1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Phenolphthalein, solution 1% in ethanol, indicator
- **Article number:** FE0496
- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the preparation:** Laboratory reagent
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Scharlab, S.L.
    C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
    08181 Sentmenat (Barcelona) SPAIN
    Tel: (+34) 93 715 19 39 - FAX: (+34) 93 715 27 65
    email: scharlab@scharlab.com
    Internet Web Site: www.scharlab.com
  - **Regional representation:** Chem-Supply Pty Ltd
    38-50 Bedford Street
    Gillman South Australia 5013 AUSTRALIA
    Tel: (08) 8440 2000 - FAX: (08) 8440 2001
    email: info@chemsupply.com.au
    Internet Web Site: www.chemsupply.com.au
- **Further information obtainable from:** technical department
- **Emergency telephone number:** EMERGENCY CONTACT NUMBER: +61 08 8440 2000
  Business hours: 8:30am to 5:00pm, Monday to Friday.

2 Hazards identification

- **Classification of the substance or mixture**
  - GHS02 flame
    H226  Flammable liquid and vapour.
  - GHS08 health hazard
    H341  Suspected of causing genetic defects.
    H350  May cause cancer.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - T; Toxic
    R45:  May cause cancer.
  - Xn; Harmful
    R68:  Possible risk of irreversible effects.
    R10:  Flammable.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

(Contd. on page 2)
Trade name: Phenolphthalein, solution 1% in ethanol, indicator

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements
- GHS label elements
  The product is classified and labelled according to the Globally Harmonized System (GHS).

Hazard pictograms
- GHS02
- GHS08

Signal word: Danger

Hazard-determining components of labelling:
- phenolphthalein

Hazard statements
- Flammable liquid and vapour.
- Suspected of causing genetic defects.
- May cause cancer.

Precautionary statements
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

Information concerning particular hazards for human and environment:
- Safety phrases:
  53 Avoid exposure - obtain special instructions before use.
  36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
  45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

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

Dangerous components:
- CAS: 64-17-5
  - ethanol
  - 50-100%
- CAS: 77-09-8
  - phenolphthalein
  - 1-5%
- EINECS: 201-004-7
  - T Carc. Cat. 2 R45; Xn R62-68
  - Muta. Cat. 3, Repr. Cat. 3
  - H341; H350; H361

(Contd. on page 3)
4 First aid measures

- **Description of first aid measures**
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Generally the product does not irritate the skin.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** If symptoms persist consult doctor.

- **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 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.
  - **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture**
  No further relevant information available.

- **Advice for firefighters**
  - **Protective equipment:** No special measures required.
  - **Hazchem code:** •3Y

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.

- **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.
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents

- **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**
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
  - **Information about fire - and explosion protection:**
    Keep ignition sources away - Do not smoke.

(Contd. on page 4)
Trade name: Phenolphthalein, solution 1% in ethanol, indicator

Protect against electrostatic charges.
Keep respiratory protective device available.

- 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/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:
    - 64-17-5 ethanol
      - NES 1880 mg/m³, 1000 ppm
  - 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.
      - Store protective clothing separately.
    - Respiratory protection:
      - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - Protection of hands:
    - Protective gloves
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    - Material of gloves
      - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
      - Penetration time of glove material
        - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Fluid
  - Colour: According to product specification
- Odour:
  - Odour: Characteristic
  - Odour threshold: Not determined.
- pH-value:
  - pH-value: Not determined.
- Change in condition
  - Melting point/Melting range: -114.5 °C
  - Boiling point/Boiling range: 78 °C
- Flash point:
  - Flash point: 23 °C
- Flammability (solid, gaseous):
  - Not applicable.
- Ignition temperature:
  - Ignition temperature: 425 °C
- Decomposition temperature:
  - Not determined.
- Self-igniting:
  - Product is not self-igniting.
- Danger of explosion:
  - Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- Explosion limits:
  - Lower: 3.5 Vol %
  - Upper: 15 Vol %
- Vapour pressure at 20 °C:
  - 59 hPa
- Density at 20 °C:
  - 0.7912 g/cm³
- Relative density:
  - Not determined.
- Vapour density:
  - Not determined.
- Evaporation rate:
  - Not determined.
- Solubility in / Miscibility with water at 20 °C:
  - 1 g/l
- Partition coefficient (n-octanol/water):
  - Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - Organic solvents: 98.8 %
- Solids content:
  - 1.2 %
- Other information:
  - No further relevant information available.
10 Stability and reactivity

- Reactivity
- 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:
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
  - 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:
      - Carcinogenic.
    - CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): Muta. 2, Carc. 1A

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 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - 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.
Safety data sheet
according to 1907/2006/EC, Article 31 (REACH)


Trade name: Phenolphthalein, solution 1% in ethanol, indicator

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADG, IMDG, IATA: UN1993
  - UN proper shipping name: 1993 FLAMMABLE LIQUID, N.O.S., mixture
  - ADG: FLAMMABLE LIQUID, N.O.S., mixture
- IMDG, IATA: FLAMMABLE LIQUID, N.O.S., mixture
- Transport hazard class(es)
  - ADG, IMDG, IATA: Class 3 Flammable liquids.
  - Label: 3
  - Packing group
    - ADG, IMDG, IATA: III
  - Environmental hazards:
    - Marine pollutant: No
  - Special precautions for user:
    - Warning: Flammable liquids.
    - Danger code (Kemler): 30
    - EMS Number: F-E,S-D
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
  - Not applicable.
- Transport/Additional information:
  - ADG
    - Limited quantities (LQ): 5L
    - Transport category: 3
    - Tunnel restriction code: D/E
    - UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., mixture, 3, III
    - Hazchem code: •3Y

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Australian Inventory of Chemical Substances: All ingredients are listed.
  - Standard for the Uniform Scheduling of Drugs and Poisons: 77-09-8 phenolphthalein: S4
  - GHS label elements: The product is classified and labelled according to the Globally Harmonized System (GHS).

(Contd. of page 6)

(Contd. on page 8)
Trade name: Phenolphthalein, solution 1% in ethanol, indicator

- **Hazard pictograms**
  - GHS02
  - GHS08

- **Signal word** Danger

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

- **Hazard statements**
  - Flammable liquid and vapour.
  - Suspected of causing genetic defects.
  - May cause cancer.

- **Precautionary statements**
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**

- **Information about limitation of use:**
  - Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- **Other regulations, limitations and prohibitive regulations**

- **Substances of very high concern (SVHC) according to REACH, Article 57**
  - 77-09-8 phenolphthalein

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

---

16 **Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H341 Suspected of causing genetic defects.
  - H350 May cause cancer.
  - H361 Suspected of damaging fertility or the unborn child.
  - R11 Highly flammable.
  - R45 May cause cancer.
  - R62 Possible risk of impaired fertility.
  - R68 Possible risk of irreversible effects.

- **Department issuing MSDS:** product safety department

- **Contact:** msds@scharlab.com

- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organization
  - 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