

# Safety data sheet

Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: **CP35**  
Version: **GHS 2.0 en**  
Replaces version of: 2020-11-03  
Version: (GHS 1)

date of compilation: 2020-11-03  
Revision: 2020-11-04

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

### 1.1 Product identifier

Identification of the substance **Aniline phthalate spray solution** for TLC  
Article number CP35  
Registration number (REACH) not relevant (mixture)

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

**Identified uses:** laboratory chemical  
laboratory and analytical use

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

Carl Roth GmbH + Co KG  
Schoemperlenstr. 3-5  
D-76185 Karlsruhe  
Germany

**Telephone:** +49 (0) 721 - 56 06 0

**Telefax:** +49 (0) 721 - 56 06 149

**e-mail:** [sicherheit@carloth.de](mailto:sicherheit@carloth.de)

**Website:** [www.carloth.de](http://www.carloth.de)

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

**e-mail (competent person):** [sicherheit@carloth.de](mailto:sicherheit@carloth.de)

### 1.4 Emergency telephone number

| Name   | Street          | Postal code/city   | Telephone | Website |
|--|-----------------|--------------------|-----------|---------|
| NSW Poisons Information Centre<br>Childrens Hospital | Hawkesbury Road | 2145 Westmead, NSW | 131126    |         |

Emergency information service

**Poison Centre Munich: +49/(0)89 19240**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification acc. to GHS**

| Classification acc. to GHS |   |                           |                  |
|----------------------------|---|---------------------------|------------------|
| Section                    | Hazard class  | Hazard class and category | Hazard statement |
| 2.6                        | flammable liquid  | (Flam. Liq. 2)            | H225             |
| 3.3                        | serious eye damage/eye irritation   | (Eye Irrit. 2)            | H319             |
| 3.8D                       | specific target organ toxicity - single exposure (narcotic effects, drowsiness) | (STOT SE 3)               | H336             |

# Safety data sheet

Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: CP35

| Classification acc. to GHS |  |                           |                  |
|----------------------------|--|---------------------------|------------------|
| Section                    | Hazard class                                       | Hazard class and category | Hazard statement |
| 3.9                        | specific target organ toxicity - repeated exposure | (STOT RE 2)               | H373             |

### The most important adverse physicochemical, human health and environmental effects

Narcotic effects.

## 2.2 Label elements

### Labelling GHS

#### Signal word

**Danger**

#### Pictograms

GHS02, GHS07,  
GHS08



#### Hazard statements

H225 Highly flammable liquid and vapour  
H319 Causes serious eye irritation  
H336 May cause drowsiness or dizziness  
H373 May cause damage to organs through prolonged or repeated exposure

#### Precautionary statements

##### Precautionary statements - prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

##### Precautionary statements - response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction.

##### Precautionary statements - storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 Store in a well-ventilated place. Keep cool.

##### Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant.

**Hazardous ingredients for labelling:** Aniline, 2-Propanol

**Labelling of packages where the contents do not exceed 125 ml**

Signal word: **Danger**

Symbol(s)



# Safety data sheet

Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: **CP35**

contains: Aniline, 2-Propanol

### 2.3 Other hazards










There is no additional information.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Description of the mixture

Composition/information on ingredients.

| Name of substance | Identifier  | wt %         | Classification acc. to 1272/2008/EC   | Pictograms   | Notes                    | Specific Conc. Limits  |
|-------------------|---|--------------|---|--|--------------------------|--|
| Ethanol           | CAS No<br>64-17-5<br><br>EC No<br>200-578-6<br><br>Index No<br>603-002-00-5<br><br>REACH Reg. No<br>01-2119457610-43-xxxx | 35 –<br>< 55 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319  |     | GHS-<br>HC<br>IARC:<br>1 |  |
| 2-Propanol        | CAS No<br>67-63-0<br><br>EC No<br>200-661-7<br><br>Index No<br>603-117-00-0<br><br>REACH Reg. No<br>01-2119457558-25-xxxx | 35 –<br>< 50 | Flam. Liq. 2 / H225<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H336  |     | GHS-<br>HC               |  |
| Phthalic acid     | CAS No<br>88-99-3<br><br>EC No<br>201-873-2<br><br>REACH Reg. No<br>01-2119539411-46-xxxx                                 | 1 – <<br>10  | Skin Irrit. 2 / H315<br>Eye Irrit. 2 / H319<br>STOT SE 3 / H335   |   |                          |  |
| Aniline           | CAS No<br>62-53-3<br><br>EC No<br>200-539-3<br><br>Index No<br>612-008-00-7<br><br>REACH Reg. No<br>01-2119451454-41-xxxx | 0.2 –<br>< 1 | Acute Tox. 3 / H301<br>Acute Tox. 3 / H311<br>Acute Tox. 3 / H331<br>Eye Dam. 1 / H318<br>Skin Sens. 1 / H317<br>Muta. 2 / H341<br>Carc. 2 / H351<br>STOT RE 1 / H372<br>Aquatic Acute 1 / H400<br>Aquatic Chronic 2 / H411 |  <br>  | GHS-<br>HC<br>IOELV      | STOT RE 1; H372: C<br>≥ 1 %<br>STOT RE 2; H373:<br>0.2 % ≤ C < 1 % |

#### Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)  
IARC: 1: IARC group 1: carcinogenic to humans (International Agency for Research on Cancer)  
IOELV: Substance with a community indicative occupational exposure limit value

## Aniline phthalate spray solution for TLC

article number: **CP35**

### Remarks

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Wash with plenty of soap and water. In case of skin reactions, consult a physician.

#### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

#### Following ingestion

Rinse mouth. Do not induce vomiting. Call a doctor if you feel unwell.

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

Vomiting, Irritation, Dizziness, Drowsiness, Narcosis

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

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings  
water spray, foam, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Combustible. Vapours can form explosive mixtures with air.

#### Hazardous combustion products

May produce toxic fumes of carbon monoxide if burning.

### 5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

## Aniline phthalate spray solution for TLC

article number: CP35

### SECTION 6: Accidental release measures

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



##### For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Explosive properties.

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

##### Advice on how to contain a spill

Covering of drains.

##### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

##### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation.

##### • Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

##### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

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

Keep container tightly closed. Keep in a cool place.

##### Incompatible substances or mixtures

Observe hints for combined storage.

##### Consideration of other advice

Ground/bond container and receiving equipment.

## Aniline phthalate spray solution for TLC

article number: **CP35**

- **Ventilation requirements**

Use local and general ventilation.

- **Specific designs for storage rooms or vessels**

Recommended storage temperature: 2 – 8 °C.

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

#### Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent                   | CAS No  | Notation | Identifier | TWA [ppm] | TWA [mg/m <sup>3</sup> ] | STEL [ppm] | STEL [mg/m <sup>3</sup> ] | Ceiling-C [ppm] | Ceiling-C [mg/m <sup>3</sup> ] | Source |
|---------|---------------------------------|---------|----------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|--------|
| AU      | aniline                         | 62-53-3 |          | WES        | 2         | 7.6                      |            |                           |                 |                                | WES    |
| AU      | ethyl alcohol (ethanol)         | 64-17-5 |          | WES        | 1,000     | 1,880                    |            |                           |                 |                                | WES    |
| AU      | isopropyl alcohol (propan-2-ol) | 67-63-0 |          | WES        | 400       | 983                      | 500        | 1,230                     |                 |                                | WES    |

#### Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### Relevant DNELs/DMELs/PNECs and other threshold levels

- **relevant DNELs of components of the mixture**

| Name of substance | CAS No  | Endpoint | Threshold level         | Protection goal, route of exposure | Used in           | Exposure time              |
|-------------------|---------|----------|-------------------------|------------------------------------|-------------------|----------------------------|
| Ethanol           | 64-17-5 | DNEL     | 1,900 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | acute - systemic effects   |
| Ethanol           | 64-17-5 | DNEL     | 343 mg/kg               | human, dermal                      | worker (industry) | chronic - systemic effects |
| Ethanol           | 64-17-5 | DNEL     | 950 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| 2-Propanol        | 67-63-0 | DNEL     | 500 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| 2-Propanol        | 67-63-0 | DNEL     | 888 mg/kg bw/day        | human, dermal                      | worker (industry) | chronic - systemic effects |
| Phthalic acid     | 88-99-3 | DNEL     | 175 mg/m <sup>3</sup>   | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| Phthalic acid     | 88-99-3 | DNEL     | 10 mg/m <sup>3</sup>    | human, inhalatory                  | worker (industry) | chronic - local effects    |
| Phthalic acid     | 88-99-3 | DNEL     | 10 mg/m <sup>3</sup>    | human, inhalatory                  | worker (industry) | acute - local effects      |

## Aniline phthalate spray solution for TLC

article number: **CP35**

| Name of substance | CAS No  | Endpoint | Threshold level        | Protection goal, route of exposure | Used in           | Exposure time              |
|-------------------|---------|----------|------------------------|------------------------------------|-------------------|----------------------------|
| Phthalic acid     | 88-99-3 | DNEL     | 25 mg/kg bw/day        | human, dermal                      | worker (industry) | chronic - systemic effects |
| Aniline           | 62-53-3 | DNEL     | 7.7 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| Aniline           | 62-53-3 | DNEL     | 15.4 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | acute - systemic effects   |
| Aniline           | 62-53-3 | DNEL     | 2 mg/kg bw/day         | human, dermal                      | worker (industry) | chronic - systemic effects |
| Aniline           | 62-53-3 | DNEL     | 4 mg/kg bw/day         | human, dermal                      | worker (industry) | acute - systemic effects   |

### • relevant PNECs of components of the mixture

| Name of substance | CAS No  | Endpoint | Threshold level         | Environmental compartment    | Exposure time                |
|-------------------|---------|----------|-------------------------|------------------------------|------------------------------|
| Ethanol           | 64-17-5 | PNEC     | 0.79 mg/cm <sup>3</sup> | marine water                 | intermittent release         |
| Ethanol           | 64-17-5 | PNEC     | 2.75 mg/cm <sup>3</sup> | air                          | intermittent release         |
| Ethanol           | 64-17-5 | PNEC     | 3.6 mg/cm <sup>3</sup>  | freshwater sediment          | intermittent release         |
| Ethanol           | 64-17-5 | PNEC     | 580 mg/cm <sup>3</sup>  | sewage treatment plant (STP) | intermittent release         |
| Ethanol           | 64-17-5 | PNEC     | 0.63 mg/cm <sup>3</sup> | soil                         | intermittent release         |
| Ethanol           | 64-17-5 | PNEC     | 0.96 mg/cm <sup>3</sup> | freshwater                   | intermittent release         |
| 2-Propanol        | 67-63-0 | PNEC     | 140.9 mg/l              | freshwater                   | short-term (single instance) |
| 2-Propanol        | 67-63-0 | PNEC     | 140.9 mg/l              | marine water                 | short-term (single instance) |
| 2-Propanol        | 67-63-0 | PNEC     | 2,251 mg/l              | sewage treatment plant (STP) | short-term (single instance) |
| 2-Propanol        | 67-63-0 | PNEC     | 552 mg/kg               | freshwater sediment          | short-term (single instance) |
| 2-Propanol        | 67-63-0 | PNEC     | 552 mg/kg               | marine sediment              | short-term (single instance) |
| 2-Propanol        | 67-63-0 | PNEC     | 28 mg/kg                | soil                         | short-term (single instance) |
| Phthalic acid     | 88-99-3 | PNEC     | 1 mg/l                  | freshwater                   | short-term (single instance) |
| Phthalic acid     | 88-99-3 | PNEC     | 0.1 mg/l                | marine water                 | short-term (single instance) |
| Phthalic acid     | 88-99-3 | PNEC     | 21.3 mg/l               | sewage treatment plant (STP) | short-term (single instance) |
| Phthalic acid     | 88-99-3 | PNEC     | 3.8 mg/kg               | freshwater sediment          | short-term (single instance) |
| Phthalic acid     | 88-99-3 | PNEC     | 0.38 mg/kg              | marine sediment              | short-term (single instance) |

## Aniline phthalate spray solution for TLC

article number: **CP35**

| Name of substance | CAS No  | Endpoint | Threshold level | Environmental compartment    | Exposure time                |
|-------------------|---------|----------|-----------------|------------------------------|------------------------------|
| Phthalic acid     | 88-99-3 | PNEC     | 0.173 mg/kg     | soil                         | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 0.001 mg/l      | freshwater                   | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 0 mg/l          | marine water                 | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 2 mg/l          | sewage treatment plant (STP) | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 0.153 mg/kg     | freshwater sediment          | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 0.015 mg/kg     | marine sediment              | short-term (single instance) |
| Aniline           | 62-53-3 | PNEC     | 0.033 mg/kg     | soil                         | short-term (single instance) |

## 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection.

#### Skin protection



#### • hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

Butyl caoutchouc (butyl rubber)

#### • material thickness

>0,5 mm

#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### Splash protection - Protective gloves



## Aniline phthalate spray solution for TLC

article number: CP35

- **Type of material**

NBR (Nitrile rubber).

- **Material thickness**

>0,3 mm.

- **Breakthrough times of the glove material**

>120 minutes (permeation: level 4).

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

### Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

### Environmental exposure controls

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

|                 |                   |
|-----------------|-------------------|
| Physical state  | liquid (fluid)    |
| Colour          | colourless        |
| Odour           | like: alcohol     |
| Odour threshold | no data available |

#### Other physical and chemical parameters

|   |   |
|---|---|
| pH (value)                              | this information is not available                                       |
| Melting point/freezing point            | -114 °C (data apply to the main component)                              |
| Initial boiling point and boiling range | 78 °C at 1,013 hPa (data apply to the main component)                   |
| Flash point                             | >12 °C (data apply to the main component)                               |
| Evaporation rate                        | no data available   |
| Flammability (solid, gas)               | not relevant (fluid)  |
| <u>Explosive limits</u>                 |   |
| • lower explosion limit (LEL)           | 2 vol% (50 g/m <sup>3</sup> )<br>(data apply to the main component)     |
| • upper explosion limit (UEL)           | 27.7 vol% (330 g/m <sup>3</sup> )<br>(data apply to the main component) |
| Explosion limits of dust clouds         | not relevant  |
| Vapour pressure                         | this information is not available                                       |

## Aniline phthalate spray solution for TLC

article number: **CP35**

|                              |   |
|------------------------------|---|
| Density                      | 0.79 g/cm <sup>3</sup>                      |
| Vapour density               | this information is not available           |
| Bulk density                 | Not applicable                              |
| Relative density             | this information is not available           |
| <u>Solubility(ies)</u>       |   |
| Water solubility             | miscible in any proportion                  |
| <u>Partition coefficient</u> |   |
| n-octanol/water (log KOW)    | this information is not available           |
| Auto-ignition temperature    | 425 °C - (data apply to the main component) |
| Decomposition temperature    | no data available                           |
| Viscosity                    | not determined                              |
| Explosive properties         | Shall not be classified as explosive.       |
| Oxidising properties         | none  |

### 9.2 Other information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Risk of ignition. Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

Violent reaction with: Alkali metals, Alkaline earth metal, Perchlorates, Peroxides, Nitric acid, Strong oxidiser, Hydrogen peroxide, Permanganates, for example potassium permanganate

### 10.4 Conditions to avoid

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

### 10.5 Incompatible materials

different plastics

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Shall not be classified as acutely toxic.

## Aniline phthalate spray solution for TLC

article number: CP35

### • Acute toxicity of components of the mixture

| Name of substance | CAS No  | Exposure route     | ATE       |
|-------------------|---------|--------------------|-----------|
| Aniline           | 62-53-3 | oral               | 442 mg/kg |
| Aniline           | 62-53-3 | dermal             | 300 mg/kg |
| Aniline           | 62-53-3 | inhalation: vapour | 3 mg/l/4h |

### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

### Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

### • Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

### • Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

vomiting, nausea, Causes damage to liver through prolonged or repeated exposure if swallowed

#### • If in eyes

Causes serious eye irritation

#### • If inhaled

drowsiness, dizziness

#### • If on skin

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation)

