Material Safety Data Sheet

Issuing Date 31-Jan-2013 **Revision Date** 31-Jan-2013 **Revision Number** 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **IVY-DRY CONTINUOUS SPRAY**

UN-Number UN1950

Recommended Use External analgesic

Supplier Address
Ivy Dry, Inc.
299-B Fairfield Ave.
Fairfield NJ 07004
Telephone: 1-800-443-8856

Manufacturer Address
K-G Spray-Pak Inc. (Assured Packaging Division)
6080 Vipond Drive
Mississauga Ontario L5T 2V4
Canada
Telephone: (905) 565-1410

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview

Flammable liquid and vapor
May be harmful if swallowed, inhaled, or absorbed through skin
May cause skin, eye, and respiratory tract irritation
May cause central nervous system depression
Contents under pressure

Appearance Colorless **Physical State** Aerosol. **Odor** Alcohol

Potential Health Effects

Principle Routes of Exposure Inhalation. Skin contact. Eye contact.

Acute Toxicity

Eyes May cause irritation.

Skin May cause irritation. May be harmful if absorbed through skin.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Ingestion May be harmful if swallowed. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

Chronic Effects Prolonged skin contact may defat the skin and produce dermatitis.

Aggravated Medical Conditions Pre-existing eye disorders. Skin disorders. Respiratory disorders. Liver disorders.

Interactions with Other Chemicals Chlorinated hydrocarbons

Environmental Hazard See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS-No	Weight %
Isopropyl alcohol	67-63-0	30-60
Benzyl alcohol	100-51-6	10-30
Zinc acetate	557-34-6	1-5
Zinc gluconate	4468-02-4	0.1-1.0
Zinc dilactate	16039-53-5	0.1-1.0
Menthol	89-78-1	0.1-1.0
Camphor	76-22-2	0.1-1.0

4. FIRST AID MEASURES

Eye Contact In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

Skin Contact Wash skin with soap and water.

Inhalation Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

Ingestion Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Notes to Physician Treat symptomatically.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Flammable Properties Flammable liquids

Flash Point 84 °F / 29 °C

Suitable Extinguishing Media Dry chemical, CO_2, water spray or regular foam. Water spray, fog or regular foam. Use water spray or fog; do not use straight streams. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO_2).

Explosion Data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge Yes.

Specific Hazards Arising from the Chemical Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health Hazard** 1	**Flammability** 3	**Instability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazard** 1	**Flammability** 3	**Physical Hazard** 0	**Personal Protection** X

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Contents under pressure. In case of rupture: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges.

Environmental Precautions No special environmental precautions required.

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Absorb spilled material with an absorbent material such as clay, sawdust, or sand.

Methods for Cleaning Up Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Handling In case of rupture: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Do not breathe vapors or spray mist.

Storage Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m³
Camphor 76-22-2	STEL: 3 ppm synthetic TWA: 2 ppm synthetic	TWA: 2 mg/m³ (vacated) TWA: 2 mg/m³	IDLH: 200 mg/m³ TWA: 2 mg/m³ synthetic

Immediately Dangerous to Life or Health.

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and Body Protection Protective gloves.

Respiratory Protection None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless.	**Odor**	Alcohol.
Odor Threshold	No information available.	**Physical State**	Aerosol
pH	6.2 - 6.5		
Flash Point	84 °F / 29 °C	**Autoignition Temperature**	No information available.
Decomposition Temperature	No information available.	**Boiling Point/Boiling Range**	82 °C / 179.6 °F
Melting Point/Range	No information available		
		Flammability Limits in Air	No information available.
Specific Gravity	0.93-0.97	**Water Solubility**	Miscible with water
Solubility	Soluble	**Evaporation Rate**	No information available
Vapor Pressure	No data available.	**Vapor Density**	No data available.
VOC Content (%)	90	**VOC (g/l)**	47.5

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products Strong oxidizing agents. Acids. Chlorinated compounds.

Conditions to Avoid Heat, flames and sparks.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO_2).

