

Australian statement of hazardous nature: Classified as hazardous according to criteria of Safe Work Australia

Section 1 - Identification

Product Name Traceable Conductivity Calibration Standards CRM

Product Code FSH06-664-24, FSH06-664-25, FSH09-328-1, FSH09-328-20, FSH09-328-6,

FSH15-077-945, FSH15-077-946, FSH15-077-947, FSH15-077-948

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Recommended Use Laboratory chemicals.

Uses advised against This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National

Code of Practice for Chemicals of Security Concern.

Section 2 - Hazard(s) Identification

Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

Physical hazards

Flammable liquids Category 3

Health hazards

Serious Eye Damage/Eye Irritation Category 1 Specific target organ toxicity - (single exposure) Category 3

Environmental hazards

No hazards identified

Label Elements







AUS-000588 14-Jul-2023 Page 1/10 Version 2

Signal Word Danger

Hazard Statements

H226 - Flammable liquid and vapor

H318 - Causes serious eye damage

H336 - May cause drowsiness or dizziness

Precautionary Statements

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

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

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 or shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

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

P501 - Dispose of contents/ container to an approved waste disposal plant

Other information

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

Section 3 - Composition and Information on Ingredients

| Component | CAS No | Weight % |
|--------------------|-----------|----------|
| n-Propyl alcohol | 71-23-8 | >30 |
| Potassium chloride | 7447-40-7 | <0.01 |

Section 4 - First Aid Measures

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

Difficulty in breathing. Causes eye burns. Causes severe eye damage. Symptoms of

overexposure may be headache, dizziness, tiredness, nausea and vomiting

AUS-000588 Version 2 14-Jul-2023 Page 2 / 10

Notes to Physician

Treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Special protective equipment and precautions for fire fighters

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

Section 6 - Accidental Release Measures

Emergency procedures

Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Clean-up methods - small spillage

Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Clean-up methods - large spillage

Typically only supplied is small quantiites as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

Section 7 - Handling and Storage

Precautions for Safe Handling

Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Conditions for Safe Storage, Including any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks and flame.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

AS 1940-2004 - The storage and handling of flammable and combustible liquids

Section 8 - Exposure Controls and Personal Protection

Exposure limits

AUS - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation

AUS-000588 Version 2 14-Jul-2023 Page 3 / 10

of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] updated in August, 2005. Safe Work Australia

ACGIH - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace.

UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

NZ - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

| Component | Australia | New Zealand WEL | ACGIH TLV | The United Kingdom | Germany |
|------------------|-----------------------------|-----------------------------|--------------|---------------------------------|---------|
| n-Propyl alcohol | STEL: 250 ppm | TWA: 200 ppm | TWA: 100 ppm | STEL: 250 ppm 15 min | |
| | STEL: 614 mg/m ³ | TWA: 492 mg/m ³ | | STEL: 625 mg/m ³ 15 | |
| | TWA: 200 ppm | STEL: 250 ppm | | min | |
| | TWA: 492 mg/m ³ | STEL: 614 mg/m ³ | | TWA: 200 ppm 8 hr | |
| | | Skin | | TWA: 500 mg/m ³ 8 hr | |
| | | | | Skin | |

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Exposure Controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection

Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial

applications)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | AUS/NZ Standard | Glove comments |
|-------------------|-------------------|-----------------|-----------------|-----------------------|
| Disposable gloves | See manufacturers | - | AS/NZS 2161 | (minimum requirement) |
| | recommendations | | | |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Repiratory Protection Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices (or AUS/NZ equivalent)

When RPE is used a face piece Fit Test should be conducted

Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

AUS-000588 Version 2 14-Jul-2023 Page 4/10

Method - No information available

explosive air/vapour mixtures possible

Liquid

Liquid

Appearance Clear, colorless solution

Physical State Liquid

Odor No information available

Odor Threshold No data available

pH 7-9

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNot applicableFlash Point35 °C / 95 °F

Evaporation Rate No data available

Flammability (solid,gas) Not applicable

Explosion Limits No data available

Vapor Pressure No data available

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density No data available
Bulk Density Not applicable

Water Solubility

No information available

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow

n-Propyl alcohol 0.2

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available
No data available
No data available

Explosive Properties

Oxidizing Properties No information available

Other information

Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials None known.

Hazardous Decomposition Products None under normal use conditions.

Hazardous Polymerization No information available.

Section 11 - Toxicological Information

Information on Toxicological Effects

Product Information

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Toxicology data for the components

AUS-000588 Version 2 14-Jul-2023 Page 5/10

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|-------------------------|------------------------------|----------------------------|
| n-Propyl alcohol | LD50 = 1870 mg/kg (Rat) | LD50 = 4049 mg/kg (Rabbit) | LC50 > 33.8 mg/L (Rat) 4 h |
| Potassium chloride | LD50 = 2600 mg/kg (Rat) | | |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory SkinNo data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Central nervous system (CNS)

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting delayed

Section 12 - Ecological Information

Ecotoxicity effects

| Component | Freshwater Fish | Water Flea | Freshwater Algae | Microtox |
|--------------------|---|---|---------------------|---|
| n-Propyl alcohol | Pimephales promelas: LC50=4480 mg/L 96h | EC50: 3339 - 3977 mg/L, 48h Static (Daphnia magna) EC50: = 3642 mg/L, 48h (Daphnia magna) | | EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min |
| Potassium chloride | Lepomis macrochirus: LC50: 1060 mg/L /96h Pimephales promelas: LC50: 750 - 1020 mg/L /96h | EC50: 825 mg/L/48h | EC50: 2500 mg/L/72h | EC50 = 980 mg/L 12 h |

Persistence and Degradability
Bioaccumulative Potential
No information available
No information available

| Component | log Pow | Bioconcentration factor (BCF) |
|------------------|---------|-------------------------------|
| n-Propyl alcohol | 0.2 | No data available |

Mobility No information available.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance
This product does not contain any known or suspected substance

AUS-000588 Version 2 14-Jul-2023 Page 6 / 10

Section 13 - Disposal Considerations

Waste from Residues/Unused Do not allow into drains or watercourses or dispose of where ground or surface waters may

Products

be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure

conformity with all applicable regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

Other Information Chemical wastes should be disposed through a licensed commercial waste collection

service. Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in

compliance with local regulations. Do not empty into drains.

Section 14 - Transport Information

IMDG/IMO

UN-No
Proper Shipping Name
Technical Shipping Name
UN1274
N-PROPANOL
Conductivity Standard

Hazard Class 3
Packing Group

<u>ADG</u>

UN-No
Proper Shipping Name
Technical Shipping Name
UN1274
N-PROPANOL
Conductivity Standard

Hazard Class 3
Packing Group III

| r dokting Group | |
|------------------|--------------|
| Component | Hazchem Code |
| n-Propyl alcohol | 2YE |
| 71-23-8 (>30) | 2Y |

IATA

UN-No UN1274

Proper Shipping Name PROPYL ALCOHOL, NORMAL Conductivity Standard

Hazard Class 3
Packing Group III

Environmental hazards No hazards identified

Special PrecautionsNo special precautions required

Additional information None known

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National Regulations Australia

AUS-000588 Version 2 14-Jul-2023 Page 7/10

See section 8 for national exposure control parameters.

Standard for the Uniform Scheduling of Medicines and Poisons

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons.

| Component | Standard for the Uniform Scheduling of Medicines and Poisons |
|--------------------------------|--|
| n-Propyl alcohol - 71-23-8 | Schedule 5 listed - in preparations except: for preparations containing <=5% of n-Propyl alcohol, or in |
| | preparations for cosmetic or therapeutic use other than in spray form |
| | Schedule 6 listed - except: when included in Schedule 5, in preparations containing <=5% of n-Propyl |
| | alcohol, or in preparations for cosmetic or therapeutic use other than in spray form |
| Potassium chloride - 7447-40-7 | Schedule 4 listed - in oral preparations for human therapeutic use except: a) when containing <=550 |
| | mg of Potassium chloride per dosage unit, b) in preparations for oral rehydration therapy, c) in |
| | preparations for oral use for bowel cleansing prior to diagnostic medical and surgical procedures, or d) |
| | in preparations for enteral feeding |

Australian Industrial Chemicals Introduction Scheme (AICIS)

| Component | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|--------------------------------|---|------------------------|
| n-Propyl alcohol - 71-23-8 | Present | • |
| Potassium chloride - 7447-40-7 | Present | - |

Australian - Illicit Drug Precursors/Reagents Substance List

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Chemicals of Security Concern

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

National pollutant inventory Not applicable

Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

International Inventories

| Component | AICS | NZIoC | EINECS | ELINCS | TSCA | DSL | NDSL | PICCS | ENCS | ISHL | IECSC | KECL |
|--------------------|------|-------|-----------|--------|------|-----|------|-------|-------------|------|-------|----------|
| n-Propyl alcohol | Х | Х | 200-746-9 | - | X | Χ | - | Х | Х | Х | Х | KE-29362 |
| Potassium chloride | Х | Х | 231-211-8 | - | X | Χ | - | Х | Х | Х | Х | KE-29086 |

Legend: X - Listed. '-' - Not Listed. KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

AUS-000588 Version 2 14-Jul-2023 Page 8 / 10

Not applicable.

Basel convention on the control of transboundary movements of hazardous wastes and their dispoal

| Component | CAS No | OECD HPV | Restriction of Hazardous Substances (RoHS) | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|--------------------|-----------|----------|--|---|--|
| n-Propyl alcohol | 71-23-8 | Listed | Not applicable | Not applicable | Not applicable |
| Potassium chloride | 7447-40-7 | Listed | Not applicable | Not applicable | Not applicable |

Authorisation/Restrictions according to EU REACH

| Component | , | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | · · · · · · · · · · · · · · · · · · · |
|------------------|---|---|---------------------------------------|
| n-Propyl alcohol | - | Use restricted. See item 75. (see link for restriction details) | - |

https://echa.europa.eu/substances-restricted-under-reach

Section 16 - Other Information

<u>Legend</u>

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

NZS 5433:2020 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%
WEL - Workplace Exposure Limit
DNEL - Derived No Effect Level

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

Predicted No Effect Concentration (PNEC)

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment **NOEC** - No Observed Effect Concentration

BCF - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards
Health Hazards
Calculation method
Environmental hazards
Cn basis of test data
Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and

AUS-000588 Version 2 14-Jul-2023 Page 9 / 10

hygiene.

Revision Date 14-Jul-2023

Revision Summary Update to GHS format.

This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of Safety Data Sheet

AUS-000588 Version 2 14-Jul-2023 Page 10 / 10