# SAFETY DATA SHEET

PROPIONIC ACID



**Compilation date:** 10/06/2015

**Revision No:** 1

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

### 1.1. Product identifier

**Product name:** PROPIONIC ACID

**CAS number:** 79-09-4

**EINECS number:** 201-176-3

**Index number:** 607-089-00-0

**Product code:** A70592

**Synonyms:** PROPANOIC ACID

PROPANYL ACID

ACID C3

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

**Use of substance / mixture:** Laboratory Chemicals, Manufacture of Substances.

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

**Company name:** PHILIP HARRIS

2 Gregory Street

Hyde

Cheshire

SK14 4HR

United Kingdom

**Tel:** +44 (0)845 1200 506

**Fax:** +44 (0)161 367 2140

**Email:** enquiries@philipharris.co.uk

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 845 1200 506

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Skin Corr. 1B: H314; STOT SE 3: H335; Flam. Liq. 3: H226

**Most important adverse effects:** Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause respiratory irritation.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H226: Flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

[cont...]

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion

GHS07: Exclamation mark

GHS02: Flame

**Precautionary statements:** P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P403+233: Store in a well-ventilated place. Keep container tightly closed.

### 2.3. Other hazards

**Other hazards:** The substance is not classified as hazardous to health or the environment according to the CLP regulation. This substance is not classified as dangerous according to Directive 67/548/EEC.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** PROPIONIC ACID...100%

**CAS number:** 79-09-4

**EINECS number:** 201-176-3

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Remove contact lenses, if present and easy to do. Consult a doctor.

**Ingestion:** Wash out mouth with water. Never give anything by mouth to an unconcious person Give nothing to eat or drink. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing is irregular or stopped, administer artifical respiration. Consult a doctor.

[cont...]

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

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

**Immediate / special treatment:** IF exposed or if you feel unwell: Call a POISON CENTRE or DOCTOR. Show this safety data sheet to the doctor in attendance. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** CO2, extingushing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. Suitable extinguishing media for the surrounding fire should be used.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

## Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove sources of ignition.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Discharge into the environment must be avoided.

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

**Clean-up procedures:** Contain spillage, and then collect with an electronically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 13 of SDS.

## Section 7: Handling and storage

[cont...]

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - no smoking. For precautions see section 2.2

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

**Storage conditions:** Keep container tightly closed. Store in a cool, well ventilated area. Containers which are open must be carefully resealed and kept upright to prevent leakage.

### 7.3. Specific end use(s)

**Specific end use(s):** Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** **Respirable dust**

| State | 8 hour TWA | 15 min. STEL | 8 hour TWA | 15 min. STEL |
|---|---|---|---|---|
| UK | 31 mg/m3 | 46 mg/m3 | - | - |

**Hazardous ingredients:**

**PROPIONIC ACID...100%**

**Workplace exposure limits:** **Respirable dust**

| State | 8 hour TWA | 15 min. STEL | 8 hour TWA | 15 min. STEL |
|---|---|---|---|---|
| UK | 31 mg/m3 | 46 mg/m3 | - | - |

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Technical measures and the application of suitable work processes have priority over personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a back up to engineering controls.

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

[cont...]

Break through time: 480 min

Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M) Splash contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 120 min

Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M

**Eye protection:** Face shield and safety glasses. Use equipment for eye protection test and approved under approperiate government statments such as NIOSH (US) or EN 166(EU)

**Skin protection:** Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Section 9: Physical and chemical properties

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

**State:** Solid

**Colour:** No data available

**Odour:** No data available

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** No data available.

**Also soluble in:** No data available.

**Viscosity:** No data available.

**Viscosity test method:** No data available.

**Boiling point/range°C:** 141

**Melting point/range°C:** 173

**Flammability limits %: lower:** No data available.

**upper:** No data available.

**Flash point°C:** 54

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** No data available.

**Vapour pressure:** No data available.

**Relative density:** No data available.

**pH:** 2.5

**VOC g/l:** No data available.

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** No data available.

### 10.2. Chemical stability

**Chemical stability:** Stable at room temperature.

[cont...]

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** No data available.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Flames. Sparks

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes. In the event of fire see section 5.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicity values:**

| Route | Species | Test | Value | Units |
|---|---|---|---|---|
| ORL | RAT | LD50 | 2600 | mg/kg |
| IVN | MUS | LD50 | 625 | mg/kg |

**Hazardous ingredients:**

**PROPIONIC ACID...100%**

| | | | | |
|---|---|---|---|---|
| IVN | MUS | LD50 | 625 | mg/kg |
| ORL | RAT | LD50 | 2600 | mg/kg |

**Relevant hazards for substance:**

| Hazard | Route | Basis |
|---|---|---|
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |
| STOT-single exposure | INH | Hazardous: calculated |

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

[cont...]

### 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Partition coefficient: n-octanol/water 0.04 (20°C)

### 12.4. Mobility in soil

**Mobility:** No data available.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN3463

### 14.2. UN proper shipping name

**Shipping name:** PROPIONIC ACID

### 14.3. Transport hazard class(es)

**Transport class:** 8 (3)

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** No **Marine pollutant:** No

### 14.6. Special precautions for user

**Tunnel code:** D/E

**Transport category:** 2

## Section 15: Regulatory information

[cont...]

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

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H226: Flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H335: May cause respiratory irritation.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.