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information May be harmful by inhalation, ingestion, or skin absorption.

LD50 Oral: > 5000 mg/kg (rat) estimated
LD50 Dermal: > 2000 mg/kg (rabbit) estimated

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol	= 4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h
Benzyl alcohol	= 1230 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
Zinc acetate	= 2510 mg/kg (Rat)		
Menthol	= 3180 mg/kg (Rat)		

Chronic Toxicity

Chronic Toxicity Prolonged skin contact may defat the skin and produce dermatitis.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol		Group 3		X

IARC: (International Agency for Research on Cancer)
Group 3: Not Classifiable as to its Carcinogenicity to Humans
OSHA: (Occupational Safety & Health Administration)
X - Present

Target Organ Effects Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated. Ecotoxicity effects of component substances.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropyl alcohol	EC50 96 h: > 1000 mg/L (Desmodesmus subspicatus) EC50 72 h: > 1000 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 11130 mg/L static (Pimephales promelas) LC50 96 h: = 9640 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1400000 µg/L (Lepomis macrochirus)		EC50 48 h: = 13299 mg/L (Daphnia magna)
Benzyl alcohol	EC50 3 h: = 35 mg/L (Anabaena variabilis)	LC50 96 h: = 10 mg/L static (Lepomis macrochirus) LC50 96 h: = 460 mg/L static (Pimephales promelas)	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	EC50 48 h: = 23 mg/L (water flea)

Chemical Name	Log Pow
Isopropyl alcohol	0.05
Benzyl alcohol	1.1

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Dispose of in accordance with local regulations.

US EPA Waste Number D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Isopropyl alcohol	Toxic Ignitable
Zinc acetate	Toxic
Zinc gluconate	Toxic
Zinc dilactate	Toxic

14. TRANSPORT INFORMATION

DOT

UN-Number	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Subsidiary Class	
Description	UN1950, Aerosols, 2.1
Emergency Response Guide Number	126

TDG

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	UN1950, AEROSOLS, 2.1

MEX

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	UN1950 Aerosols, 2.1,

ICAO

UN-Number	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Description	UN1950, Aerosols, 2.1

IATA

UN-Number	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
ERG Code	10L
Description	UN1950, Aerosols, flammable, 2.1

IMDG/IMO

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
EmS No.	F-D, S-U
Description	UN1950, Aerosols, 2.1, FP 29C

RID

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Classification Code	5F
Description	UN1950 Aerosols, 2.1,

ADR

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Classification Code	5F
Description	UN1950 Aerosols, 2.1,

ADN

UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Classification Code	5F
Special Provisions	190, 327, 625
Description	UN1950 Aerosols, 2.1,
Hazard Labels	2.1
Limited Quantity	LQ2
Ventilation	VE01, VE04

15. REGULATORY INFORMATION

International Inventories

TSCA	Exempt
DSL	Exempt

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Zinc acetate	557-34-6	1-5	1.0
Zinc dilactate	16039-53-5	1-5	1.0
Zinc gluconate	4468-02-4	1-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc acetate	1000 lb	X		X
Zinc dilactate		X		
Zinc gluconate		X		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Zinc acetate	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Isopropyl alcohol	X	X	X		X
Benzyl alcohol	-	X	X	-	-
Zinc acetate	X	X	X		
Zinc gluconate			X		
Camphor	X	X	X		X

International Regulations

Mexico - Grade Serious risk, Grade 3

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl alcohol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m^3 Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m^3
Camphor		Mexico: TWA 2 ppm Mexico: TWA 12 mg/m^3 Mexico: STEL 3 ppm Mexico: STEL 19 mg/m^3

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B5 Flammable aerosol
A Compressed gases
D2B Toxic materials

Canadian National Pollutant Release Inventory (NPRI)

Component	NPRI
Isopropyl alcohol 67-63-0 (30-60)	X

Legend

X - Listed

16. OTHER INFORMATION

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
Issuing Date	31-Jan-2013
Revision Date	31-Jan-2013
Revision Note	Initial Release

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet