# SAFETY DATA SHEET

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

## Section 1 - Identification

**Product Name** **Methyl alcohol**

| | |
|---|---|
| **Product Code** | **SPXSVO-FSLAU-43** |
| **Address** | ThermoFisher Scientific Australia Pty Ltd<br>5 Caribbean Drive, Scoresby<br>VICTORIA 3179, Australia |
| **Emergency Tel.** | **CHEMTREC®**<br>**03 9757 4559 or +613 9757 4559** |
| **Telephone / Fax Numbers** | Tel: 1300 735 292<br>Fax: 1800 067 639 |
| **E-mail address** | ANZinfo@thermofisher.com |

**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**
No hazards identified

**Health hazards**

Specific target organ toxicity - (single exposure) Category 2

**Environmental hazards**
No hazards identified

**Label Elements**

Health Hazard

**Signal Word** **Warning**

**Hazard Statements**
H371 - May cause damage to organs

**Precautionary Statements**
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor
P403 - Store in a well-ventilated place
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other information**

This product does not contain any known or suspected endocrine disruptors

# Section 3 - Composition and Information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Diphenylnitrosamine | 86-30-6 | 97 |
| Methyl alcohol | 67-56-1 | 3 |

# Section 4 - First Aid Measures

**Inhalation** — Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

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

**Skin Contact** — Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Eye Contact** — Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**General Advice** — If symptoms persist, call 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** — None reasonably foreseeable.

**Notes to Physician** — Treat symptomatically.

# Section 5 - Fire Fighting Measures

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons**
No information available.

**Specific Hazards Arising from the Chemical**
Thermal decomposition can lead to release of irritating gases and vapors.

**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**
Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions**
Should not be released into the environment.

**Methods for Containment and Clean Up**

**Clean-up methods - small spillage**
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

**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**
Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

**Conditions for Safe Storage, Including any Incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

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

# Section 8 - Exposure Controls and Personal Protection

**Exposure limits**
**AUS** - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation 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.
**DE** - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011
**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 |
|---|---|---|---|---|---|
| Methyl alcohol | STEL: 250 ppm<br>STEL: 328 mg/m$^3$<br>TWA: 200 ppm<br>TWA: 262 mg/m$^3$ | TWA: 200 ppm<br>TWA: 262 mg/m$^3$<br>STEL: 250 ppm<br>STEL: 328 mg/m$^3$<br>Skin | TWA: 200 ppm<br>STEL: 250 ppm<br>Skin | WEL - TWA: 200 ppm<br>TWA; 266 mg/m$^3$ TWA<br>WEL - STEL: 250 ppm<br>STEL; 333 mg/m$^3$ STEL | 100 ppm TWA MAK;<br>130 mg/m$^3$ TWA<br>MAKSkin absorber |

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

| Component | Australia | New Zealand | European Union | United Kingdom | Germany |
|---|---|---|---|---|---|
| Methyl alcohol | | 15 mg/L (urine) end of shift (Methyl alcohol) | | | Methanol: 15 mg/L urine (end of shift ) Methanol: 15 mg/L urine (for long-term exposures: at the end of the shift after several shifts ) |

**Exposure Controls**
**Engineering Measures**
Ensure adequate ventilation, especially in confined areas.

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** Wear safety glasses with side shields (or 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 recommendations | - | AS/NZS 2161 | (minimum requirement) |

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 Measures** Handle 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**

**Appearance**
**Physical State** Liquid

**Odor** No information available
**Odor Threshold** No data available
**pH** Not applicable
**Melting Point/Range** No data available
**Softening Point** No data available

| | | |
|---|---|---|
| **Boiling Point/Range** | Not applicable | |
| **Flash Point** | Not applicable | **Method -** No information available |
| **Evaporation Rate** | No data available | |
| **Flammability (solid,gas)** | Not applicable | Liquid |
| **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 | Liquid |
| **Water Solubility** | No information available | |
| **Solubility in other solvents** | No information available | |

**Partition Coefficient (n-octanol/water)**

| **Component** | **log Pow** |
|---|---|
| Diphenylnitrosamine | 3.13 |
| Methyl alcohol | -0.74 |

| | |
|---|---|
| **Autoignition Temperature** | No data available |
| **Decomposition Temperature** | No data available |
| **Viscosity** | No data available |
| **Explosive Properties** | No information available |
| **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** | Heat, flames and sparks. |
| **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;**

| | |
|---|---|
| **Oral** | Based on available data, the classification criteria are not met |
| **Dermal** | Based on available data, the classification criteria are not met |
| **Inhalation** | Based on available data, the classification criteria are not met |

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Diphenylnitrosamine | LD50 = 1650 mg/kg ( Rat ) | LD50 = 7940 mg/kg ( Rabbit ) | |
| Methyl alcohol | LD50 = 1187 – 2769 mg/kg (Rat) | LD50 = 17100 mg/kg ( Rabbit ) | LC50 = 128.2 mg/L ( Rat ) 4 h |

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** No data available

**(d) respiratory or skin sensitization;**

**Respiratory** No data available

**Skin** No data available

| Component | Test method | Test species | Study result |
|---|---|---|---|
| Methyl alcohol<br>67-56-1 ( 3 ) | OECD Test Guideline 406 Guinea Pig Maximisation Test (GPMT) | guinea pig | non-sensitising |

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;** No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

**(g) reproductive toxicity;** No data available

| Component | Test method | Test species / Duration | Study result |
|---|---|---|---|
| Methyl alcohol<br>67-56-1 ( 3 ) | OECD Test Guideline 416 | Rat / Inhalation 2 Generation | NOAEC = 1.3 mg/l (air) |

**(h) STOT-single exposure;** Category 2

**Results / Target organs** Optic nerve
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 delayed** No information available

# Section 12 - Ecological Information

**Ecotoxicity effects** .

| Component | Freshwater Fish | Water Flea | Freshwater Algae | Microtox |
|---|---|---|---|---|
| Methyl alcohol | Pimephales promelas: LC50 > 10000 mg/L 96h | EC50 > 10000 mg/L 24h | | EC50 = 39000 mg/L 25 min<br>EC50 = 40000 mg/L 15 min<br>EC50 = 43000 mg/L 5 min |

**Persistence and Degradability** No information available

**Persistence** Persistence is unlikely.

| Component | Degradability |
|---|---|
| Methyl alcohol<br>67-56-1 ( 3 ) | DT50 ~ 17.2d<br>>94% after 20d |

**Bioaccumulative Potential** Bioaccumulation is unlikely

| Component | log Pow | Bioconcentration factor (BCF) |
|---|---|---|
| Diphenylnitrosamine | 3.13 | No data available |
| Methyl alcohol | -0.74 | <10 dimensionless |

**Mobility** No information available.

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

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

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

# Section 13 - Disposal Considerations

| | |
|---|---|
| **Waste from Residues/Unused Products** | Do not allow into drains or watercourses or dispose of where ground or surface waters may 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. |
| **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 empty into drains. |

# Section 14 - Transport Information

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN1230 |
| **Proper Shipping Name** | METHANOL |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

**ADG**

| | |
|---|---|
| **UN-No** | UN1230 |
| **Proper Shipping Name** | METHANOL |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

| Component | Hazchem Code |
|---|---|
| Methyl alcohol<br>67-56-1 ( 3 ) | 2WE |

**IATA**

| | |
|---|---|
| **UN-No** | UN1230 |
| **Proper Shipping Name** | METHANOL |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

| | |
|---|---|
| **Environmental hazards** | No hazards identified |
| **Special Precautions** | No 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**

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 |
|---|---|
| Methyl alcohol - 67-56-1 | Schedule 5 listed - except its derivatives;in preparations except a) when included in Schedule 10, or b) in preparations containing <=2% of Methanol, or c) when Methanol is present only as a denaturant of Ethanol<br>Schedule 6 listed - except its derivatives;except a) when included in Schedule 5, or b) when included in Schedule 10, or c) in preparations containing <=2% of Methanol<br>Schedule 10 listed |

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

| Component | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|---|---|---|
| Diphenylnitrosamine - 86-30-6 | Present | - |
| Methyl alcohol - 67-56-1 | 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** Subject to reporting requirements

| Component | National pollutant inventory |
|---|---|
| Methyl alcohol - 67-56-1 | 10 tonne/yr. Threshold category 1 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphenylnitrosamine | X | X | 201-663-0 | - | X | X | - | - | X | X | X | KE-26029 |
| Methyl alcohol | X | X | 200-659-6 | - | X | X | - | X | X | X | X | KE-23193 |

**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

**Basel convention on the control of transboundary movements of hazardous wastes and their dispoal**
Not applicable.

| 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 |
|---|---|---|---|---|---|
| Diphenylnitrosamine | 86-30-6 | Not applicable | Not applicable | Not applicable | Not applicable |
| Methyl alcohol | 67-56-1 | Listed | Not applicable | 500 tonne | 5000 tonne |

**Authorisation/Restrictions according to EU REACH**

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|
| Diphenylnitrosamine | - | Use restricted. See item 75. (see link for restriction details) | - |
| Methyl alcohol | - | Use restricted. See item 69. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) | - |

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

# Section 16 - Other Information

**Legend**

**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

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