### Other information

Other adverse effects: Headache, Vertigo

## Aniline phthalate spray solution for TLC

article number: CP35

### SECTION 12: Ecological information

#### 12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

##### Aquatic toxicity (acute)

##### Aquatic toxicity (acute) of components of the mixture

| Name of substance | CAS No  | Endpoint | Value               | Species               | Exposure time |
|-------------------|---------|----------|---------------------|-----------------------|---------------|
| Ethanol           | 64-17-5 | LC50     | 8,140 mg/l          | orfe (Leuciscus idus) | 96 h          |
| Ethanol           | 64-17-5 | EC50     | 9,000 – 14,000 mg/l | daphnia magna         | 48 h          |
| 2-Propanol        | 67-63-0 | LC50     | 9,640 mg/l          | Pimephales promelas   | 96 h          |
| Phthalic acid     | 88-99-3 | EC50     | >640 mg/l           | aquatic invertebrates | 48 h          |
| Aniline           | 62-53-3 | LC50     | 10.6 mg/l           | fish                  | 96 h          |
| Aniline           | 62-53-3 | EC50     | 0.16 mg/l           | aquatic invertebrates | 48 h          |
| Aniline           | 62-53-3 | ErC50    | 175 mg/l            | algae                 | 72 h          |

##### Aquatic toxicity (chronic)

##### Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No  | Endpoint | Value        | Species               | Exposure time |
|-------------------|---------|----------|--------------|-----------------------|---------------|
| 2-Propanol        | 67-63-0 | LC50     | >10,000 mg/l | aquatic invertebrates | 24 h          |
| Phthalic acid     | 88-99-3 | EC50     | 213 mg/l     | microorganisms        | 16 h          |
| Aniline           | 62-53-3 | EC50     | 0.044 mg/l   | aquatic invertebrates | 21 d          |

#### 12.2 Process of degradability

Data are not available.

##### Degradability of components of the mixture

| Name of substance | CAS No  | Process          | Degradation rate | Time |
|-------------------|---------|------------------|------------------|------|
| Ethanol           | 64-17-5 | biotic/abiotic   | 94 %             | d    |
| 2-Propanol        | 67-63-0 | biotic/abiotic   | 95 %             | 21 d |
| 2-Propanol        | 67-63-0 | oxygen depletion | 53 %             | 5 d  |
| Phthalic acid     | 88-99-3 | oxygen depletion | 74 %             | 30 d |
| Aniline           | 62-53-3 | oxygen depletion | 70 %             | 15 d |
| Aniline           | 62-53-3 | DOC removal      | 100 %            | 5 d  |

## Aniline phthalate spray solution for TLC

article number: **CP35**

### 12.3 Bioaccumulative potential

Data are not available.

#### Bioaccumulative potential of components of the mixture

| Name of substance | CAS No  | BCF  | Log KOW                     | BOD5/COD |
|-------------------|---------|------|-----------------------------|----------|
| Ethanol           | 64-17-5 |      | -0.31                       |          |
| 2-Propanol        | 67-63-0 |      | 0.05                        |          |
| Phthalic acid     | 88-99-3 | 3.16 | 0.73 (pH value: 1)          |          |
| Aniline           | 62-53-3 | 2.6  | 0.91 (pH value: 7.5, 25 °C) |          |

