1 Identification

- **Product identifier**
- **Trade name:** FAME Mix - 36 Component (1 x 1mL)
- **Part number:** 5191-4276
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  Agilent Technologies Australia Pty Ltd
  679 Springvale Road
  Mulgrave
  Victoria 3170, Australia
- **Further information obtainable from:**
  Telephone: 1800 802 402
e-mail: pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

- **Classification of the substance or mixture**
  - health hazard
  - Carc. 2 H351 Suspected of causing cancer.
  - Acute Tox. 4 H302 Harmful if swallowed.
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
  - **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
  - **Hazard pictograms**
    - GHS07
    - GHS08

- **Signal word** Warning

- **Hazard-determining components of labelling:**
  - dichloromethane

- **Hazard statements**
  - Harmful if swallowed.
  - Causes skin irritation.
  - Causes serious eye irritation.
  - Suspected of causing cancer.

- **Precautionary statements**
  - If medical advice is needed, have product container or label at hand.
  - Keep out of reach of children.

(Contd. on page 2)
Trade name: FAME Mix - 36 Component (1 x 1mL)

Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves / eye protection / face protection.
Use personal protective equipment as required.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.
IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition and Information on Ingredients

Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:
75-09-2 dichloromethane
Carc. 2; H351; Acute Tox. 4; H302; Skin Irrit. 2; H315; Eye Irrit. 2A, H319
99.26%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

Description of first aid measures
General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation: In case of unconsciousness place patient stably in side position for transportation.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Call for a doctor immediately.
Information for doctor:
Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.
5 Fire Fighting Measures

- Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters: No special measures required.

6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
- Reference to other sections:
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and Storage

- Handling:
  - Precautions for safe handling: No special precautions are necessary if used correctly.
  - Information about fire - and explosion protection: No special measures required.
- Conditions for safe storage, including any incompatibilities
  - Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Keep container tightly sealed.
- Specific end use(s): No further relevant information available.

8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    - 75-09-2 dichloromethane
      - WES Long-term value: 174 mg/m³, 50 ppm
      - Sk
- Additional information: The lists valid during the making were used as basis.
- Exposure controls
  - Personal protective equipment:
  - General protective and hygienic measures:
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
47.0

- **Respiratory protection:**
  When used as intended with Agilent instruments the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
  Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device equipment with appropriate organic or acid gas cartridge.

- **Protection of hands:**
  Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

- **Material of gloves**
  For normal use: nitrile rubber, 11-13 mil thickness
  For direct contact with the chemical: butyl rubber, 12-15 mil thickness

- **Penetration time of glove material**
  For normal use: nitrile rubber: 1 hour
  For direct contact with the chemical: butyl rubber: > 4 hours

- **Eye protection:**
  Safety glasses
  Tightly sealed goggles

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* **9 Physical and Chemical Properties**

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Colour:** Colourless
    - **Odour:** Like chlorine
    - **Odour threshold:** Not determined.
  - **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/freezing point:** -95.1 °C
  - **Initial boiling point and boiling range:** 40 °C

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 605 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:**
  - **Explosion limits:**
    - **Lower:** 13 Vol %
    - **Upper:** 22 Vol %

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(Contd. on page 5)
Trade name: FAME Mix - 36 Component (1 x 1mL)

· Vapour pressure at 20 °C: 360 hPa
· Density at 20 °C: 1.3 g/cm³
· Relative density Not determined.
· Vapour density Not determined.
· Evaporation rate Not determined.
· Solubility in / Miscibility with water at 20 °C: 20 g/l
· Partition coefficient: n-octanol/water: Not determined.
· Viscosity:
  Dynamic at 20 °C: 0.43 mPas
  Kinematic: Not determined.
· Solvent content:
  Organic solvents: 99.3 %
  VOC (EC) 99.26 %
· Solids content: 0.2 %
· Other information No further relevant information available.

10 Stability and Reactivity
· Reactivity No further relevant information available.
· Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· Possibility of hazardous reactions No dangerous reactions known.
· Conditions to avoid No further relevant information available.
· Incompatible materials: No further relevant information available.
· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information
· Information on toxicological effects
· Acute toxicity
· LD/LC50 values relevant for classification:
  ATE (Acute Toxicity Estimates)
  Oral LD50 1,612 mg/kg (rat)
  Dermal LD50 >2,015 mg/kg (rat)
  Inhalative LC50/4 h 88.7 mg/L (rat)
  75-09-2 dichloromethane
  Oral LD50 1,600 mg/kg (rat)
  Dermal LD50 >2,000 mg/kg (rat)
  Inhalative LC50/4 h 88 mg/L (rat)
· Primary irritant effect:
· Skin corrosion/irritation Irritant to skin and mucous membranes.
· Serious eye damage/irritation Irritating effect.
· Respiratory or skin sensitisation No sensitising effects known.
Trade name: FAME Mix - 36 Component (1 x 1mL)

- Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Harmful
  Irritant
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  Carc. 2

12 Ecological Information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADG, IMDG, IATA: UN1593
- UN proper shipping name
  - ADG: 1593 DICHLOROMETHANE
  - IMDG, IATA: DICHLOROMETHANE
- Transport hazard class(es)
  - ADG, IMDG, IATA

  ![Class 6.1]

  Class: 6.1 Toxic substances.
47.0

- **Label:** 6.1
- **Packing group**
  - ADG, IMDG, IATA: III
- **Environmental hazards:** Not applicable.
- **Special precautions for user**
  - Warning: Toxic substances.
- **Danger code (Kemler):** 60
- **EMS Number:** F-A,S-A
- **Segregation groups**
  - Liquid halogenated hydrocarbons
  - A
- **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **Transport/Additional information:**
  - **ADG**
    - Limited quantities (LQ): 5L
    - Excepted quantities (EQ): Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml
  - **Transport category:** 2
  - **Tunnel restriction code:** E
- **IMDG**
  - Limited quantities (LQ): 5L
  - Excepted quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

### UN "Model Regulation":
- UN 1593 DICHLOROMETHANE, 6.1, III

### 15 Regulatory information

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

**Australian Inventory of Chemical Substances**

<table>
<thead>
<tr>
<th>Australian Inventory of Chemical Substances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75-09-2 dichloromethane</td>
<td></td>
</tr>
<tr>
<td>112-39-0 Methyl hexadecanoate</td>
<td></td>
</tr>
<tr>
<td>106-70-7 methyl hexanoate</td>
<td></td>
</tr>
<tr>
<td>111-11-5 methyl octanoate</td>
<td></td>
</tr>
<tr>
<td>110-42-9 methyl decanoate</td>
<td></td>
</tr>
<tr>
<td>111-82-0 methyl laurate</td>
<td></td>
</tr>
<tr>
<td>124-10-7 methyl myristate</td>
<td></td>
</tr>
<tr>
<td>623-42-7 methyl butyrate</td>
<td></td>
</tr>
<tr>
<td>112-61-8 methyl stearate</td>
<td></td>
</tr>
<tr>
<td>112-62-9 Methyl 9-octadecenoate</td>
<td></td>
</tr>
<tr>
<td>1120-28-1 methylicosanoate</td>
<td></td>
</tr>
<tr>
<td>929-77-1 methyl docosanoate</td>
<td></td>
</tr>
<tr>
<td>1731-92-6 methyl heptadecanoate</td>
<td></td>
</tr>
<tr>
<td>1731-86-8 methyl undecanoate</td>
<td></td>
</tr>
</tbody>
</table>
### Trade name: FAME Mix - 36 Component (1 x 1mL)

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-63-0</td>
<td>methyl linoleate</td>
</tr>
<tr>
<td>7132-64-1</td>
<td>methyl pentadecanoate</td>
</tr>
<tr>
<td>301-00-8</td>
<td>methyl (9Z,12Z,15Z)-9,12,15-octadecatrienoate</td>
</tr>
<tr>
<td>2566-89-4</td>
<td>methyl arachidonate</td>
</tr>
<tr>
<td>2566-90-7</td>
<td>cis-4,7,10,13,16,19-docosahexaenoic acid methyl ester</td>
</tr>
</tbody>
</table>

### Standard for the Uniform Scheduling of Medicines and Poisons

- **75-09-2** dichloromethane- S5

### GHS label elements
The product is classified and labelled according to the Globally Harmonised System (GHS).

### Hazard pictograms

- GHS07
- GHS08

### Signal word
Warning

### Hazard-determining components of labelling:
dichloromethane

### Hazard statements
- Harmful if swallowed.
- Causes skin irritation.
- Causes serious eye irritation.
- Suspected of causing cancer.

### Precautionary statements
- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves / eye protection / face protection.
- Use personal protective equipment as required.
- IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- Rinse mouth.
- IF ON SKIN: Wash with plenty of water.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned: Get medical advice/attention.
- Specific treatment (see on this label).
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

### Directive 2012/18/EU

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
## 16 Other information

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

### Relevant phrases
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.

### Abbreviations and acronyms:
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Carc. 2: Carcinogenicity – Category 2

* Data compared to the previous version altered.