

Material Safety Data Sheet

1 Identification of substance:

• Product name: INSTANT ENGINEERING MARKING BLUE

• Stock number: 252980, 129266

• Manufacturer/Supplier:

PPS Industries Limited 86 Hugo Johnston Drive,

Penrose,

Auckland, New Zealand

P.O.Box 12-823, Penrose, Auckland 1642

Phone: 64 9 579-1001 Facsimile: 64 9 579-9474

Emergency Phone: 0800 657 894 Monday to Friday 8am-4pm

Web Site: www.ppsindustries.co.nz

• Emergency contact detail:

For emergency only. During normal hours call PPS Industries office.

OrganizationLocationPhoneNational POSION CENTERNew Zealand0800 647-766Chemcall 24/7 Emergency Response ServiceNew Zealand0800 243-6225

2 <u>Hazards identification</u>

Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. Classified as a Dangerous Goods according to NZS 5433.

- Hazard description: Class 3.1, Ethanol solution, Packing Group II, UN 1170.
- HSNO Class:

Class 3 Flammable

3.1B Flammable Liquids: high hazard.

Class 6 Toxicity

6.4A Irritating to the eye.

• HSNO approved number:

HSR002495

GHS Classification:

Hazard Pictogram:







Signal word: Danger

Hazard class:

Flammable liquid Category 3
Germ cell Mutagenicity Category 1

Hazard statement(s):

H225 Highly flammable liquid and vapour H319 Causes serious eye irritation

Precautionary Statement(s) Prevention:

P210 keep away from heat, hot surface, sparks, open flames and other ignition

Sources-no smoking

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment

P241 Use explosion- proof, electrical, ventilation, lighting equipment

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge

P280 Wear protective gloves/protective clothing/eye protection/face protection

P264 Wash the affected body parts thoroughly after handling

 $\ensuremath{\texttt{P280}}$ Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statement(S) Response:

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated Clothing. Rinse with water.

P370+P378 In case of fire: Evacuate area.

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.

Precautionary Statement(S)Storage:

P403 Store in a well ventilated place P235 Keep cool



Precautionary Statement(S) Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal Facility in accordance with applicable laws and regulations.

3 Composition/Data on components:

• Chemical characterization:

Description:	(CAS#)	Concentration	Hazardous
Ethanol	64-17-5	>95%	Yes
Dye	N/A	< 1%	No

4 First aid measures

SWALLOWED

- · If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

EYE

If this product comes in contact with the eyes:

- · Wash out immediately with fresh running water.
- ullet Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

If fumes or combustion products are inhaled remove from contaminated area.

• Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

For acute or short term repeated exposures to ethanol:

- ullet Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- \bullet Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.

5 Fire fighting measures

EXTINGUISHING MEDIA

- Alcohol stable foam.
- Dry chemical powder.
- Alcohol stable foam.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 metres in all directions.

FIRE/EXPLOSION HAZARD



- · Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat, flame and/or oxidisers. Combustion products include: carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

• Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

6 Accidental release measures

EMERGENCY PROCEDURES

MINOR SPILLS

- Remove all ignition sources.
- · Clean up all spills immediately.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- · Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

7 Handling and storage

PROCEDURE FOR HANDLING

- \bullet Containers, even those that have been emptied, may contain explosive vapours.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of exposure occurs.

SUITABLE CONTAINER

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- For materials with a viscosity of at least 23 deg. C.

STORAGE INCOMPATIBILITY

- · Avoid strong bases.
- ullet Incompatible with aluminium. DO NOT heat above 49 deg. C. in aluminium equipment.
- $\ensuremath{\bullet}$ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.
- DO NOT store in aluminium containers.

STORAGE REQUIREMENTS

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.

8 Exposure controls and personal protection

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³
New Zealand Workplace Exposure Standards (WES)	alcohol, denatured (Ethyl alcohol)	1, 000	1, 880

RESPIRATOR

Type A Filter of sufficient capacity

EYE



- · Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

Suitability and durability of glove type is dependent on usage. Factors such as:

- · frequency and duration of contact,
- chemical resistance of glove material,.
- Wear chemical protective gloves, eg. PVC.
- Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- · Overalls.
- PVC Apron.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

ENGINEERING CONTROLS

» For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. In conditions where worker exposure potential is high, wear air-supplied breathing apparatus.

9 Physical and chemical properties:

APPEARANCE

Dark blue, highly flammable liquid with a characteristic odour and burning taste; mixes with water, methyl alcohol, ether, chloroform and acetone.

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

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Molecular Weight: Not applicable.
Boiling Range (°C): 78.3
Melting Range (°C): -117.3
Specific Gravity (water=1): 0.79
Solubility in water (g/L): Miscible
pH (as supplied): Not available
pH (1% solution): Not available.
Vapour Pressure (kPa): 5.81 @ 20 C
Volatile Component (%vol): 100
Evaporation Rate: 2.53 BuAc=1
Relative Vapour Density (air=1): 1.59
Flash Point (°C): 13 (CC)
Lower Explosive Limit (%): 3.3
Upper Explosive Limit (%): 19.0
Autoignition Temp (°C): 392
Decomposition Temp (°C): Not Available
State: Liquid Viscosity: Not Available
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10 Stability and reactivity

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

For incompatible materials - refer to Section 7 - Handling and Storage.

11 Toxicological information

POTENTIAL HEALTH EFFECTS



ACUTE HEALTH EFFECTS

- » Vapours may cause dizziness or suffocation.
- » Inhalation and/or ingestionmay produce health damage*.
- » May produce discomfort of the eyes andrespiratory tract*.
- » Vapours potentially cause drowsiness and dizziness*.
- » (limited evidence).

CHRONIC HEALTH EFFECTS

- » Cumulative effects may result following exposure*.
- » (limited evidence).

TOXICITY AND IRRITATION

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis.

12 Ecological information:

This material and its container must be disposed of as hazardous waste.

13 Disposal considerations

• Recycle where possible

Otherwise ensure that:

• licenced contractors dispose of the product and its container.

14 Transport information

Labels Required: FLAMMABLE LIQUID

HAZCHEM: None

UNDG:

Dangerous Goods Class: 3 Subrisk: None UN Number: 1170 Packing Group: II

Shipping Name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION

(ETHYL ALCOHOL SOLUTION)

Air Transport IATA:

ICAO/IATA Class: 3 ICAO/IATA Subrisk: None

UN/ID Number: 1170 Packing Group: II

Special provisions: A3 A58 A148 Shipping Name: ETHANOL

Maritime Transport IMDG:

EMS Number: F- E, S- D Special provisions: 144 330

Limited Quantities: 1 L

Shipping Name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION

(ETHYL ALCOHOL SOLUTION)



15 Regulations

REGULATIONS

Alcohol, denatured (CAS: 64-17-5) is found on the following regulatory lists:

GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships

IMO IBC Code Chapter 18: List of products to which the Code does not apply

IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances

IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products

IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by

IMO

International Air Transport Association (IATA) Dangerous Goods Regulations

International Council of Chemical Associations (ICCA) - High Production Volume List

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Hazardous Substances Register

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Veterinary Medicines

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

OECD Representative List of High Production Volume (HPV) Chemicals Specific advice on controls required for materials used in New Zealand can be found at

http://www.ermanz.govt.nz/search/registers.html

• HSNO Class:

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Class 6 Toxicity

6.4A Irritating to the eye.

• HSNO approved number:

HSR002495

Certified Handler : Not Applicable

Tracking : Not Applicable

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this



Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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