

Classified as hazardous in accordance with the criteria of EPA New Zealand

## Section 1 - Identification

### Product Identifier

|                             |                          |
|-----------------------------|--------------------------|
| <b>Product Name</b>         | <u>Toluene-d8</u>        |
| <b>CAS No</b>               | 2037-26-5                |
| <b>Synonyms</b>             | Methylbenzene-d8         |
| <b>Molecular Formula</b>    | C7 D8                    |
| <b>Molecular Weight</b>     | 100.21                   |
| <b>Recommended Use</b>      | Laboratory chemicals.    |
| <b>Uses advised against</b> | No Information available |

|                                |   |
|--------------------------------|---|
| <b>Product Code</b>            | <b>36477</b>  |
| <b>Address</b>                 | Thermo Fisher Scientific New Zealand Ltd<br>244 Bush Road, Albany,<br>Auckland, New Zealand |
| <b>Emergency Tel.</b>          | <b>CHEMTREC®</b><br><b>09 980 6780 or +64 9 980 6780</b>                                    |
| <b>Telephone / Fax Numbers</b> | Tel: 09 980 6700<br>Fax: 09 980 6788  |
| <b>E-mail address</b>          | <a href="mailto:ANZinfo@thermofisher.com">ANZinfo@thermofisher.com</a>                      |

## Section 2 - Hazard(s) Identification

### Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

### GHS Classification

#### Physical hazards

Flammable liquids Category 2

#### Health hazards

|  |            |
|--|------------|
| Aspiration Toxicity                                  | Category 1 |
| Skin Corrosion/Irritation                            | Category 2 |
| Reproductive Toxicity                                | Category 2 |
| Specific target organ toxicity - (single exposure)   | Category 3 |
| Specific target organ toxicity - (repeated exposure) | Category 2 |

#### Environmental hazards

Chronic aquatic toxicity Category 3

**Label Elements****Signal Word****Danger****Hazard Statements**

H225 - Highly flammable liquid and vapor  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H336 - May cause drowsiness or dizziness  
 H361 - Suspected of damaging fertility or the unborn child  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements****Prevention**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 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  
 P241 - Use explosion-proof electrical/ ventilating/ lighting equipment  
 P242 - Use non-sparking tools  
 P243 - Take action to prevent static discharges  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P280 - Wear eye protection/ face protection

**Response**

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor  
 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  
 P308 + P313 - IF exposed or concerned: Get medical advice/attention  
 P331 - Do NOT induce vomiting  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish  
 P362 + P364 - Take off contaminated clothing and wash it before reuse

**Storage**

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

**Disposal**

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

**Other hazards which do not result in classification**

## Section 3 - Composition and Information on Ingredients

| Component    | CAS No    | Weight % |
|--------------|-----------|----------|
| (2H8)Toluene | 2037-26-5 | >95      |
| Toluene      | 108-88-3  | -        |

## Section 4 - First Aid Measures

### Description of first aid measures

|  |   |
|--|---|
| <b>General Advice</b>                      | If symptoms persist, call a physician.  |
| <b>New Zealand Emergency Tel.</b>          | CHEMTREC®<br>09 980 6780 or +64 9 980 6780  |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.  |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.   |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water.  |
| <b>Self-Protection of the First Aider</b>  | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.                |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.  |
| <b>Most important symptoms and effects</b> | . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression |
| <b>Notes to Physician</b>                  | Treat symptomatically. Symptoms may be delayed.   |

## Section 5 - Fire Fighting Measures

### Suitable Extinguishing Media

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

### Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

### 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.

### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### 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

### Personal Precautions, Protective Equipment and Emergency Procedures

#### Emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation.

#### Environmental Precautions

Should not be released into the environment.

**Methods for Containment and Clean Up**

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

**Precautions to prevent secondary hazards**

Clean contaminated objects and areas thoroughly observing environmental regulations

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

**Precautions for Safe Handling****Advice on safe handling**

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

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

**Conditions for Safe Storage, Including any Incompatibilities****Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame. Store under an inert atmosphere. Keep container tightly closed in a dry and well-ventilated place. Protect from moisture.

**Incompatible Materials**

Strong oxidizing agents. Strong acids. Halogens. Halogenated compounds.