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

# Safety data sheet



Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: CP35

### SECTION 14: Transport information

|             |   |  |
|-------------|---|--|
| <b>14.1</b> | UN number   | <b>1993</b>  |
| <b>14.2</b> | UN proper shipping name<br>Hazardous ingredients  | <b>FLAMMABLE LIQUID, N.O.S.</b><br>Ethanol, Aniline  |
| <b>14.3</b> | Transport hazard class(es)  |   |
|             | Class   | 3 (flammable liquids)  |
| <b>14.4</b> | Packing group   | II (substance presenting medium danger)  |
| <b>14.5</b> | Environmental hazards   | none (non-environmentally hazardous acc. to the dangerous goods regulations)   |
| <b>14.6</b> | <b>Special precautions for user</b><br>Provisions for dangerous goods (ADR) should be complied within the premises.           |  |
| <b>14.7</b> | <b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b><br>The cargo is not intended to be carried in bulk. |  |
| <b>14.8</b> | <b>Information for each of the UN Model Regulations</b>   |  |
|             | <b>• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)</b>   |  |
|             | UN number   | 1993   |
|             | Proper shipping name  | FLAMMABLE LIQUID, N.O.S.   |
|             | Particulars in the transport document   | UN1993, FLAMMABLE LIQUID, N.O.S., (contains: Ethanol, Aniline), 3, II, (D/E), special provision 640D<br>Special provision 640D |
|             | Class   | 3  |
|             | Classification code   | F1   |
|             | Packing group   | II   |
|             | Danger label(s)   | 3  |
|             |    |  |
|             | Special provisions (SP)   | 274, 601, 640D   |
|             | Excepted quantities (EQ)  | E2   |
|             | Limited quantities (LQ)   | 1 L  |
|             | Transport category (TC)   | 2  |
|             | Tunnel restriction code (TRC)   | D/E  |
|             | Hazard identification No  | 33   |
|             | <b>Emergency Action Code</b>  | 3YE  |
|             | <b>• International Maritime Dangerous Goods Code (IMDG)</b>   |  |
|             | UN number   | 1993   |

# Safety data sheet

Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: **CP35**

|  |   |
|--|---|
| Proper shipping name                     | FLAMMABLE LIQUID, N.O.S.  |
| Particulars in the shipper's declaration | UN1993, FLAMMABLE LIQUID, N.O.S., (contains: Ethanol, Aniline), 3, II, >12°C c.c. |
| Class                                    | 3   |
| Marine pollutant                         | -   |
| Packing group                            | II  |
| Danger label(s)                          | 3   |



|                          |                 |
|--------------------------|-----------------|
| Special provisions (SP)  | 274             |
| Excepted quantities (EQ) | E2              |
| Limited quantities (LQ)  | 1 L             |
| EmS                      | F-E, <u>S-E</u> |
| Stowage category         | B               |

### • International Civil Aviation Organization (ICAO-IATA/DGR)

|  |   |
|--|---|
| UN number                                | 1993  |
| Proper shipping name                     | Flammable liquid, n.o.s.  |
| Particulars in the shipper's declaration | UN1993, Flammable liquid, n.o.s., (contains: Ethanol, Aniline), 3, II |
| Class                                    | 3   |
| Packing group                            | II  |
| Danger label(s)                          | 3   |



|                          |     |
|--------------------------|-----|
| Special provisions (SP)  | A3  |
| Excepted quantities (EQ) | E2  |
| Limited quantities (LQ)  | 1 L |

## SECTION 15: Regulatory information

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

#### National inventories

## Aniline phthalate spray solution for TLC

article number: **CP35**

| Country | National inventories | Status                         |
|---------|----------------------|--------------------------------|
| AU      | AICS                 | all ingredients are listed     |
| CA      | DSL                  | all ingredients are listed     |
| CN      | IECSC                | all ingredients are listed     |
| EU      | ECSI                 | all ingredients are listed     |
| EU      | REACH Reg.           | all ingredients are listed     |
| JP      | CSCL-ENCS            | all ingredients are listed     |
| JP      | ISHA-ENCS            | not all ingredients are listed |
| KR      | KECI                 | all ingredients are listed     |
| MX      | INSQ                 | all ingredients are listed     |
| NZ      | NZIoC                | all ingredients are listed     |
| PH      | PICCS                | all ingredients are listed     |
| TR      | CICR                 | not all ingredients are listed |
| TW      | TCSI                 | all ingredients are listed     |
| US      | TSCA                 | all ingredients are listed     |

### Legend

|            |   |
|------------|---|
| AICS       | Australian Inventory of Chemical Substances                             |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

| Section | Former entry (text/value)  | Actual entry (text/value)  | Safety-relevant |
|---------|--|--|-----------------|
| 14.8    | Particulars in the transport document:<br>UN1993, FLAMMABLE LIQUID, N.O.S., (contains:<br>Ethanol, Aniline), 3, II, (D/E), special provision<br>640C<br>Special provision 640C | Particulars in the transport document:<br>UN1993, FLAMMABLE LIQUID, N.O.S., (contains:<br>Ethanol, Aniline), 3, II, (D/E), special provision<br>640D<br>Special provision 640D | yes             |
| 14.8    | Special provisions (SP):<br>274, 601, 640C   | Special provisions (SP):<br>274, 601, 640D   | yes             |



