SAFETY DATA SHEET

Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name: BM-4100 Isopropyl Alcohol 99%

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use(s): Surface cleaner, solvent, multi-purpose

Non-Recommended / Restricted Use(s): None

Details of the supplier of the safety data sheet

Manufacturer: N.A.K.P Foto Inc.
2575 De Miniac
Ville Saint Laurent, Quebec H4S 1E5
Canada

Website: www.nakpfoto.com

Email: paul@nakpfoto.com

Tel (514) 932-8057
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Distributor: B.M. Group Inc.
4950 CH Queen Mary, Suite 100 Mezzanine
Montreal Quebec H3W 1X3 Canada

Website : http://www.bmcanada.ca

Email: info@bmcanada.ca

Tel: (514) 738-5200 Toll Free 1-800-561-9818
Fax: (514) 738-2290

Emergency telephone number

1-800-463-5060 Poison Control Center in Quebec; 1-844-764-7669 Poison Control Center in Canada
Canutec: 613-996-6666

Note: While this product is sold in 4L format to consumers who generally purchase small quantities, this SDS also contains valuable information critical to the safe handling and proper use of the product for large production plants, industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product.

Section 2. Hazards identification

Classification of the substance or mixture

GHS Classification for mixture:

Specific target organ toxicity - single exposure - Category 3 (Narcotic)
Serious eye irritation - Category 2
Skin irritation - Category 2
Flammable Liquids - Category 2

Label elements

Pictograms:

Signal Words:

Danger

Hazard Statements:

Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements:

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Keep cool.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, lighting, ventilating equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid breathing vapors, spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, face protection, eye protection.

Response

If eye irritation persists: Get medical attention / advice.
If skin irritation occurs: Get medical attention / advice.
If eye irritation persists: Get medical advice/attention.
IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes.
IF ON SKIN: Wash with plenty of water.
IF ON SKIN (or hair): Rinse skin with water or shower
IF ON SKIN (or hair): Take off immediately all contaminated clothing.
In case of fire: Use Use dry chemical, water spray, carbon dioxide or alcohol-resistant foam to extinguish to extinguish.

Storage

Store in a well-ventilated place.
Store locked up.

Disposal

Dispose of contents in accordance with all local, regional, national and international regulations. Dispose of container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substances

No available data for this section.

Mixtures

Identifiers	Ingredients	Percentage	Classification
67-63-0	Isopropyl alcohol	99%	

Section 4. First-Aid Measures

Description of First Aid Measures

In the event of splashes or contact with eyes

Hold eyelids open to ensure adequate flushing. If redness or other symptoms persist, seek medical advice / attention. Immediately flush with clean, low-pressure water for several minutes.

In the event of splashes or contact with skin

Wash contaminated areas thoroughly with water. If redness or other symptoms occur, seek medical attention.

In the event of ingestion

Rinse mouth with water. DO NOT INDUCE VOMITING. Call a poison center, a doctor, or medical service. In case of ingestion of large quantities immediately take the exposed person to hospital.

In the event of inhalation

Remove person to fresh air and keep at rest in a position comfortable for breathing. If respiratory problems occur consult a doctor/medical service.

Most important symptoms and effects, both acute and delayed

No available data for this section.

Indication of any immediate medical attention and special treatment needed

No available data for this section.

Section 5. Firefighting Measures

Extinguishing media

Suitable Extinguishing Media

For large fires: Water spray. Fog. Alcohol-resistant foam. Use water spray to cool fire-exposed containers.

For small fires: Dry chemical. Water spray. Carbon dioxide. Alcohol-resistant foam.

Unsuitable Extinguishing Media

Inappropriate media: Straight streams of water. Water (may be ineffective).

Special hazards arising from the substance or mixture

Specific Hazards Arising from Combustion of Products

INDIRECT FIRE HAZARDS: May be ignited by sparks. Gas/vapour spreads at floor level.

DIRECT FIRE HAZARDS: Highly Flammable. Gas/vapour flammable with air within explosion limits.

