



SAFETY DATA SHEET

SECTION 1 - CHEMICAL SUBSTANCE/PRODUCT AND COMPANY

IDENTIFICATION

Finished Product Name: Pana Spray Plus

Company Identification:

NSK AMERICA CORPORATION
1800 Global Parkway
Hoffman Estates, IL 60192-1578
Main office: 847-843-7664

Manufacturer:

Pharmasol Corporation
1 Norfolk Ave.
S. Easton, MA 02375
USA
508-238-8501

In case of medical emergencies, please contact your local poison control center.

Transportation emergency (24 hour), contact:

CHEMTREC - Phone # 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (for calls originating elsewhere).

DATE: April 2, 2019

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the substance or mixture



GHS02 Flame
Flammable Aerosol 1 H222-H229, Flammable aerosol. Pressurized container: May burst if heated.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02

Signal word

Danger

Hazard statements

Extremely flammable aerosol

EMERGENCY OVERVIEW:

This is a medical device product that is safe for consumers and other users when used as intended.

POTENTIAL HEALTH EFFECTS:

Eye: Contact may cause mild irritation. Some redness and/or stinging may occur.

Skin: Not expected to be irritating, sensitizing, photoallergenic or phototoxic when used as intended. If irritation occurs following use or prolonged contact, it is expected to be mild and transient.

Inhalation:

Not expected to be irritating to the respiratory system when used as intended.

Ingestion:

Used as intended, the product is not expected to cause gastrointestinal irritation. Accidental ingestion of product may cause mild gastrointestinal irritation with nausea, vomiting and diarrhea.

SECTION 3 - COMPOSITION AND INGREDIENTS

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200 and/or WHMIS under the HPA:

Chemical Name	Common Name	CAS No.	Composition Range	LD50/LC50
Lubricant	N/A	N/A	5 – 10%	N/A
n-Butane	Butane	106-97-8	25 – 35%	N/A
Alcohol	Alcohol	64-17-5	25 – 35%	N/A
Propane	Propane	74-98-6	15 – 25%	N/A
Isobutane	Isobutane	75-28-5	5 – 15%	NA

SECTION 4 - FIRST AID MEASURES

Eye: Rinse thoroughly with water for 15-20 minutes. If contact lenses are worn, remove them. If discomfort or irritation persists, consult a physician.

Skin Problem: Thoroughly wash the site with soap and water after wiping it off with a dry cloth. Remove contaminated clothing and wash the exposed area of skin thoroughly with soap and water. Wash it off by taking a shower/bath in case of whole-body exposure. In case of cryogenic burn by gas exposure, rinse with plenty of warm/cold water without taking off the clothing. Seek medical attention if there is pain/change in appearance.

Inhalation: Immediately move the affected person to a place with fresh air and keep him/her warm with a blanket and quiet. Give rescue breathing if breathing has become irregular/stopped. Keep him/her from swallowing vomit. Seek medical attention.

Ingestion: Accidental ingestion of product may necessitate medical attention. Induce vomiting by giving him/her plenty of water. Do not give the victim anything when he/she is unconscious. Seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Flash point is not applicable to aerosol products. Refer to section 13 for disposal information and section 14 for transportation information.

Fire-fighting Agent: Chemical foam, dry chemical, carbon dioxide or water.

Specific Hazards: Flammable. Contents under pressure. Container may explode in heat of fire. If large amounts of product are involved, use self-contained breathing apparatus and full protective gear. Hazardous decomposition products may be released, including oxides of carbon and/or nitrogen; hydrocarbons and/or derivatives.

Fire Fighting Instructions: Smother a fire with fire extinguisher. Use the specified type of fire extinguisher. Immediately remove any flammable items from the surrounding area. Extinguish the fire from the windward side, so as not to inhale toxic gas. Extinguish the fire at a distance, to avoid the possibility of producing an explosion with aerosol container at a fire site. Pour water and cool the product container that is subjected to high temperature. In case of a larger fire, it is effective to use a foam fire extinguisher and block out the air.

Fire in the surrounding area: Immediately move the container to a safe place. If the container is not movable, sprinkle water on it and the surrounding area. Contact emergency personnel.

Protection to those who extinguish a fire: Wear proper protective clothing (heat-resistant clothing, protective glasses, etc.) and use a ventilator.