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

**Control parameters****Exposure limits**

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

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

**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.

**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

| Component | New Zealand WEL  | Australia   | ACGIH TLV   | The United Kingdom  |
|-----------|--|---|-------------|---|
| Toluene   | TWA: 20 ppm<br>TWA: 75 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 377 mg/m <sup>3</sup><br>Skin | STEL: 150 ppm<br>STEL: 574 mg/m <sup>3</sup><br>TWA: 50 ppm<br>TWA: 191 mg/m <sup>3</sup> | TWA: 20 ppm | STEL: 100 ppm 15 min<br>STEL: 384 mg/m <sup>3</sup> 15 min<br>TWA: 50 ppm 8 hr<br>TWA: 191 mg/m <sup>3</sup> 8 hr<br>Skin |

**Biological limit values**

**NZ** - Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

**ACGIH** - American Conference of Governmental Industrial Hygienists (ACGIH) TLVs® and BEIs®- Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices. 2022 Edition

| Component | New Zealand | Australia | ACGIH - Biological | United Kingdom |
|-----------|-------------|-----------|--------------------|----------------|
|-----------|-------------|-----------|--------------------|----------------|

|         |   |  | Exposure Indices   |  |
|---------|---|--|--|--|
| Toluene | 0.03 mg/L (urine) end of exposure or end of shift (Toluene)<br>0.3 mg/g creatinine (urine) end of exposure or end of shift (O-Cresol) |  | 0.02 mg/L<br>Medium: blood<br>Time: prior to last shift of workweek<br>Determinant: Toluene<br>0.03 mg/L<br>Medium: urine<br>Time: end of shift<br>Determinant: Toluene<br>0.3 mg/g creatinine<br>Medium: urine<br>Time: end of shift<br>Determinant: o-Cresol with hydrolysis |  |

**Appropriate engineering controls****Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment. 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

**Individual protection measures, such as 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        |
|----------------|-----------------------------------|-----------------|-----------------|-----------------------|
| Viton (R).     | 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

**Respiratory 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 respiratory protective devices

**Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387 (or AUS/NZ equivalent)

**Recommended half mask:-** Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 (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**

|  |  |  |
|--|--|--|
| <b>Physical State</b>                          | Liquid                                       |  |
| <b>Appearance</b>                              | Colorless                                    |  |
| <b>Odor</b>                                    | aromatic                                     |  |
| <b>Odor Threshold</b>                          | No data available                            |  |
| <b>pH</b>                                      | No information available                     |  |
| <b>Melting Point/Range</b>                     | -84 °C / -119.2 °F                           |  |
| <b>Softening Point</b>                         | No data available                            |  |
| <b>Boiling Point/Range</b>                     | 110 °C / 230 °F                              |  |
| <b>Flammability (liquid)</b>                   | Highly flammable                             | On basis of test data                    |
| <b>Flammability (solid,gas)</b>                | Not applicable                               | Liquid                                   |
| <b>Explosion Limits</b>                        | <b>Lower</b> 1.2 Vol%<br><b>Upper</b> 7 Vol% |  |
| <b>Flash Point</b>                             | 4 °C / 39.2 °F                               | <b>Method</b> - No information available |
| <b>Autoignition Temperature</b>                | 535 °C / 995 °F                              |  |
| <b>Decomposition Temperature</b>               | No data available                            |  |
| <b>Viscosity</b>                               | No data available                            |  |
| <b>Water Solubility</b>                        | 0.5 g/L @20°C practically insoluble          |  |
| <b>Solubility in other solvents</b>            | No information available                     |  |
| <b>Partition Coefficient (n-octanol/water)</b> |  |  |
| <b>Component</b>                               | <b>log Pow</b>                               |  |
| Toluene  | 2.73   |  |
| <b>Vapor Pressure</b>                          | 29.1 hPa @ 20°C                              |  |
| <b>Density / Specific Gravity</b>              | 0.940  |  |
| <b>Bulk Density</b>                            | Not applicable                               | Liquid                                   |
| <b>Vapor Density</b>                           | No data available                            | (Air = 1.0)                              |
| <b>Particle characteristics</b>                | Not applicable (liquid)                      |  |
| <b><u>Other information</u></b>                |  |  |
| <b>Molecular Formula</b>                       | C7 D8  |  |
| <b>Molecular Weight</b>                        | 100.21                                       |  |
| <b>Explosive Properties</b>                    | Vapors may form explosive mixtures with air  |  |