Combustion Products

Carbon dioxide (CO_2). Carbon monoxide (CO).

Advice for firefighters

Protective Measures for Fire-Fighting

Wear full protective clothing.

Special Protective Actions for Fire-Fighters

Evacuate the people from the area. Move containers from the fire area if it is possible to do so without risk to personnel. Dispose off fire control water later. Do not scatter the product. Use water spray or fog; do not use straight streams.

Other Information for Fire Fighters

No available data for this section.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Eliminate all sources of heat and ignition. Use special care to avoid static electric charges. No smoking. Wear protective gloves, clothing, and protective goggles to prevent contact with skin and eyes.

Environmental precautions

Prevent spreading the product in sewers.

Methods and material for containment and cleaning up

Absorb with earth, sand, or other non-combustible material.

Reference to other sections

No available data for this section.

Section 7. Handling and Storage

Precautions for safe handling

Wear protective gloves, clothing, and protective goggles to prevent contact with skin and eyes. No smoking or open flame in storage, use, or handling areas.

Conditions for safe storage, including any incompatibilities

Conditions for Safe Storage

Keep away from: Direct sunlight. Heat. Open flame. Sparks.

Keep container tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances (See section 10).

Suitable Packaging

Compatible container / packaging material: Copper. Glass containers. Iron. Nickel. Polyethylene. Polypropylene. Stainless steel 304.

Incompatible Materials

INCOMPATIBLE container / packaging material: Aluminum. Strong bases. Strong acids. Oxidizing materials.

Specific end use(s)

No available data for this section.

Section 8. Exposure Controls / Personal Protection

Control parameters

Control Parameters / Limits for Product

No available data for this section.

Control Parameters / Limits for Component

Isopropyl alcohol

ACGIH

TLV	400 ppm STEL 400 mg/m³ TWA 200 ppm TWA

NIOSH

REL	1225 mg/m³ STEL 500 ppm STEL 980 mg/m³ TWA 400 ppm TWA

OSHA

PEL	980 mg/m³ TWA 400 ppm TWA
TLV	984 mg/m³ STEL

Exposure controls

Engineering Measures

No available data for this section.

Respiratory Protection

No available data for this section.

Eye/Face Protection

No available data for this section.

Skin and Body Protection

No available data for this section.

Hand Protection

No available data for this section.

Hygiene Measures

No available data for this section.

Environmental exposure controls

No available data for this section.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	Acetone/Methanol-like
Odor threshold	Not available
pH	Not available
Melting point	<-88°C / -126.4°F
Boiling point	Greater than 83°C / 181.4°F
Flash Point	14°C / 57.2°F
Evaporation rate	1.44 multiplier w/r/t butyl acetate
Flammability	Liquid Highly Flammable Liquid and vapor
Flammability limit	3.2 to 12 %vol
Vapor pressure	Greater than 33 mmHg
Vapor density	2.1 g/ml
Relative density	0.5 multiplier w/r/t water Conditions of Measurement: Temperature: 20°C / 68°F Pressure: 101.3kPa
Solubility	Miscible in water
Solubility in other solvents	Not available
Partition coefficient	Not available
Auto-ignition temperature	399°C / 750.2°F
Decomposition temperature	Not available

Viscosity	Not available
Freezing point	Not available
Percent volatiles	99 %vol
Explosion limit (upper)	12 % vol
Explosion limit (lower)	3.2 %vol

Other Information

No available data for this section.

Section 10. Chemical Stability & Reactivity Information

Reactivity

Chemical stability: This product is stable under ambient condition.

Chemical Stability

No available data for this section.

Possibility of Hazardous Reactions

No available data for this section.

Conditions to Avoid

Keep away from: Heat. Open flame. Sources of Ignition.

Incompatible Materials

Avoid contact or storage with: Aluminum Materials. Strong acids. Strong bases. Oxidizing agents.

Hazardous Decomposition Products

Decomposition will Result in Production of: Carbon dioxide (CO_2). Carbon monoxide (CO).

