M2130 Ethanol Disinfectant

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1.1. Product identifier

<u>Trade name</u>

W200 230, W220 230, S76230TX

1.2. Relevant identified uses of the substance or mixture and uses advised against <u>Relevant identified uses</u>

Solvent.

1.3. Details of the supplier of the safety data sheet

<u>Supplier</u>

Pal Hygiene Products Limited

Street address

Unit 5B & Unit 5H, Fingal Bay Business Park Balbriggan K32 NY57 Co. Dublin Ireland

Telephone +44 (0) 1455 555 700

Email info@palinternational.com

1.4. Emergency telephone number

112

<u>Available outside office hours</u> Yes

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Flammable liquids, hazard category 2 Eye irritation, hazard category 2

Hazard statements

H225, H319

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paltx

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

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

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

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 + P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

This product does not contain any PBT or vPvB substances. Endocrine disrupting properties: No

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Ethanol	64-17-5 200-578-6 01-2119457610- 43-xxxx 603-002-00-5	50 - <70%	Flam. Liq. 2, Eye Irrit. 2	H225, H319 - -	-
Propan-2-ol	67-63-0 200-661-7 01-2119457558- 25-xxxx 603-117-00-0	1 - <10%	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3	H225, H319, H336 - -	-

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Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take off all contaminated clothing immediately.

Inhalation

If inhaled, remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with plenty of water. Get medical attention if any discomfort continues.

Eye contact

Rinse cautiously with water for several minutes. Hold eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth with water. Drink plenty of water. Never give liquid to an unconscious person. If symptoms persist, call a physician. If a person vomits when lying on his back, place him in the recovery position.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Causes headache, drowsiness or other effects to the central nervous system.

Skin contact

Prolonged skin contact may cause redness, irritation and dry skin.

Eye contact

Irritating and may cause redness and pain.

Ingestion

Nausea, vomiting.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry sand, dry chemical or alcohol-resistant foam.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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5.2. Special hazards arising from the substance or mixture

Solvent vapours are heavier than air and may spread along floors. Solvent vapours may form explosive mixtures with air. Flash back possible over considerable distance.

Hazardous combustion products: Carbon monoxide (CO). Carbon dioxide (CO2).

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode. Use protective equipment appropriate for surrounding materials.

Other

Measures in case of fire

Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers can burst violently when heated, due to excess pressure build-up. Do not enter storage areas or confined spaces unless adequately ventilated. Pay attention to the direction of the wind in relation to the fire to avoid inhalation of fumes. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unnecessary and unprotected personnel away from the spillage. Use personal protective equipment as required. Keep away from sources of ignition - No smoking. Ensure adequate ventilation. Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. If risk of water pollution occurs, notify appropriate authorities.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Keep container tightly closed. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion proof electric equipment.

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General hygiene

Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from direct sunlight. Incompatible with oxidizing agents. Do not store together with oxidizing and self-igniting products. Keep in an area equipped with solvent resistant flooring.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Туре	Exposure	Value	Population	Effects
Propan-2-ol (67-63-0/200-661-7)	DNEL	Chronic (long term) Dermal	888 mg/kg bw/day	Workers	Systemic
Propan-2-ol (67-63-0/200-661-7)	DNEL	Chronic (long term) Inhalation	500 mg/m³	Workers	Systemic
Propan-2-ol (67-63-0/200-661-7)	DNEL	Chronic (long term) Dermal	319 mg/kg bw/day	Consumers	Systemic
Propan-2-ol (67-63-0/200-661-7)	DNEL	Chronic (long term) Inhalation	89 mg/m³	Consumers	Systemic
Propan-2-ol (67-63-0/200-661-7)	DNEL	Chronic (long term) Oral	26 mg/kg bw/day	Consumers	Systemic
Ethanol (64-17-5/200-578-6)	DNEL	Chronic (long term) Inhalation	950 mg/m³	Workers	Systemic
Ethanol (64-17-5/200-578-6)	DNEL	Acute (short term) Inhalation	1900 mg/m³	Workers	Local
Ethanol (64-17-5/200-578-6)	DNEL	Chronic (long term) Dermal	343 mg/kg bw/day	Workers	Systemic
Ethanol (64-17-5/200-578-6)	DNEL	Chronic (long term) Inhalation	114 mg/m³	Consumers	Systemic
Ethanol (64-17-5/200-578-6)	DNEL	Acute (short term) Inhalation	950 mg/m³	Consumers	Local
Ethanol (64-17-5/200-578-6)	DNEL	Chronic (long term) Dermal	206 mg/kg bw/day	Consumers	Systemic
Ethanol (64-17-5/200-578-6)	DNEL	Chronic (long term) Oral	87 mg/kg bw/day	Consumers	Systemic