## Aniline phthalate spray solution for TLC

article number: **CP35**

### Abbreviations and acronyms

| Abbr.           | Descriptions of used abbreviations  |
|-----------------|---|
| Acute Tox.      | acute toxicity  |
| ADN             | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR             | Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)                                       |
| Aquatic Acute   | hazardous to the aquatic environment - acute hazard   |
| Aquatic Chronic | hazardous to the aquatic environment - chronic hazard   |
| ATE             | Acute Toxicity Estimate   |
| BCF             | bioconcentration factor   |
| BOD             | Biochemical Oxygen Demand   |
| Carc.           | carcinogenicity   |
| CAS             | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| Ceiling-C       | ceiling value   |
| CMR             | Carcinogenic, Mutagenic or toxic for Reproduction   |
| COD             | chemical oxygen demand  |
| DGR             | Dangerous Goods Regulations (see IATA/DGR)  |
| DMEL            | Derived Minimal Effect Level  |
| DNEL            | Derived No-Effect Level   |
| EC50            | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval                                      |
| EC No           | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)                                     |
| EINECS          | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS          | European List of Notified Chemical Substances   |
| EmS             | Emergency Schedule  |
| ErC50           | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control  |
| Eye Dam.        | seriously damaging to the eye   |
| Eye Irrit.      | irritant to the eye   |
| Flam. Liq.      | flammable liquid  |
| GHS             | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| IARC            | International Agency for Research on Cancer   |
| IATA            | International Air Transport Association   |
| IATA/DGR        | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO            | International Civil Aviation Organization   |
| IMDG            | International Maritime Dangerous Goods Code   |
| index No        | the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008  |

## Aniline phthalate spray solution for TLC

article number: **CP35**

| Abbr.       | Descriptions of used abbreviations  |
|-------------|---|
| LC50        | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval                       |
| log KOW     | n-octanol/water   |
| MARPOL      | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")   |
| Muta.       | germ cell mutagenicity  |
| NLP         | No-Longer Polymer   |
| PBT         | Persistent, Bioaccumulative and Toxic   |
| PNEC        | Predicted No-Effect Concentration   |
| ppm         | parts per million   |
| REACH       | Registration, Evaluation, Authorisation and Restriction of Chemicals  |
| RID         | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| Skin Corr.  | corrosive to skin   |
| Skin Irrit. | irritant to skin  |
| Skin Sens.  | skin sensitisation  |
| STEL        | short-term exposure limit   |
| STOT RE     | specific target organ toxicity - repeated exposure  |
| STOT SE     | specific target organ toxicity - single exposure  |
| TWA         | time-weighted average   |
| vPvB        | very Persistent and very Bioaccumulative  |
| WES         | Safe Work Australia: Workplace exposure standards for airborne conatminants   |

### Key literature references and sources for data

- UN Recommendations on the Transport of Dangerous Good
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text                                |
|------|-------------------------------------|
| H225 | highly flammable liquid and vapour  |
| H301 | toxic if swallowed                  |
| H311 | toxic in contact with skin          |
| H315 | causes skin irritation              |
| H317 | may cause an allergic skin reaction |
| H318 | causes serious eye damage           |
| H319 | causes serious eye irritation       |
| H331 | toxic if inhaled                    |
| H335 | may cause respiratory irritation    |
| H336 | may cause drowsiness or dizziness   |

# Safety data sheet

Safe Work Australia - Code of Practice



## Aniline phthalate spray solution for TLC

article number: **CP35**

| Code | Text  |
|------|---|
| H341 | suspected of causing genetic defects                              |
| H351 | suspected of causing cancer                                       |
| H372 | causes damage to organs through prolonged or repeated exposure    |
| H373 | may cause damage to organs through prolonged or repeated exposure |
| H400 | very toxic to aquatic life  |
| H411 | toxic to aquatic life with long lasting effects                   |

### Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.