SECTION 6- ACCIDENTAL RELEASE MEASURES / EXPOSURE PREVENTION

Procedures for Spill/Leak Clean-up:

For Professional Use Settings: Absorb liquid and clean the area with detergent. Ventilate area and eliminate ignition sources.

For Production Settings: Ventilate area and eliminate all ignition sources. Use safety goggles if airborne mist or splash hazards exist. Use gloves and protective clothing (apron, boots, etc) to prevent skin contact. Supply earth sand/waste cloth to absorb the lubricant. Collect it in an empty container. Use soil and sand to stop the flow of leaking lubricant and lead the lubricant to a safe area. Cover the liquid surface with foam and collect as much of the liquid as possible in an empty container.

Measures for preventing exposure

Exposure to human body: Wear proper protective clothing.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling:

For All Settings:
Extremely Flammable

Technical Aspects:

Ground equipment properly. Electric(al) apparatus must be explosion proof structured. Wear a proper protective cloth. Use non-spark-producing tools.

Ventilation:

Use in a well ventilated area

Conditions for Safe Storage

For All Settings: Pressurized container. Protect from sunlight. Do not expose to temperatures exceeding 120°F (~50°C). Keep from extreme cold. Avoid heat, sparks, flame, or smoking during use. Avoid spraying toward open flame. Avoid contact with eyes, skin and clothing. Use only as directed. Use with

adequate ventilation. Do not crush, puncture or incinerate. Keep out of the reach of children. Store in accordance with local requirements for Aerosol Level 3. Do not store with oxidizers. Store in a well ventilated area.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

For Professional Use Settings: This is a medical device product that is safe for consumers and other users when used as intended.

For Production Settings: Use in a well ventilated, explosion-proof area. Use safety goggles if airborne dust, mist or scenarios. The product packaging is compatible with solid waste management practices.

Exposure Limit Value

Component	Controlled Concentration (SHA)	Allowable Concentration		
		Japan Society for Occupational Health	ACGIH (TLV-TWA)	ACGIH (TLV-STEL)
Ethanol	N/A	N/A	1,000 ppm	N/A
LPG	n-butane 500 ppm	n-butane 800 ppm	N/A	N/A

Protective Gear (if necessary)

For Respiration	Gas mask (organic), dust mask, or air-supplied respirator (in an enclosed space)
For Hands	Solution-resistant protective gloves
For Eyes	Protective glasses / mask
For Skin/Body	Protective cloth, boot (solution-resistant), apron, etc.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES, HAZARD INFORMATION

Status	Liquid	Spray
	Fluid	Gas (under atmospheric pressure)/Fluid (in a pressurized container)
Appearance	Clear and colorless	Clear and colorless
Odor	Alcohol	Odiferous
pH	N/A	N/A
Melting Point	-114.5C (as ethanol)	-187.7 → -138.4C
Boiling Point	78.32C (101.325KPa) (as ethanol)	-42.1 → -0.5C
Flash Point	13C (closed cup) (as ethanol)	-104.4 → -73.8C
Ignition Point	439C (as ethanol)	405 – 550C
Explosive Range	No data	1.8 – 9.5 vol%
Vapor Pressure	No data	0.248 – 1.275MPa (40C)
Vapor Density	No data	1.895 – 2.538 kg/m3 (1MPa, 15.6C)
Specific Gravity	0.803 (20C)	0.551 (15C)
Solubility	Soluble/dispersible in water	Soluble/dispersible in water
Octanol/water partition coefficient	-0.30 (lowPow) (as ethanol)	No data
Decomposition Temperature	No data	No data
Others	No data	No data

SECTION 10 – STABILITY AND REACTIVITY

Stability	Explosion-producing at 40C or greater. Pressure in the container at RT: Approx. 0.43MPa
Hazard Reactivity	Reactive with incompatible hazardous substances such as oxidants, and poses risk of fire/explosion. Reactive with plastic, rubber, coating agent.
Conditions to avoid	Storage in conditions of heat and humidity. Fire. Contact with incompatible hazardous substances
Incompatible Hazardous Substances	Strong Acid, strong alkali, oxidant, calcium hypochlorite, silver oxide
Hazardous Decomposition	Burning produces hazardous gas, including CO, nitrogen oxides