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PNEC/PEC

Product/Substance name (CAS No./EC No.)	Туре	Environmental compartment	Value
Propan-2-ol (67-63-0/200-661-7)	PNEC	Freshwater	140.9 mg/l
Propan-2-ol (67-63-0/200-661-7)	PNEC	Marine water	140.9 mg/l
Propan-2-ol (67-63-0/200-661-7)	PNEC	Intermittent releases	140.9 mg/l
Propan-2-ol (67-63-0/200-661-7)	PNEC	Sewage Treatment Plant	552 mg/kg dwt
Propan-2-ol (67-63-0/200-661-7)	PNEC	Soil	28 mg/kg
Propan-2-ol (67-63-0/200-661-7)	PNEC	Oral (Secondary Poisoning)	160 mg/kg food
Ethanol (64-17-5/200-578-6)	PNEC	Freshwater	0.96 mg/l
Ethanol (64-17-5/200-578-6)	PNEC	Marine water	0.79 mg/l
Ethanol (64-17-5/200-578-6)	PNEC	Intermittent releases	2.75 mg/l
Ethanol (64-17-5/200-578-6)	PNEC	Sewage Treatment Plant	580 mg/l
Ethanol (64-17-5/200-578-6)	PNEC	Sediment (freshwater)	3.6 mg/kg dwt
Ethanol (64-17-5/200-578-6)	PNEC	Sediment (marine water)	2.9 mg/kg dwt
Ethanol (64-17-5/200-578-6)	PNEC	Soil	0.63 mg/kg dwt
Ethanol (64-17-5/200-578-6)	PNEC	Oral (Secondary Poisoning)	380 mg/kg food

8.2. Exposure controls

Appropriate engineering controls

Provide explosion proof ventilation for high concentrations. Use explosion proof electric equipment.

Eye / face protection

Wear approved safety goggles.

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Hand protection

Protective gloves complying with EN 374. Wear protective gloves made of the following material: Butyl rubber.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Other skin protection

Given the identified use of the product additional skin and body protection should not be required.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment. Respiratory protection complying with EN 141. Recommended Filter type: AX

Thermal hazards

Not applicable.

Environmental exposure controls

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

<u>Colour</u> Colourless

<u>Odour</u> Alcohol

<u>Melting point / freezing point</u> No data available

Boiling point or initial boiling point and boiling range No data available

<u>Flammability</u> No data available

Lower and upper explosion limit No data available

Flash point No data available

Auto-ignition temperature

No data available

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> *Decomposition temperature* No data available

<u>рН</u>

8.4

Kinematic viscosity No data available

Solubility No data available

Partition coefficient n-octanol/water

No data available

Vapour pressure No data available

Density and/or relative density

0.866 g/cm³

<u>Relative vapour density</u> No data available

Particle characteristics

Not applicable

9.2. Other information

No other information noted.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Solvent vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products None at ambient temperatures.



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SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
Propan-2-ol 67-63-0 / 200- 661-7	LD50	5840 mg/kg	Oral	-	Rat	OECD Test Guideline 401	-
Propan-2-ol 67-63-0 / 200- 661-7	LC50	> 25 mg/l	Inhalation	6 hours	Rat	OECD Test Guideline 403	Vapour
Propan-2-ol 67-63-0 / 200- 661-7	LD50	13 900 mg/kg	Dermal	-	Rabbit	OECD Test Guideline 402	-
Ethanol 64-17-5 / 200- 578-6	LD50	10 470 mg/kg	Oral	-	Rat	OECD 401	-
Ethanol 64-17-5 / 200- 578-6	LC50	51 mg/l	Inhalation	4 hours	Rat	OECD 403	Vapour
Ethanol 64-17-5 / 200- 578-6	LD50	> 2000 mg/kg	Dermal	-	Rabbit	OECD 402	-

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

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STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Repeated exposure may cause skin dryness or cracking. Vapours may be irritating to eyes, nose, throat, and lungs. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Central nervous system depression including narcotic effects such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Unconsciousness, possibly death.

<u>Delayed and immediate effects as well as chronic effects from short and long-term</u> <u>exposure</u>

Chronic symptoms of ingestion and/or vapor exposure may include weight loss, cirrhosis of the liver, gastroenteritis, anorexia, diarrhea, polyneuritis with pain, motor and sensory loss in the extremities, optic atrophy and loss or impairment of other abilities, excitement, acute and chronic gastritis, malabsorption syndrome, acute and chronic pancreatitis, anemia due to acute or chronic blood myopathy, alcoholic cardiomyopathy, lactic acidosis, hypomagnesemia, hypouricemia, hyperlipidemia, pulmonary aspiration and respiratory infections. Chronic exposure may also result in serious neurological and mental disorders (e.g. brain damage, memory loss, sleep disturbances, and psychoses). Other symptoms include mucous membrane irritation, central nervous system depression, giddiness, jaundice, pain in upper abdomen on

the right side and staggering gait. It may cause liver, kidney and heart damage. The pupils are sometimes widely dilated and unreactive to light. The liquid can defat the skin, producing a dermatitis characterized by drying and fissuring. It rarely causes temporary blindness. Ingestion of this compound can enhance the effects of coumarin, anticoagulants, antihistamines, hypnotics, sedatives, tranquilizers, insulin, monoamine oxidase inhibitors, and antidepressants. Can cause reproductive and teratogenic effects. Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

11.2. Information on other hazards

Endocrine disrupting properties Not applicable.