## Section 10 - Stability and Reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                       | None known, based on information available  |
| <b>Stability</b>                        | Hygroscopic.  |
| <b>Sensitivity to Mechanical Impact</b> | No information available  |
| <b>Sensitivity to Static Discharge</b>  | No information available  |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.  |
| <b>Hazardous Reactions</b>              | None under normal processing.   |
| <b>Conditions to Avoid</b>              | Incompatible products, Excess heat, Exposure to moist air or water, Keep away from open flames, hot surfaces and sources of ignition. |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong acids, Halogens, Halogenated compounds.   |
| <b>Hazardous Decomposition Products</b> | Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).  |

## Section 11 - Toxicological Information

### Acute Effects

### Information on likely routes of exposure

|                            |  |
|----------------------------|--|
| <b>Product Information</b> | No acute toxicity information is available for this product  |
| <b>Inhalation</b>          | Avoid breathing vapors or mists.   |
| <b>Eyes</b>                | Avoid contact with eyes. May cause irritation.   |
| <b>Skin</b>                | Avoid contact with skin. May cause irritation. Prolonged skin contact may defat the skin and produce dermatitis. |
| <b>Ingestion</b>           | May be harmful if swallowed.   |

**Numerical measures of toxicity****(a) acute toxicity;**

|                   |                   |
|-------------------|-------------------|
| <b>Oral</b>       | No data available |
| <b>Dermal</b>     | No data available |
| <b>Inhalation</b> | No data available |

| Component | LD50 Oral            | LD50 Dermal            | LC50 Inhalation       |
|-----------|----------------------|------------------------|-----------------------|
| Toluene   | > 5000 mg/kg ( Rat ) | 12000 mg/kg ( Rabbit ) | 26700 ppm ( Rat ) 1 h |

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

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

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

|                    |                   |
|--------------------|-------------------|
| <b>Respiratory</b> | No data available |
| <b>Skin</b>        | 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;**

|                              |  |
|------------------------------|--|
| <b>Reproductive Effects</b>  | No data available  |
| <b>Developmental Effects</b> | Experiments have shown reproductive toxicity effects on laboratory animals                               |
| <b>Teratogenicity</b>        | Developmental effects have occurred in experimental animals<br>Possible risk of harm to the unborn child |

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

|                                |   |
|--------------------------------|---|
| <b>Results / Target organs</b> | No data available<br>Central nervous system (CNS) |
|--------------------------------|---|

**(i) STOT-repeated exposure;**

|                      |  |
|----------------------|--|
| <b>Target Organs</b> | No data available<br>Neuropsychological effects, Eyes, Ears. |
|----------------------|--|

**(j) aspiration hazard;** Category 1

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Symptoms / effects, both acute and delayed**

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Causes central nervous system depression.

## **Section 12 - Ecological Information**

**Ecotoxicity****Aquatic ecotoxicity**

Contains a substance which is: Toxic to aquatic organisms.

| Component | Freshwater Fish  | Water Flea  | Freshwater Algae  | Microtox                   |
|-----------|--|---|---|----------------------------|
| Toluene   | 50-70 mg/L LC50 96 h<br>5-7 mg/L LC50 96 h<br>15-19 mg/L LC50 96 h<br>28 mg/L LC50 96 h<br>12 mg/L LC50 96 h | EC50: = 11.5 mg/L, 48h<br>(Daphnia magna)<br>EC50: 5.46 - 9.83 mg/L,<br>48h Static (Daphnia<br>magna) | EC50: = 12.5 mg/L, 72h<br>static<br>(Pseudokirchneriella<br>subcapitata)<br>EC50: > 433 mg/L, 96h<br>(Pseudokirchneriella<br>subcapitata) | EC50 = 19.7 mg/L 30<br>min |

**Terrestrial ecotoxicity**

There is no data for this product

**Persistence and Degradability**

Readily biodegradable

**Persistence**

Persistence is unlikely.

| Component               | Degradability |
|-------------------------|---------------|
| Toluene<br>108-88-3 (-) | 86% (20d)     |

**Bioaccumulative Potential**

Bioaccumulation is unlikely

| Component | log Pow | Bioconcentration factor (BCF) |
|-----------|---------|-------------------------------|
| Toluene   | 2.73    | 90                            |

**Mobility**

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Spillage unlikely to penetrate soil. The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility.