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Effects: Acute toxicity effects of the product are related to the ethanol content, including;

Acute Toxicity (oral) Rat LD50: 13.7g/kg

Acute Toxicity (inhalation vapor)Rat LC50: 277374 ppm/4h

Eye Irritation: Eye irritation is related to the ethanol content;

OECD TAG404 test Rabbit Moderate
Draize Test Rabbit Moderate

Respiratory/Skin Sensitization N/A

Germline Mutagenicity N/A for finished product

Carcinogenicity: Finished product is not expected to be carcinogenic, N/A

Reproductivity: N/A for finished product

Chronic Effects: Chronic health effects, although not expected for the finished product, would be related to the ethanol content, including liver damage and nerve damage associated with long-term ingestion and/or inhalation.

Target Organs: No adverse health effects on target organs are expected for finished product. Chronic health effects, although not expected for the finished product, would be related to the ethanol content, including liver damage and nerve damage associated with long-term ingestion and/or inhalation.

NTP: No IARC: No OSHA: No

SECTION 12 – ECOLOGICAL INFORMATION

Hazards to Water Environment (acute): N/A

Hazards to Water Environment (chronic): N/A. Low toxicity, ingredients have good biodegradability

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of product in accordance with all Federal, State/Provincial and Local regulations.

For Professional Use Settings: The following instructions are for consumer usage only. Empty can through normal use as instructed on the can. If the can cannot be emptied due to malfunction, the product should be disposed of in a special waste collection for pressurized containers. Contact a local waste handler for additional information.

For Production Use Settings: Dispose of product in accordance with all Federal, State/Provincial and Local regulations. Aerosol cans, when disposed as waste, are regulated as D003 reactive hazardous waste in some States because of their potential to explode when heated. Refer to your State environmental agency for further guidance.

SECTION 14 - TRANSPORT INFORMATION

Finished packaged product transported by ground (DOT): Consumer Commodity, ORM-D.

Finished packaged product transported by vessel (IMDG): UN1950, Aerosol, Class 2.1, Ltd. Qty.

Finished packaged product transported by air (IATA): Consumer Commodity, ID 8000, Class 9.

SECTION 15 - ADDITIONAL REGULATORY INFORMATION

Industrial Safety and Health Act	Ignitable substance, flammable gas, notifiable substances (ethanol, butane)
Act on Port Regulations	Enforcement regulation, provision 12: Hazardous material (ignitable liquid, high pressure gas)
Ship Safety Act	High pressure gas, low flash point ignitable liquid
Aviation Law	High pressure gas, Ignitable liquid
High Pressure Gas Safety Act	N/A (liquefied gas, flammable gas). However, follow the notice from government gazette and high-pressure gas safety act.
Fire Defense Law	Provision 2 Hazardous materials, Category 4 alcohol
Dangerous Goods	IMDG code: Class 2.1 (UN No. 1950)
Water Quality Pollution	Effluent standard: Normal-hexane extracts (mineral oil, etc.) 5 mg/L (Lubricant)
Export Trade Control Order	Annex 1, 16. Catch all control: Lubricant
Poisonous and Deleterious Substances	N/A
PRTR	N/A

Regulated as a medical device under FDA (US), HPB (Canada), Medical device Directive (EU), MHW (Japan) and MOH (China).

US Federal

The product described in this Material Safety Data Sheet is regulated as a Medical Device under the Federal Food, Drug, and Cosmetics Act, and is safe to use as directed.

CERCLA reportable quantity (RQ): None.

Ingredient	CAS #	Level	RQ
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None

SARA 313/302/304/311/312 chemicals: None.

Canada

All ingredients are CEPA approved for import to Canada. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the CPR.

US States

CA Prop 65:

This product is not subject to warning labeling under California Proposition 65.

SECTION 15 - ADDITIONAL REGULATORY INFORMATION (cont.)

State Right-to-Know:

The following ingredients are present in the finished product and are listed on the following state right-to-know lists:

Ingredient	CAS #	Level	State
None			

SECTION 16 - OTHER INFORMATION

Informative Literature	Ethanol MSDS Lubricant (Mineral Oil) MSDS Liquified Petroleum Gas MSDS
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