

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Low Level OP Mix  
Product code : AL0-130105  
Product group : Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Laboratory use  
Industrial/Professional use spec : Industrial  
For professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Phenova  
6390 Joyce Dr. Suite 100  
80403 Golden, CO - United States  
T 1-866-942-2978 - F 1-866-283-0269  
[info@phenova.com](mailto:info@phenova.com) - [www.phenova.com](http://www.phenova.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924  
ChemTel Assistance (International) +1 813-248-0585

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225  
Acute Tox. 3 (Oral) H301  
Acute Tox. 3 (Dermal) H311  
STOT SE 1 H370  
Aquatic Chronic 3 H412

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11  
T; R23/24/25  
T; R39/23/24/25  
R52/53

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS06

GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour  
H301+H311 - Toxic if swallowed or in contact with skin

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Precautionary statements (CLP) : H370 - Causes damage to organs  
H412 - Harmful to aquatic life with long lasting effects  
: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P233 - Keep container tightly closed  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P270 - Do not eat, drink or smoke when using this product  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse  
P403+P235 - Store in a well-ventilated place. Keep cool  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

No labelling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                    | Product identifier   | %   | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
|-------------------------|--|---|--|
| methanol<br>(Component) | (CAS-No.) 67-56-1<br>(EC-No.) 200-659-6<br>(EC Index-No.) 603-001-00-X | 99.993  | Flam. Liq. 2, H225<br>Acute Tox. 3 (Oral), H301<br>Acute Tox. 3 (Dermal), H311<br>Acute Tox. 3 (Inhalation), H331<br>STOT SE 1, H370 |
| Name                    | Product identifier   | Specific concentration limits                               |  |
| methanol<br>(Component) | (CAS-No.) 67-56-1<br>(EC-No.) 200-659-6<br>(EC Index-No.) 603-001-00-X | ( 3 =<C < 10) STOT SE 2, H371<br>( C >= 10) STOT SE 1, H370 |  |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.

Symptoms/effects after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

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### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up in absorbent material. Collect spillage.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools.
- Hygiene measures : Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
- Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
- Incompatible materials : Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

- Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.
- Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



- Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
- Eye protection : Chemical goggles or safety glasses. Safety glasses.
- Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
- Other information : Do not eat, drink or smoke during use.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                           |                                      |
|---------------------------|--------------------------------------|
| Physical state            | : Liquid                             |
| Colour                    | : Colourless.                        |
| Odour                     | : characteristic.                    |
| pH                        | : No data available                  |
| Melting point             | : No data available                  |
| Freezing point            | : No data available                  |
| Boiling point             | : No data available                  |
| Flash point               | : No data available                  |
| Auto-ignition temperature | : No data available                  |
| Decomposition temperature | : No data available                  |
| Flammability (solid, gas) | : Highly flammable liquid and vapour |
| Relative density          | : No data available                  |
| Solubility                | : No data available                  |
| Explosive properties      | : No data available                  |
| Oxidising properties      | : No data available                  |
| Explosive limits          | : No data available                  |

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

May release flammable gases.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

| Low Level OP Mix           |  |
|----------------------------|--|
| ATE CLP (oral)             | 100.00700049 mg/kg bodyweight  |
| ATE CLP (dermal)           | 300.0210014701 mg/kg bodyweight  |
| methanol (67-56-1)         |  |
| LD50 oral rat              | > 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence) |
| LD50 dermal rabbit         | 15800 mg/kg (Rabbit; Literature study)   |
| LC50 inhalation rat (mg/l) | 85 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)  | 64000 ppm/4h (Rat; Literature study)   |
| ATE CLP (oral)             | 100 mg/kg bodyweight   |
| ATE CLP (dermal)           | 300 mg/kg bodyweight   |
| ATE CLP (gases)            | 700 ppmv/4h  |
| ATE CLP (vapours)          | 3 mg/l/4h  |
| ATE CLP (dust,mist)        | 0.5 mg/l/4h  |

|                               |  |
|-------------------------------|--|
| Skin corrosion/irritation     | : Not classified<br>Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified<br>Based on available data, the classification criteria are not met |

