



PRESQUE ISLE

WINE CELLARS

9440 West Main Rd, North East, PA 16428
800-488-7492 WWW.PIWINE.COM

MATERIAL SAFETY DATA SHEET

Solvent Developer

SD250

Section 1 - Chemical Product and Company Identification

MSDS Name: Solvent Developer

Catalog Numbers: SD250

Synonyms: Chromatography medium, Chromatography Developer Solution

Company Identification:

Presque Isle Wine Cellars
9440 West Main Rd.
North East, PA 16428

For emergencies in the US, call: 814-725-1314

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
71-36-3	1-Butanol	~47%	200-751-6
7732-18-5	Water	~47%	231-791-2
64-18-6	Formic acid	~5%	200-579-1
76-60-8	Bromocresol green	<1%	200-972-8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available. Appearance: colorless clear orange liquid. Flash Point:
Not available.

Target Organs: Blood, kidneys, central nervous system, liver, respiratory system, eyes, skin, bladder.

Potential Health Effects

Eye: Causes severe eye injury. May cause conjunctivitis. Risk of serious damage to eyes. Vapors appear to cause a special vacuolar keratopathy in humans.

Skin: Causes skin irritation. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of the skin

and dermatitis. Although n-butanol can enter the circulation after topical application, the absorbed dose is insignificant compared to that from other routes.

Ingestion: Harmful if swallowed. Aspiration hazard. May cause irritation of the digestive tract, with abdominal pain, vomiting and diarrhea. May cause kidney damage. May cause liver damage. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: May cause respiratory tract irritation, with burning pain to the nose and throat. May be harmful if inhaled. Inhalation of vapors may cause drowsiness and dizziness. Exposure causes central nervous system depression with possible headache, dizziness, and drowsiness. May cause lung hemorrhage, blood disturbances, and liver and kidney

Chronic: Not available. Repeated eye exposure may cause visual abnormalities including blurred vision and photosensitivity. Repeated exposure in combination with constant, loud noise can produce hearing loss and vertigo.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water. Give Milk of Magnesia.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not Available.

Autoignition Temperature: Not Available.

Explosion Limits, Lower: Not Available.

Upper: Not Available.

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or

earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Avoid breathing dust, mist, or vapor. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Butanol	20 ppm TWA	1400 ppm IDLH	100 ppm TWA; 300 mg/m ³ TWA
Water	None listed	None listed	None listed
Formic acid	5 ppm TWA; 10 ppm STEL	5 ppm TWA; 9 mg/m ³ TWA 30 ppm IDLH	5 ppm TWA; 9 mg/m ³ TWA
Bromocresol green	None listed	None listed	None listed

OSHA Vacated PELs: 1-Butanol: No OSHA Vacated PELs are listed for this chemical. Formic acid: 5 ppm TWA; 9 mg/m³ TWA

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Appearance: Orange

Odor: banana-like - sweetish acidic odor

pH: Not available.

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: not available

Freezing/Melting Point:-89 deg C
Decomposition Temperature:Not available.
Solubility: Not Available
Specific Gravity/Density: Not Available
Molecular Formula: Mixture None Available
Molecular Weight: Not Applicable

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: High temperatures, incompatible materials, ignition sources.

Incompatibilities with Other Materials: Strong oxidizing agents, aluminum, organic peroxides, chromium trioxide, reducing agents, acid chlorides, copper, copper alloys, acid anhydrides, strong bases, nitro compounds.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, hydrogen gas.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 71-36-3: EO1400000

LD50/LC50:

CAS# 71-36-3:

Draize test, rabbit, eye: 2 mg Severe;
Draize test, rabbit, eye: 2 mg/24H Severe;
Draize test, rabbit, skin: 405 mg/24H Moderate;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, rat: LC50 = 8000 ppm/4H;
Inhalation, rat: LC50 = 24000 mg/m³/4H;
Oral, mouse: LD50 = 100 mg/kg;
Oral, rabbit: LD50 = 3484 mg/kg;
Oral, rabbit: LD50 = 3400 mg/kg;
Oral, rat: LD50 = 790 mg/kg;
Oral, rat: LD50 = 800 mg/kg;
Skin, rabbit: LD50 = 3400 mg/kg;

CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

CAS# 64-18-6: LQ4900000

LD50/LC50:

CAS# 64-18-6:

Draize test, rabbit, eye: 122 mg Severe;
Inhalation, mouse: LC50 = 6200 mg/m³/15M;

Inhalation, rat: LC50 = 15 gm/m³/15M;
Oral, mouse: LD50 = 700 mg/kg;
Oral, rat: LD50 = 1100 mg/kg;

CAS# 76-60-8: SJ7456000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 71-36-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 64-18-6: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

CAS# 76-60-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: CAS# 71-36-3: No data available.

CAS# 7732-18-5: No data available.

CAS# 64-18-6: No toxic or teratogenic effects occurred after injection of 20 mg into fertilized chicken eggs. (Malorny, G.Z. Ernaehrungswiss 1969, 9, 332-339(Chem.Abstr.72(7),30395m)).

CAS# 76-60-8: No data available.

Reproductive Effects: No data available for all components.

Mutagenicity: CAS# 71-36-3: No data available.

CAS# 7732-18-5: No data available.

CAS# 64-18-6: mmo-esc:70 ppm/3H sln-dmg ihl:1000 ppm/24H sln-dmg orl:1000 ppm sce-hmn lym:10 mmol/l cyt-ham ovr:10 mmol/l

CAS# 76-60-8: No data available.

Neurotoxicity: No data available for any component.

Other Studies: Components have not been fully investigated.

Section 12 - Ecological Information

Ecotoxicity: No data available. Log Pow: 0.9

Environmental: No information available.

Physical: No information available.

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 71-36-3: waste number U031 (Ignitable waste).

CAS# 64-18-6: Waste number U123 (Corrosive waste, Toxic waste)

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Flammable liquid, corrosive, n.o.s. (butanol, formic acid)	Flammable liquid, corrosive, n.o.s. (butanol, formic acid)
Hazard Class:	3(8)	3(8)
UN Number:	UN2924	UN2924
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

- CAS# 71-36-3 is listed on the TSCA inventory.
- CAS# 7732-18-5 is listed on the TSCA inventory.
- CAS# 64-18-6 is listed on the TSCA inventory.
- CAS# 76-60-8 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 71-36-3: 5000 lb final RQ; 2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

- CAS # 71-36-3: immediate, fire.
- CAS # 64-18-6: acute, flammable.

Section 313

This material contains 1-Butanol (CAS# 71-36-3, >46%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depletors.
- This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 64-18-6 is listed as a Hazardous Substance under the CWA.

None of the other chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 71-36-3 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 64-18-6 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN, C

Risk Phrases:

- R 10 Flammable.
- R 22 Harmful if swallowed.
- R 37/38 Irritating to respiratory system and skin.
- R 41 Risk of serious damage to eyes.
- R 67 Vapors may cause drowsiness and dizziness.

Safety Phrases:

- S 13 Keep away from food, drink and animal feeding stuffs.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 37/39 Wear suitable gloves and eye/face protection.
- S 46 If swallowed, seek medical advice immediately and show this container or label.
- S 7/9 Keep container tightly closed and in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 71-36-3: 1

CAS# 64-18-6: 1

Canada - DSL/NDSL

CAS# 71-36-3, 7732-18-5, 76-60-8, & 64-18-6 are listed on Canada's DSL List.

Canada - WHMIS

not available.

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

Canadian Ingredient Disclosure List

CAS# 71-36-3 & 64-18-6 are listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

Product Use:

Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 1.

Date: Wednesday, April 11, 2012

Disclaimer:

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