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

- **Product identifier**
- **Trade name:** Nitromethane, extra pure, Reag. Ph Eur
- **Article number:** NI0370
- **CAS Number:** 75-52-5
- **EC number:** 200-876-6
- **Index number:** 609-036-00-7
- **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.
  - **GHS07**
  - **H302** Harmful if swallowed.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

- **Xn; Harmful**
- **R22:** Harmful if swallowed.
- **R5-10:** Heating may cause an explosion. Flammable.
- **Information concerning particular hazards for human and environment:** Not applicable.

(Contd. on page 2)
Trade name: Nitromethane, extra pure, Reag. Ph Eur

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

GHS02  GHS07

- Signal word Warning
- Hazard statements
  Flammable liquid and vapour.
  Harmful if swallowed.
- 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.
  Ground/bond container and receiving equipment.
  IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

Information concerning particular hazards for human and environment:
- Safety phrases:
  2 Keep out of the reach of children.
  41 In case of fire and/or explosion do not breathe fumes.
- Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Substances
  - CAS No. Description
    75-52-5 nitromethane
  - Identification number(s)
  - EC number: 200-876-6
  - Index number: 609-036-00-7

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: 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: Call for a doctor immediately.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    No further relevant information available.

(Contd. on page 3)
5 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture**
  - During heating or in case of fire poisonous gases are produced.

- **Advice for firefighters**
  - **Protective equipment:** Mouth respiratory protective device.
  - **Hazchem code:** 2Y

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Mount respiratory protective device.
  - 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.

- **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:**
    - Keep ignition sources away - Do not smoke.
    - Protect from heat.
    - 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:** Store in a cool location.
    - **Further information about storage conditions:**
      - Keep container tightly sealed.
      - Store in cool, dry conditions in well sealed receptacles.
  - **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.
Trade name: Nitromethane, extra pure, Reag. Ph Eur

- Control parameters
- Ingredients with limit values that require monitoring at the workplace:
  75-52-5 nitromethane
  NES 50 mg/m³, 20 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. Wash hands before breaks and at the end of work.
  - Respiratory protection: Not required.
  - Protection of hands:
    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.
  - 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.
  - Eye protection:
    Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Fluid
    - Colour: Colourless
    - Odour: Characteristic
    - Odour threshold: Not determined.
    - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: -29.2 °C
    - Boiling point/Boiling range: 101.2 °C
  - Flash point: 36 °C
  - Flammability (solid, gaseous): Not applicable.
  - Ignition temperature: 415 °C
  - Decomposition temperature: Not determined.
  - Self-igniting: Not determined.
  - Danger of explosion: Heating may cause an explosion.
Trade name: Nitromethane, extra pure, Reag. Ph Eur

- Explosion limits:
  - Lower: 7.1 Vol %
  - Upper: 63 Vol %
- Vapour pressure at 20 °C: 36 hPa
- Density at 20 °C: 1.13816 g/cm³
- Relative density
  - Not determined.
- Vapour density
  - Not determined.
- Evaporation rate
  - Not determined.
- Solubility in / Miscibility with water at 20 °C: 5 g/l
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- 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:
  - LD/LC50 values relevant for classification:
    - Oral LD50 940 mg/kg (rat)
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.

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) (Assessment by list): hazardous for water
    - Do not allow product to reach ground water, water course or sewage system.
Trade name: Nitromethane, extra pure, Reag. Ph Eur

(Contd. of page 5)

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: UN1261
- UN proper shipping name
  - ADG: 1261 NITROMETHANE
  - IMDG, IATA: NITROMETHANE
- Transport hazard class(es)
  - ADG, IMDG, IATA
  - Class: 3 Flammable liquids.
  - Label: 3
  - Packing group: II
  - Environmental hazards:
    - Marine pollutant: No
    - Special precautions for user: Warning: Flammable liquids.
    - Danger code (Kemler): -
    - 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): 1L
    - Transport category: 2
    - Tunnel restriction code: E
    - UN "Model Regulation": UN1261, NITROMETHANE, 3, II
    - Hazchem code: •2Y

(Contd. on page 7)
Safety data sheet according to 1907/2006/EC, Article 31 (REACH)


Trade name: Nitromethane, extra pure, Reag. Ph Eur

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Australian Inventory of Chemical Substances Substance is listed.
  - Standard for the Uniform Scheduling of Drugs and Poisons Substance is not listed.
- GHS label elements
  The substance is classified and labelled according to the Globally Harmonized System (GHS).
- Hazard pictograms
  - GHS02
  - GHS07

- Signal word Warning
- Hazard statements
  Flammable liquid and vapour.
  Harmful if swallowed.
- 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.
  Ground/bond container and receiving equipment.
  IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- 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.

- 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
  - ADG: Australian Code for the Transport of Dangerous Goods by Road & Rail
  - 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
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent