

Material Safety Data Sheet

Pana Spray



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[Product name] Panaspray, Z182200

[Product identification]
Product classification Lubricant (Aerosol) (UN1950)

[Substance identification]
Distinction (single product/mixture) Mixture
Main component Lubricant (Ester lubricant, additive)
Power propellant (Propane, butane)

Component	Content	CAS No.	Number under the Law concerning the Examination & Regulation of Manufacture etc., of Chemical Substances	UN Number	UN classification
Ester lubricant, additive	10-15	Confidential information	Confidential information	None	None
Propane	25-35	74-98-6	(2)-360	1075	Class 2.1
Butane (Notification required under the Occupational Health and Safety Law)	45-60	75-28-5 106-97-8	(2)-4	1075	Class 2.1

Note: The information in [] after component designation regards the following:

PRTR Special 1: Chemical substance specified as specific class 1 chemical substance under the Law Concerning the Promotion of Understanding and Management of Emissions into the Environment of Specific Chemical Substances

PRTR-1: Chemical substance specified as class 1 chemical substance under the Law Concerning the Promotion of Understanding and Management of Emissions into the Environment of Specific Chemical Substances

PRTR-2: Chemical substance specified as class 2 chemical substance under the Law Concerning the Promotion of Understanding and Management of Emissions into the Environment of Specific Chemical Substances

Notification required under the Occupational Health and Safety Law: Substance with its notification required under the Occupational Health and Safety Law

[Classification of hazardousness and harmfulness]

Name under classification
Hazardousness

Inflammable liquid, high-pressure gas
The lubricant contains an inflammable gas and is inflammable at room temperature. Vapor produces an air-explosive gas mixture.

Harmfulness

The lubricant contains a combustible gas. The gas, if left as is, leads to a risk of explosion.

The lubricant is an irritant to skin and eyes. When the lubricant is swallowed or its vapor is inhaled in high concentrations, headaches, dizziness, vomiting, or blackouts can result.

Environmental effect

The lubricant is harmful to aqueous living things when in high concentrations.

[First-aid measures]	
Eye contact	Immediately wash eyes with clean water for 15 minutes or more and seek medical attention.
Skin contact	Immediately wipe off lubricant with a cloth and wash skin clean with water.
Vapor inhalation	Immediately move the affected person to a place with fresh air and keep him/her warm and quiet and seek medical attention. If he/she experiences irregular breathing or has already stopped breathing, carry out artificial respiration.
Ingestion	Force the person to drink water until he/she vomits. If he/she has already lost consciousness, do not give him/her anything but immediately seek medical attention.
[Action at the time of fire]	
Fire-fighting methods	(In case of a surrounding fire) Promptly move the container to a safe place. If the lubricant cannot be moved, sprinkle the container and its surroundings with water and cool down the container. (If the lubricant has caught fire) At the initial stage of a fire, use powder carbon dioxide, dry sand, etc. In case of a larger fire, it is effective to use a foam fire extinguisher and block out the air. Wear proper protective equipment (rescue suit) and extinguish the fire from the windward side. Immediately remove any inflammable items from the surrounding area.
Fire-fighting agent	Powder carbon dioxide, foam, and dry sand
[Measures if the lubricant leaks]	
(Small amounts of leaking lubricant)	Instruct people on the leeward side to seek shelter. Rope off the area where a leak has occurred to keep people away. Immediately remove any item that would act as a source of a fire. When necessary measures must be taken, wear proper protective equipment (gloves, protective mask, protective glasses, etc.). Do not stay on the leeward side. Prepare suitable fire extinguisher(s) in case of accidents.
(Large amounts of leaking lubricant)	Supply earth and sand to absorb the lubricant before collecting it in an empty container. Use earth and sand to stop the flow of leaking lubricant and lead the lubricant to a safe area. Then cover the surface of the liquid with foam and collect as much of the liquid as possible in an empty container.
[Notes for handling]	
	Handle the lubricant in a well-ventilated place. Do not spray the lubricant toward a fire. Do not place the container of the lubricant in a place that may become hot, or the container may explode. Wear proper protective equipment so as to prevent the lubricant from contacting skin or vapor inhalation. Keep the source of vapor airtight or provide a local exhaust system. Be careful about fire. It is desirable that electrical equipment should be constructed to be explosion proof. The lubricant must be handled at room temperature as a rule while paying attention to prevent moisture and dirt from entering the lubricant.
[Notes for storage]	
	Avoid direct sunlight and store the lubricant in a well-ventilated dark and cool place. Keep the lubricant as far away as possible from fire and sources of heat. Do not place the lubricant in a place whose temperature exceeds 40°C. Keep the lubricant isolated from perchloric acid, hydrogen peroxide water, sodium peroxide, chromic acid, and nitric acid.

[Measures for preventing exposure]			
Chemical designation	Propane	Butane	
Controlled concentration	No prescription	No prescription	
Allowable concentration			
Japan Society of Occupational Health	1000 ppm	1000 ppm	
ACGIH	1800 mg/m ³	1800 mg/m ³	
Equipment measures	Keep the source of vapor airtight or provide a local exhaust system.		
Protective equipment	Do not handle the equipment near an ignition source. Use equipment of the explosion proof type. Use protective glasses, gloves, and masks for organic gases, as required.		