<u>Other information</u> No other information noted.

SECTION 12: Ecological information

12.1. Toxicity <u>Acute toxicity</u> Not classified.

<u>Toxicity</u> Not classified.

Acute fish toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Propan-2-ol 67-63-0 / 200-661-7	LC50	9640 mg/l	96 hours	Pimephales promelas	OECD Test Guideline 203
Ethanol 64-17-5 / 200-578-6	LC50	13 000 mg/l	96 hours	Oncorhynchus mykiss	OECD 203

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Endpoint of the test	Species	Method / Guideline
Propan-2-ol 67-63-0 / 200- 661-7	EC50	> 100 mg/l	72 hours	-	Scenedesmus subspicatus	-
Ethanol 64-17-5 / 200- 578-6	EC50	275 mg/l	72 hours	Growth rate	Chlorella vulgaris	OECD 201

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
Ethanol 64-17-5 / 200- 578-6	EC50	858 mg/l	24 hours	Artemia salina	OECD 202	Marine water

Micro-/macro organism toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Species	Remark
Propan-2-ol 67-63-0 / 200-661-7	EC50	> 100 mg/l	Bacteria	No harming action

Chronical toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Endpoint of the test	Species
Propan-2-ol 67-63-0 / 200-661-7	LOEC	1000 mg/kg	8 days	-	Algae
Ethanol 64-17-5 / 200-578-6	NOEC	245 mg/l	30 days	-	Fish
Ethanol 64-17-5 / 200-578-6	NOEC	9.6 mg/l	10 days	Reproduction Test	Ceriodaphnia dubia

12.2. Persistence and degradability

The product is readily biodegradable.

Propan-2-ol:

53 % (aerobic; domestic sewage; related to O2 consumption; exposure time 5 days) The substance is readily biodegradable.

Ethanol:

97 % (aerobic; activated sludge; related to CO2 formation (% of the theoretical value); exposure time 28 d) OECD 301B

The substance is readily biodegradable.

12.3. Bioaccumulative potential

Propan-2-ol: log Kow = 0.05 Not bioaccumulable.

Ethanol: log Kow = -0.35 (24 °C; pH 7.4) Bioconcentration factor (BCF) = 0.66 Bioaccumulation is unlikely.

12.4. Mobility in soil

<u>Mobility</u>

The product is water soluble and may spread in water systems.

Propan-2-ol: Koc ≈ 1.1

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

Not applicable.

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12.7. Other adverse effects

Other adverse effects

Ethanol: Biochemical oxygen demand (BOD) = 100 mg/g Chemical oxygen demand (COD) = 1900 mg/g

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Do not empty into drains. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of wastes in an approved waste disposal facility.

Packaging

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion if heated.

Other

Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

14.1. UN number

1987

14.2. UN proper shipping name <u>ADR / RID / ADN proper shipping name</u> ALCOHOLS SOLUTION, N.O.S (ethanol, isopropanol)

IMDG proper shipping name ALCOHOLS SOLUTION, N.O.S. (Ethanol, Isopropanol)

14.3. Transport hazard class(es)

<u>Label</u>

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ADR/RID/ADN



IMDG



IATA



ADR / RID Class 3

ADR / RID Classification code

ADR / RID hazard identification number 33

IMDG Class 33

IATA Class 3

14.4. Packing group

II

14.5. Environmental hazards No

> <u>IMDG Marine Pollutant</u> No

14.6. Special precautions for user IMDG EmS: F-E, S-D Tunnel restriction code ADR: (D/E)

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14.7. Maritime transport in bulk according to IMO instruments

This product is not intended for transport in bulk.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP).

Directive 2008/98/EC of the European Parliament and of the Council on waste.

Directive 2012/18/EU of the European Parliament and of the Council on the control of majoraccident hazards involving dangerous substances (SEVESO III).

National regulations

No data available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations

LC50: Deadly concentration for 50 % of a test population (Lethal Concentration).

LD50: Lethal dose for 50 % of a test population (Lethal Dose).

EC50: The concentration of a substance that affects 50 % of a population over a given period of time (Effective Concentration).

LOEC: The lowest concentration at which effects are observed (Lowest Observed Effect Concentration).

NOEC: The concentration at which no effects are observed (No Observed Effect Concentration). Kow: Partition coefficient octanol/water.Koc: Partitioning coefficient organic carbon/water.

PBT: Persistent, Bioaccumulative, Toxic.

vPvB: very Persistent, very Bioaccumulative.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

Phrase meaning

Flam. Liq. 2 - Flammable liquids, hazard category 2

Eye Irrit. 2 - Eye irritation, hazard category 2

STOT SE 3 - Specific Target Organ Toxicity — Single exposure, hazard category 3

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.