**Other adverse effects**
**Endocrine Disruptor Information**  
**Persistent Organic Pollutant**  
**Ozone Depletion Potential**

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

## Section 13 - Disposal Considerations

**Waste treatment methods****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. 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**

Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations . 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.

## Section 14 - Transport Information



| Component                 | Hazchem Code |
|---------------------------|--------------|
| Toluene<br>108-88-3 ( - ) | 3YE          |

**NZS 5433:2020**

UN-No UN1294  
Proper Shipping Name TOLUENE  
Hazard Class 3  
Packing Group II

**IATA**

UN-No UN1294  
Proper Shipping Name TOLUENE  
Hazard Class 3  
Packing Group II

**IMDG/IMO**

UN-No UN1294  
Proper Shipping Name TOLUENE  
Hazard Class 3  
Packing Group II

Environmental hazards No hazards identified

Transport in bulk according to  
Annex II of MARPOL 73/78 and the  
IBC Code Not applicable, packaged goods

Special Precautions No special precautions required. Please refer to the applicable dangerous goods regulations for additional information.

Additional information None known

## Section 15 - Regulatory Information

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

Any applicable tolerable exposure limits and environmental exposure limits according to the EPA Controls for Hazardous Substances are listed below

| Component | Tolerable Exposure Limit<br>(TEL) Air | Tolerable Exposure Limit<br>(TEL) Water | Tolerable Exposure Limit<br>(TEL) Surface | Environmental Exposure<br>Limits (EEL) |
|-----------|---------------------------------------|---|---|--|
| Toluene   | 400 µg/m <sup>3</sup>                 | 0.8 mg/L                                |   | 330 µg/L (Water)                       |

**Certified handlers, tracking and controlled substance license requirements**

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

**Prohibition or notification/licensing requirements**

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

**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

**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) |
|-----------|---|--|---|
| Toluene   | -   | Use restricted. See item 48.<br>(see link for restriction details)<br>Use restricted. See item 75.<br>(see link for restriction details) | -   |

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

**International Inventories**

New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component    | CAS No    | NZIoC | AICS | EINECS    | ELINCS | NLP | KECL     | IECSC | TCSI |
|--------------|-----------|-------|------|-----------|--------|-----|----------|-------|------|
| (2H8)Toluene | 2037-26-5 | X     | X    | 218-009-5 | -      | -   | -        | X     | X    |
| Toluene      | 108-88-3  | X     | X    | 203-625-9 | -      | -   | KE-33936 | X     | X    |

| Component    | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | PICCS | ISHL | ENCS |
|--------------|-----------|------|---|-----|------|-------|------|------|
| (2H8)Toluene | 2037-26-5 | -    | -   | -   | -    | -     | -    | -    |
| Toluene      | 108-88-3  | X    | ACTIVE  | X   | -    | X     | X    | X    |

**Legend:** X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

## Section 16 - Other Information

**This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations**

**Legend**

**NZIoC** - New Zealand Inventory of Chemicals

**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

**NZS 5433:2020** - Transport of Dangerous Goods on Land

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

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**WEL** - Workplace Exposure Limit

**DNEL** - Derived No Effect Level

**POW** - Partition coefficient Octanol:Water

**AICS** - Australian Inventory of Chemical Substances

**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

**PNEC** - Predicted No Effect Concentration

**OECD** - Organisation for Economic Co-operation and Development

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

**ADG** - Australian Code for the Transport of Dangerous Goods by Road and Rail

**LC50** - Lethal Concentration 50%

**ATE** - Acute Toxicity Estimate

**RPE** - Respiratory Protective Equipment

**NOEC** - No Observed Effect Concentration

**BCF** - Bioconcentration factor

**vPvB** - very Persistent, very Bioaccumulative  
**VOC** - (Volatile Organic Compound)

**PBT** - Persistent, Bioaccumulative, Toxic

**Key literature references and sources for data**

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

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

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

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

**Training Advice**

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

|                         |                |
|-------------------------|----------------|
| <b>Revision Date</b>    | 13-Mar-2023    |
| <b>Revision Summary</b> | Not applicable |

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## End of Safety Data Sheet