction	Cannot be classified※
	Specific target organ・ systemic toxicity (single exposure)	Cannot be classified※
	Specific target organ・ systemic toxicity (repeated exposure)	Cannot be classified※
	Aspiration respiratory harmfulness	Cannot be classified※

※Because the concentration is below the control concentration under the normal usage, so Cannot be classified.

GHS label factor

Symbol



Signal word: Hazard

Hazard and harmfulness information

・Extremely combustible and inflammable aerosol.
・High pressure container: Risk of explosion if heated.
・Highly inflammable liquid and vapor.
・May be harmful in case of the ingestion.
・May be harmful in case of then contact with a skin.
・May be harmful in case of getting into an eye directly.

Cautions

【Preventive measure】
Keep away from the ignition source like heat, spark, open flame and hot object—No smoking.
Use only at the outdoor or the good ventilated place.
Avoid the inhalation of spray.
In case of the fire caused by leaked gas : Don't extinguish the fire as long as the leakage is not stopped completely.
Remove the ignition source if possible safely.
Don't use the product until the user reads and understands all of the safety precautions.
Use the explosion proof electrical machinery and apparatus/ventilator/lighting equipment etc.
Use the tools which cannot cause spark.
Take the preventive measure against the electrostatic discharge.
Wash hands well after use.
Don't eat, drink and smoke when using this product.
Pressurized container: Don't make a hole and burn including after-use.
Don't spray at the naked fire or the high temperature incandescent body.
Wear the protective glove/cloth/glass/mask.
Avoid the discharge into the environment.

【Action】
Call the doctor when feeling bad.
In case of inhalation: Move the patient to the place with fresh air and get him/her to take a rest in the position easy to take a breath.
In case of skin (or hair) contact: Take off/remove all of the contaminated clothes immediately.
Wash a skin with running water/shower.
In case of the skin contact: Wash with a lot of water and soap.
In case of the eye contact: Wash with water for a few minutes carefully. Secondly, take off the contact lens if possible easily.
And keep washing afterwards.
If the skin irritation appears, have the doctor's diagnosis/treatment.
In case of ingestion: Call the doctor immediately.
Don't force a patient to vomit.
In case of a fire, use the effective fire extinguishing agent.
Collect the leakage.

【Storage】
Avoid the direct sunlight and store at the cool and ventilated place.
Keep at the place where any outsiders cannot enter.
Keep in the locked state.

【Disposal】
When the content and container are disposed, consign the disposal to the professional waste disposal service company which obtains the approval from the prefectural governors of each municipality.

3 Composition and ingredients information

Distinction of Single product・Mixed product　Mixed product

Component and content

Ingredient name・chemical name	Content percentage vol%	CAS No	Chemical Examining Regulation Law No.	Industrial Safety and Health Law No.	PRTR Law No.	Poisonous and Deleterious Substances Control Law
Isopropyl alcohol	5～20	67-63-0	2-207	494	Not applicable	Not applicable
Limestone powder(calcium carbonate)		1317-65-3(471-34-1)	1-122	Not subject to Industrial Safety and Health Law	Not applicable	Not applicable
Liquefied petroleum gas	80～95					
n-butane		106-97-8	(2)-4	Applicable	Not applicable	Not applicable
i-butane		75-28-5		Applicable	Not applicable	Not applicable
Propane		74-98-6	(2)-3	Not applicable	Not applicable	Not applicable

UN classification　UN No: 1950　Class 2.1(Inflammable aerosol)

4. First aid measure

In case of the inhalation
Move the patient to the place with fresh air and get him/her to take a rest in the position easy to take a breath.
Call the doctor when feeling bad.

In case of the skin contact
Wash a skin immediately.
If the skin irritation appears, have the doctor's diagnosis/treatment.

In case of getting into the eye
Wash with water for a few minutes carefully. Secondly, take off the contact lens if possible easily. And keep washing afterwards.

In case of the ingestion
Wash a mouth immediately and have the doctor's diagnosis.

5. Fire fighting measure

Specific hazard and harmfulness
Extremely inflammable/combustible gas
In case of being got caught in a fire, there is the risk of causing an explosive polymerization.
Risk of the explosion of the container if it is heated.
There is the risk that the irritating and toxic gas will be caused by a fire.
Highly inflammable liquid/vapor

Fire extinguishing method
Extinguish the fire as long as the leakage is not stopped completely.
Remove the ignition source if possible safely.
Move the container from the firing area if not danger.
Extinguish the fire from the windward place where the gas is not accumulated, and take the leak preventive measure.
The fire extinguishing activity should be carried out from the sufficient distance to do effectively.
Cool the circumference with the water spray to prevent from the temperature rise of the peripheral equipment etc. caused by the radiant heat.
Don't pour water to the leaking part and the safety equipment directly because of the risk of a freeze.
Even after extinguishing the fire, cool the container with a lot of water sufficiently.

Fire extinguishing agent
The use of water to extinguish a fire should not be done absolutely because of the risk increase. When extinguishing a fire, use the dedicated fire extinguisher and fire extinguishing facility.

ABC or ABC typed powder fire extinguishing agent, alcohol resistance foam fire extinguishing agent, carbon dioxide gas and dry sand etc.

6. Leakage measure

Because the combustible gas and inflammable liquid are spouted, be careful not to have a fire source approach. Pull a rope around the leaking place and keep it off limits.

7. Handling and storage consideration

Handling
No fire
Contact to the fire, spark and high temperature object, and don't use the machine which has the risk of becoming a fire source. Use at the good ventilated place, and wear a protective glove, protective glass and protective mask according to the situation.

Don't use for the purpose other than the original one.

Storage
Don't store at the place where the temperature can be at 40℃ or more.
Don't store around the water section.
Store at the place where a child can not reach.
Avoid the direct sunlight and fire from the container.

8. Exposure prevention and protective measure

Controlled concentration and acceptable concentration

	Butane	Propane	Isopropyl alcohol
Controlled concentration	Not set up	Not set up	200ppm
Japan Association of Industrial Health	500ppm	Not set up	400ppm
ACGIH (TLV-TWA)	800ppm	1000ppm	200ppm

Facility measure
Take the preventive measure for the electrostatic discharge.
Install the explosion-proof local ventilation.
Install the eye washing facility.

Protective equipment

Respiratory protective equipment
Wear the proper respiratory protective equipment.
Wear the air-supplied respirator and self-contained breathing apparatus according to the situation.

Hands protective equipment
Wear the proper protective glove.

Eyes protective equipment
Wear the proper eye protective equipment.
Protective glass (normal glass type, normal glass with the side plate, goggle type)

Skin and body protective equipment
Wear the proper facial protective equipment.

Sanitation measure
Wash hands before taking a rest and immediately after using the product.

9. Physical and chemical property

(Product : Aerosol)

Product pressure(25℃) : Uncertain
Spraying property(25℃) : Mist

(Bulk :)

	Isopropyl alcohol	Limestone powder(calcium carbonate)
Appearance	Transparent liquid	White color Fine powder
Odor	Alcohol odor	No odor
Flash point	14.0℃(tag typed)	No data because of the noncombustible product
Ignition point		
Combustion or explosion range-Upper limit	12.0vol%	No data because of the noncombustible product
Combustion or explosion range-Lower limit	2.0vol%	No data because of the noncombustible product
Boiling point	82℃	—
Density	0.785g/cm3(20℃)	—
Specific gravity of vapor (air＝1)	2.1	—
Solubility (water)	Soluble	Insoluble
Viscosity	-	

(Propellant)

	Propane	Normal butane	Isobutane
Melting point	-189.7℃	-138℃	-160℃
Boiling point	-42℃	-0.5℃	-12℃
Flash point	-104℃	-60℃	Inflammable gas
Combustion range (Explosion range)	Lower limit 2.1% Upper limit 9.5%	Lower limit 1.8% Upper limit 8.4%	Lower limit 1.8% Upper limit 8.4%
Vapor pressure (40℃)	1.275Mpa	1.278Mpa	0.427Mpa
Specific gravity of gas (air＝1)	1.6	2.1	2.0
Specific gravity of liquid (water＝1)	0.5	0.6	0.6
Solubility (20℃)	0.007g / 100ml	0.0061g / 100ml	Insoluble
Ignition temperature	450℃	287℃	460℃
Molecular weight	44.1	58.1	58.1

10. Stability and reactivity

Stability: The fire will be caused by the heating.
If calcium carbonate and acid are mixed, they will be dissolved while generating carbon dioxide.
Hazard and harmful reactivity possibility: Strongly reactive to the strong oxidizing agents and there is the risk of catching the fire or the explosion.
Condition to be avoided: Heating and high temperature
Reactive chemical hazards material: Strong oxidizing agent, strong acid and strong alkali.
Hazard and harmful decomposition product: Carbon monoxide, carbon dioxide caused by the heating decomposition and the combustion. Calcium oxide.

