



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: N-Vinylpyrrolidone/vinyl acetate copolymer
Catalog Number(s): 367, 368, 373 **Molecular Formula:** $(C_6H_9NO)_m(C_4H_6O_2)_n$
Company: Scientific Polymer Products, Inc.
6265 Dean Parkway
Ontario, NY 14519
Telephone: 585/265-0413
Fax: 585/265-1390
Website: www.scipoly.com
Emergency Phone Number: 800-255-3924 (CHEM TEL)

Section 2: Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids, Category 2, H225
Eye irritation, Category 2A, H319
Specific target organ toxicity- single exposure, Category 3, Central nervous system, H336

GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. NO smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well ventilated area.
P280 Wear protective gloves/eye protection/face protection.
P303+P361+P353 IF ON SKIN(or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340+P312 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish.
P403+P233 Store in a well ventilated place. Keep container tightly closed.
P403+P235 Store in a well ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS- None

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Section 3: Composition/Information on Ingredients

Ingredient	CAS Number	Concentration (%)
N-Vinylpyrrolidone/vinyl acetate copolymer	25086-89-9	50
Isopropanol	67-63-0	50

Section 4: First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition-No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

Handle and store under inert gas. Hygroscopic
Storage class (TRGS 510): Flammable liquids

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Isopropanol	67-63-0	TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Eye & Upper Respiratory Tract irritation Central Nervous System impairment Not classifiable as a human carcinogen		
		STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Eye & Upper Respiratory Tract irritation Central Nervous System impairment Not classifiable as a human carcinogen		
		TWA	400 ppm 980 mg/m ³	USA. OSHA-Table Z-1 Limits for air contaminants – 1910.1000
		STEL	500 ppm 1,225 mg/m ³	USA. OSHA-Table Z-1 Limits for air contaminants – 1910.1000
		TWA	400 ppm 980 mg/m ³	USA. Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
		The value in mg/m ³ is approximate		

		TWA	400 ppm 980 mg/m ³	USA. NIOSH Recommended Exposure Limits.
		ST	500 ppm 1,225 mg/m ³	USA. NIOSH Recommended Exposure Limits.

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Isopropanol	67-63-0	Acetone	40 mg/l	Urine	ACGIH-Biological Exposure Indices (BEI)
		Remarks	End of shift at end of work week		

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air purifying respirators are appropriate use full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Liquid
b)	Odor	Alcohol-like
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	82° C (180° F)
g)	Flash point	12° C (53.6° F) –Closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 12.7% (V) Lower explosion limit: 2% (V)
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	Completely soluble

o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

Other safety information

No data available

Section 10: Stability and Reactivity

Reactivity

No data available

Chemical stability

Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year. Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapors may form explosive mixture with air.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminum, Halogenated compounds, Acids

Hazardous decomposition products

Other decomposition products- No data available

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral-Rat-5,045 mg/kg

Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Somnolence (general depressed activity).

LC50 Inhalation-Rat-8 h-16000 ppm

LD50 Dermal-Rabbit-12,800 mg/kg

Skin corrosion/irritation

Skin-Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Eyes-Rabbit

Result: Eye irritation-24 h

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3-Group 3: Not classifiable as to its carcinogenicity to humans (Isopropanol)
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity- single exposure (GHS)

Inhalation, Oral- May cause drowsiness or dizziness.

Specific target organ toxicity- repeated exposure (GHS)

No data available

Aspiration hazard

No data available

Additional Information

RTECS: NT8050000

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, Narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects. Aspiration may lead to: Lung oedema, Pneumonia.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney-Irregularities-Based on human evidence

Section 12: Ecological Information

Toxicity

Toxicity to fish	LC50-Pimephales promelas (fathead minnow)-9,640.00 mg/l-96 h
Toxicity to daphnia and other aquatic invertebrates	EC50-Daphnia magna (Water flea)-5,102.00 mg/l-24 h Immobilization EC50-Daphnia magna (Water flea)-6,851 mg/l-24 h
Toxicity to algae	EC50-Desmodesmus subspicatus (green algae)->2,000 mg/l-72 h

Persistence and degradability

No data available

Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <=4)

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available

Section 13: Disposal Considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

Section 14: Transport Information

DOT (US)

UN Number: 1866 Class: 3 Packing group: II
Proper shipping name: Resin solution
Poison Inhalation Hazard: No

IMDG

UN Number: 1866 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: Resin solution

IATA

UN Number: 1866 Class: 3 Packing group: II
Proper shipping name: Resin solution

Section 15: Regulatory Information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

	CAS-No.
Isopropanol	67-63-0
N-Vinylpyrrolidone/vinyl acetate copolymer	25086-89-9

New Jersey Right to Know Components

	CAS-No.
Isopropanol	67-63-0
N-Vinylpyrrolidone/vinyl acetate copolymer	25086-89-9

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

HMIS Rating

Health:	2
Flammability:	3
Reactivity:	0

NFPA Rating

Health:	2
Flammability:	3
Reactivity:	0

This material is intended for laboratory use only. It is not sold or intended for drug, household or other uses. The information represents the most accurate and complete data currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.