[Physical and chemical properties]				
Odor	Lubricant Almost none	Propane Almost none	Isobutan Almost none	Normal butane Almost none
Appearance	Colorless and transparent liquid Separation in two layers at low temperatures	Colorless and transparent liquid	Colorless and transparent liquid	Colorless and transparent liquid
Specific gravity	0.803	0.501 (Liquid)	0.557 (Liquid)	0.579 (Liquid)
Boiling point	No data available	-42.04	-11.7	-0.5
Vapor pressure	No data available	0.735MPa	0.210MPa	0.116MPa
Water solubility	Soluble in water	Insoluble in water	Insoluble in water	Insoluble in water
Others				

[Stability and reactivity]				
Firing point	Lubricant 12.0°C	Propane -90°C	Isobutan -81°C	Normal butane -72°C
Ignition point	363°C	493°C	405°C	550°C
Explosion limit	No information available	2.2-9.5%	1.8-8.5%	1.8-8.5%
Spontaneous combustion	None	None	None	None
Reactivity with water	None	None	None	None
Oxidizability	None	None	None	None
Self reaction and explosiveness	Vapor procedures an air-explosive gas mixture.			
Reactivity and stability	Stable during normal use and not reactive			
Other hazard information	No information available			

[Harmfulness information]	
Acridity	Irritant to skin and mucous membranes Skin contact with a liquefied gas in a liquid state may result in a dry ice burn.
Sensitivity property	Long or repeated contact with skin can result in a defatting of skin and thereby in an irritation.
Acute toxicity	Swallowing the lubricant and inhaling its vapor in high concentrations can result in headaches, dizziness or blackouts.
Chronic toxicity	The lubricant affects the central nervous system, liver, and blood, thus resulting in a drop in the power of attention, bradypragia, injury to the liver, and anemia.
Carcinogenic property	No information available

[Information on environmental effects]	
Decomposability	No information available
Eco toxicity	No information available
[Notes for disposing the lubricant]	
	<p>Use up the lubricant before disposing of the container.</p> <p>Do not throw the container into a fire even after the lubricant is used up, as the container may explode.</p> <p>If the container is disposed, press the push button in a fire-free outdoor area and spray the lubricant at an unwanted article such as old newspapers to completely remove the lubricant from the container. (After spraying the lubricant, ensure that there is no spraying noise.)</p> <p>Do not puncture a hole in the container unless a directive has been issued by the local government. When puncturing a hole in the container, use a commercially available punch press while being careful about any of the lubricant.</p> <p>Request an industrial waste disposal professional licensed by the local government to dispose of the container and the lubricant contained. Properly dispose of industrial waste according to relevant laws and regulations.</p>
[Notes for transportation]	
	<p>Follow the general precautions in Item Notes for handling and Notes for storage. When transporting the lubricant in a container, keep the container at 40°C or less. In addition, load lubricant containers in such a way as to avoid direct sunlight, falls, drops, and damage to the container and take proper measures to prevent the collapse of cargo piles.</p> <p>UN number: 1950 (Aerosol)</p>
[Applicable laws and regulations]	
Fire Defense Law	Article 2 Hazardous material, Classification 4, First oils
Material with its notification required under the Occupational Health and Safety Law	First hazardous materials, separate sheet, Case of enforcement (inflammables and combustibles)
Danger regulations	480, butane, separate sheet, the 9th case of enforcement
Aviation Law	Article 3, hazardous materials notification, separate sheet, the 5th inflammable liquid liquids, the 2nd high pressure gas
Harbor regulations	Article 194, applicable rules, hazardous materials notification, separate sheet, the 3rd inflammable liquids, the 2nd high pressure gas
Law Concerning the Promotion of Understanding and Management of Emissions into the Environment of Specific Chemical Substances	Article 12, applicable rules, hazardous material (inflammable liquids, high pressure gas)
High Pressure Gas Safety Law	Not compliant
	Not applicable (Aerosol)
[References]	
	12093 Chemical Commodities (the Chemical Daily)
	New Solvent Pocket Book (The Society of Synthetic Organic Chemistry, Japan)
	Material Maker Product Safety Data Sheet
	Guidelines for product safety data sheet preparation (Nippon Chemical Industrial Co., Ltd.)
Precautions	
<p>This product safety data sheet has been prepared based on the most accurate and reliable references, information, and data currently available as reference information for ensuring safe use and handling. However, much of the information contained has been obtained outside the company. Therefore, the accuracy and reliability of the information contained cannot be guaranteed. Nor is any warranty of these products indicated made.</p> <p>Notes contained herein concerning health and safety do not cover all effects on people, the environment, and health. Because all materials can contain unknown risks or harmfulness, great care must be exercised in handling the lubricant.</p> <p>When using the lubricant, you are asked to follow related laws and regulations under your own discretion and responsibility with reference to the product safety data sheet and to set requirements for its safe use. When you have obtained the latest information on the lubricant, you are also asked to follow the information contained therein and use the lubricant safely.</p>	