Section 11. Toxicological Information

Information on toxicological effects

Toxicological Information for Product

No available data for this section.

Toxicological Information for Component

Isopropyl alcohol

LC50 Inhalation	53000 mg/m³ Mouse. 16000 ppmV (8h), Rat. 72600 mg/m³ Rat.
LD50 Dermal	12800 mg/kg Rabbit.
LD50 Oral	3600 mg/kg Mouse. 6410 mg/kg Rabbit. 5000 to 5045 mg/kg Rat.

Irritation/Corrosion Information for Product

No available data for this section.

Irritation/Corrosion Information for Component

Isopropyl alcohol

Draize Test - Eye: 100 mg, Rabbit, Severe. 10 mg, Rabbit, Moderate. 100 mg(24hr), Rabbit, Moderate.
Draize Test - Skin: 500 mg, Rabbit, Mild.

Section 12. Ecological Information

Toxicity

Ecotoxicity Values for Product

No available data for this section.

Ecotoxicity Values for Component

Isopropyl alcohol

LC50 Environmental 64000 to 100000 mg/l (96h), Fish, Fathead Minnow.

Persistence and degradability

No available data for this section.

Bioaccumulative potential

Bioaccumulative Potential for Product

No available data for this section.

Bioaccumulative Potential for Component

No available data for this section.

Mobility in soil

No available data for this section.

Results of PBT and vPvB assessment

No available data for this section.

Other adverse effects

No available data for this section.

Section 13. Disposal Considerations

Waste treatment methods

Waste Disposal Regulation(s) / Operation

Dispose of according to local, state, and federal regulations.

Waste Treatment Methods

No available data for this section.

Section 14. Transportation Information

	ADR	IMDG	IATA	DOT
UN number	UN 1219	UN 1219	UN 1219	UN 1219
UN proper shipping name	Isopropanol	Isopropanol	Isopropanol	Isopropanol

	ADR	IMDG	IATA	DOT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II
Environmental hazards	No available data for this section.	No available data for this section.	No available data for this section.	No available data for this section.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling			
Transport in bulk according to Annex II of Marpol and the IBC Code	No available data for this section.			
Other	**Flammable liquid**			

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, Health and Environmental Regulations for Product

No available data for this section.

Safety, Health and Environmental Regulations for Component

Isopropyl alcohol

WHMIS (Canada):

Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

Class D-2B: Material causing other toxic effects (TOXIC).

Federal and State Regulations:

Connecticut Hazardous Material Survey.

Illinois Toxic Substances Disclosure to Employee Act.

Rhode Island RTK Hazardous Substances.

Pennsylvania RTK.

Florida.

Minnesota.

Massachusetts.

New Jersey.

New Jersey Spill List.

Director's List of Hazardous Substances.

Tennessee.

TSCA 8(b) inventory.

TSCA 4(a) FInal Testing Order.

TSCA 8(a) IUR.

TSCA 8(d) H and S data reporting.

TSCA 12(b) One Time Report.

SARA 313 toxic chemical notification and release reporting.

Chemical safety assessment

No available data for this section.

Section 16. Other Information

Disclaimer

The above information is accurate to the best of our knowledge, however since data, safety standards and government regulations change, and the conditions of handling and use or misuse are beyond our control, manufacturer and distributor, above mentioned, make no warranty either expressed or implied with respect to the completeness or continuing accuracy of information herein and disclaims all liability for reliance thereon. Do not use ingredient information and / or ingredient percentages in this SDS as a product specification.

Glossary

ACGIH: American Conference of Governmental Industrial Hygienists.

DOT: Department of Transportation, USA.

LC 50: Lethal Concentration which is lethal to 50% of the population.

LD 50: Lethal Dose which is lethal to 50% of the population.

N/A: Not applicable.

N/AV: Not available.

N/D: Not determined.

OSHA: US Occupational Safety and Health Administration, US Department of Labor.

PEL: Permissible Exposure Limit.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

Prepared by: N.A.K.P. Foto Inc.