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|   |  |
|---|--|
| Respiratory or skin sensitisation                   | : Not classified<br>Based on available data, the classification criteria are not met                     |
| Germ cell mutagenicity                              | : Not classified<br>Based on available data, the classification criteria are not met                     |
| Carcinogenicity                                     | : Not classified<br>Based on available data, the classification criteria are not met<br>May cause cancer |
| Reproductive toxicity                               | : Not classified<br>Based on available data, the classification criteria are not met                     |
| STOT-single exposure                                | : Causes damage to organs.   |
| STOT-repeated exposure                              | : Not classified<br>Based on available data, the classification criteria are not met                     |
| Aspiration hazard                                   | : Not classified<br>Based on available data, the classification criteria are not met                     |
| Potential adverse human health effects and symptoms | : Toxic if swallowed. Toxic in contact with skin.  |

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

| methanol (67-56-1) |  |
|--------------------|--|
| LC50 fish 1        | 15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value) |
| EC50 Daphnia 1     | > 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)                 |
| LC50 fish 2        | 10800 mg/l (LC50; 96 h; Salmo gairdneri)   |

#### 12.2. Persistence and degradability

| Low Level OP Mix                |   |
|---------------------------------|---|
| Persistence and degradability   | May cause long-term adverse effects in the environment.                           |
| methanol (67-56-1)              |   |
| Persistence and degradability   | Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. |
| Biochemical oxygen demand (BOD) | 0.6 - 1.12 g O /g substance   |
| Chemical oxygen demand (COD)    | 1.42 g O /g substance   |
| ThOD                            | 1.5 g O /g substance  |
| BOD (% of ThOD)                 | 0.8 (Literature study)  |

#### 12.3. Bioaccumulative potential

| Low Level OP Mix          |  |
|---------------------------|--|
| Bioaccumulative potential | Not established.                               |
| methanol (67-56-1)        |  |
| BCF fish 1                | < 10 (BCF; 72 h; Leuciscus idus)               |
| Log Pow                   | -0.77 (Experimental value; Other)              |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

#### 12.4. Mobility in soil

| methanol (67-56-1) |   |
|--------------------|---|
| Surface tension    | 0.023 N/m (20 °C)                       |
| Log Koc            | Koc,PCKOCWIN v1.66; 1; Calculated value |

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Additional information : Avoid release to the environment

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Additional information : Handle empty containers with care because residual vapours are flammable.  
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

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### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 1992  
UN-No. (IATA) : 1992  
UN-No. (IMDG) : 1992  
UN-No. (ADN) : 1992

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, N.O.S.  
Proper Shipping Name (IATA) : Flammable liquid, toxic, n.o.s.  
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, N.O.S.  
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, TOXIC, N.O.S.  
Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II, (D/E)

#### 14.3. Packing group

Class (ADR) : 3  
Classification code (ADR) : FT1  
Class (IATA) : 3  
Class (IMDG) : 3  
Class (ADN) : 3  
Classification code (ADN) : FT1  
Subsidiary risk (ADR) : 6.1  
Subsidiary risk (IMDG) : 6.1  
Danger labels (ADR) : 3, 6.1



Hazard labels (IATA) : 3, 6.1



Danger labels (IMDG) : 3, 6.1



Danger labels (ADN) : 3, 6.1



#### 14.4. Packing group

Packing group (ADR) : II  
Packing group (IATA) : II  
Packing group (IMDG) : II  
Packing group (ADN) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

##### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 336  
Classification code (ADR) : FT1

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Orange plates



Special provisions (ADR) : 274  
Transport category (ADR) : 2  
Tunnel restriction code (ADR) : D/E  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E2

### 14.6.2. Transport by sea

Special provisions (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP2, TP13  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-D  
Stowage category (IMDG) : B  
Properties and observations (IMDG) : Flammable toxic liquid which is not specified by name in this class or, on account of its characteristics, in some other class. Toxic if swallowed, by skin contact or by inhalation.

### 14.6.3. Air transport

CAO packing instructions (IATA) : 364  
CAO max net quantity (IATA) : 60L  
PCA packing instructions (IATA) : 352  
PCA Limited quantities (IATA) : Y341  
PCA limited quantity max net quantity (IATA) : 1L  
PCA max net quantity (IATA) : 1L  
PCA Excepted quantities (IATA) : E2  
Special provisions (IATA) : A3  
ERG code (IATA) : 3HP

### 14.6.4. Inland waterway transport

Special provisions (ADN) : 274, 802  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP, EX, TOX, A  
Ventilation (ADN) : VE01, VE02  
Number of blue cones/lights (ADN) : 2  
Carriage prohibited (ADN) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  
Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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### SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

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