11. Harmfulness information

Harmful toxicity:Oral — Can not be classified
Acute toxicity:Dermal — Can not be classified
Acute toxicity:Inhalation(gas) — Not applicable to classification
Acute toxicity:Inhalation(vapor) — Not applicable to classification
Acute toxicity:Inhalation(powder) — Not applicable to classification
Acute toxicity:Inhalation(mist) — Can not be classified
Skin corrosion/irritation — Not applicable to classification
Serious damage on an eye/eye irritation — This product has the eye Irritation.
Germ cell mutagenicity — Not applicable to classification
Carcinogenicity — Not applicable to classification
Toxic to reproduction — Can not be classified
Specific target organ・ systemic toxicity (single exposure) — Can not be classified
Specific target organ・ systemic toxicity (repeated exposure) — Can not be classified
Aspiration respiratory harmfulness — Can not be classified

12. Ecological influence information

Aquatic environmental acute toxicity — Not applicable to classification
Aquatic environmental chronic toxicity — Not applicable to classification

13. Disposal consideration

At the disposal, after gas is degassed at the outside where there is no fire until the propelling sound fades away, obey the disposal methods regulated by ordinances of each municipality.
Don't burn in the closed-type incinerator absolutely because of the risk of the explosion.
Don't pour into the drain and the sewage, and don't dispose illegally in forests, rivers and seas absolutely.

14. Transportation consideration

Domestic regulation
Land transportation — Obey Fire Services Act and the transport regulations of other laws
Sea transportation — Obey the regulations of Ship Safety Law.
Air transportation — Obey the regulations of Aviation Law.
International regulation
UN classification — Class 2.1 (Inflammable aerosol)
UN No — 1950

Specific safety measure and condition of transportation — At the transportation, keep the container at 40℃ or below and load the stuff without falling, upsetting, damaging and take the preventive measure for the cargo collapse surely.

15. Applicable laws

Industrial Safety and Health Law — Harmful material subject to notify:Butane, Isopropyl alcohol
Harmful material subject to notify:Butane, Isopropyl alcohol
Ship Safety Law — Dangerous goods (high pressure gas)
Aviation Law — Dangerous goods (high pressure gas)
High Pressure Gas Safety Law — Obey the enforcement order (Display of「Cautions」of the container Quality control of aerosol).
Fire Services Act — Alcohols Danger class Ⅱ
(Propellant)Fire Service Act Article 9-3 :The report of the storage etc. of the compressed acetylene etc.)
PRTR Law — There is no applicable materials.

16. Other information

Cautions

The contents of this SDS can be revised based on the revision of the regulations, new knowledge and information acquisition, tests etc.
The descriptions are based on the materials available at the moment, but there is no guarantee regarding the described data and evaluation.

Every chemical substance can have the unknown hazard and harmfulness, so the careful attention is required at use. The normal hazard and harmfulness are described in this SDS, but there is no guarantee that any hazard and harmfulness other than the described ones don't exist. The described points are for the normal use. So in case of using in the special manner, please use after taking the new safety measure suitable for What to Use & How to Use.

Reference

・SDS issued by the raw material manufacturer.
・Classification method of chemical products based on JIS Z 7252(2019) GHS
・Communication method of the information on the hazard and harmfulness of chemical products based on JIS Z 7253(2019) GHS—label, display in the working place and Safety Data Sheet (SDS)
・GHS classification result data base (National Institute of Technology and Evaluation)
・Hazard Evaluation Sheet(Chemical Evaluation and Research Institute, Japan)
・Working Place Safety Site, Safety Data Sheet (Ministry of Health, Labor and Welfare)