

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifiers**Product name: **LEAD FOIL**CAS-No.: **7439-92-1**Product Number: **A68664****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

1.4 Emergency telephone numberEmergency Phone #: **+44 (0)845 1200 506****2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

According to Regulation (EC) No1272/2008; Reproductive toxicity (Category 1A), Acute toxicity, Inhalation (Category 4), Acute toxicity, Oral (Category 4), Specific target organ toxicity - repeated exposure (Category 2), Acute aquatic toxicity (Category 1), Chronic aquatic toxicity (Category 1).

According to European Directive 67/548/EEC as amended: May cause harm to the unborn child. Danger of cumulative effects. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Possible risk of impaired fertility. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Pictogram

Signal word

Danger

Hazard statement(s): H302 Harmful if swallowed. H332 Harmful if inhaled. H360 May damage fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s): P201 Obtain special instructions before use. P273 Avoid release to the environment. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P501 Dispose of contents/ container to an approved waste disposal plant.

Restricted to professional users.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s): R61 May cause harm to the unborn child. R48/20/22 Also harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. R33 Danger of cumulative effects. R40 Limited evidence of a carcinogenic effect. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R62 Possible risk of impaired fertility.

S-phrase(s): S53 Avoid exposure - obtain special instructions before use. S36/37 Wear suitable protective clothing and gloves. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S60 This material and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Restricted to professional users.

2.3 Other hazards – no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Lead

Formula:	Pb
Molecular Weight:	207.2g/mol
CAS-No.:	7439-92-1
EC-No.:	231-100-4

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed: Anaemia

4.3 Indication of immediate medical attention and special treatment needed: no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Lead oxides

5.3 Precautions for fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information: no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections: For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses: no data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Lead	7439-92-1	CEIL	0.15mg/m ³	CLAW 2002 UK
Lead	7439-92-1	TWA	0.15mg/m ³	EU

UK. EH40 WEL – Workplace Exposure Limits. Remarks The occupational exposure limits for lead are set out in the Control of Lead at Work Regulations 2002 (CLAW). The limits are 8-hour TWA concentrations as follows: (a) in relation to lead other than lead alkyls, a concentration of lead in the atmosphere to which any employee is exposed of 0,15 mg/m³; and (b) in relation to lead alkyls, a concentration of lead in the atmosphere to which any employee is exposed of 0,10 mg/m³. When determining lead-in-air concentrations for comparison with the occupational exposure limits, the

method referred to in regulation 9 of CLAW described in "Control of lead at work. Unlike the former lead-in-air standards which could be exceeded in certain specified circumstances, the exposure limits for lead are ceiling limits which not be exceeded when calculated as time weighted averages over 8 hours. As far as exposure by inhalation is concerned, control is considered adequate when exposure does not exceed the appropriate exposure limit. It should be remembered that other routes of exposure to lead are also important, e.g. ingestion, or contact with the skin where there is exposure to lead alkyls. Substances and processes capable of causing cancer and/or heritable genetic damage.

Europe. Chemical Agents Directive - Annex I: Binding occupational exposure limit values Binding.

Biological occupational exposure limits

Component	CAS No.	Parameters	Value	Specimen
Lead	7439-92-1	Lead	0.7mg/l	Blood

Remarks Biological monitoring must include measuring the blood-lead level (PbB) using absorption spectrometry or a method giving equivalent results., Medical surveillance is carried out if: - exposure to a concentration of lead in air is greater than 0,075 mg/m³, calculated as a time-weighted average over 40 hours per week, or - a blood-lead level greater than 40 µg Pb/100 ml blood is measured in individual workers. Practical guidelines for biological monitoring and medical surveillance must be developed in accordance with article 12, paragraph 2. These include recommendations of biological indicators (e.g. ALAU, ZPP, ALAD) and biological monitoring strategies.

8.2 Exposure controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Genotoxicity in vivo - rat – Inhalation. Cytogenetic analysis

Carcinogenicity: Limited evidence of carcinogenicity in animal studies. IARC: 2B - Group 2B: Possibly carcinogenic to humans (Lead).

Reproductive toxicity: Suspected human reproductive toxicant.

Reproductive toxicity - rat – Inhalation. Effects on Newborn: Biochemical and metabolic.

Reproductive toxicity - rat – Oral. Effects on Newborn: Behavioural.

Reproductive toxicity - mouse – Oral. Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated). Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

Developmental Toxicity - rat – Inhalation. Effects on Embryo or Foetus: Fetotoxicity (except death, e.g., stunted foetus). Specific Developmental Abnormalities: Blood and lymphatic system (including spleen and marrow).

Developmental Toxicity - rat – Oral. Specific Developmental Abnormalities: Blood and lymphatic system (including spleen and marrow). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Developmental Toxicity - rat – Oral. Effects on Embryo or Foetus: Fetotoxicity (except death, e.g., stunted foetus). Effects on Embryo or Foetus: Foetal death.

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: no data available

Potential health effects

Inhalation Harmful if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin Harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure: Anemia

Additional Information: RTECS: OF7525000

12. ECOLOGICAL INFORMATION

12.1 Toxicity: Toxicity to fish mortality; LOEC - *Oncorhynchus mykiss* (rainbow trout) - 1.19mg/l-96h

LC50 - *Micropterus dolomieu* - 2.2mg/l-96h

mortality NOEC - *Salvelinus fontinalis* - 1.7mg/l-10d

Toxicity to daphnia and other aquatic invertebrates.

mortality LOEC - *Daphnia* - 0.17 mg/l - 24h

mortality NOEC - *Daphnia* - 0.099 mg/l - 24h

Toxicity to algae mortality EC50 - *Skeletonema costatum* - 7.94mg/l-10d

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: Bioaccumulation *Oncorhynchus kisutch* - 2 Weeks -150 µg/l

Bioconcentration factor (BCF): 12

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: no data available

12.6 Other adverse effects: Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the Material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for users

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available

15.2 Chemical Safety Assessment: no data available

16. OTHER INFORMATION

no data available