



SAFETY DATA SHEET LEAD SUBSTITUTE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name LEAD SUBSTITUTE
Product No. QFS300, QFS301

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

Identified uses Fuel additive.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED
BEVIS GREEN WORKS
WALMERSLEY
BURY
BL9 6RE
0161 764 5981
0161 797 5899
info@tetrosyl.com

Manufacturer TETROSYL LIMITED
BEVIS GREEN WORKS
WALMERSLEY
BURY
BL9 6RE
0161 764 5981
0161 797 5899
info@tetrosyl.com

1.4. Emergency telephone number

0161 764 5981

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R65.

2.2. Label elements

Contains Distillates (Petroleum), Hydrotreated Light; Kerosine - Unspecified

Detergent Labelling:

>= 30% Aliphatic hydrocarbons

Labelling



Harmful

Risk Phrases

R65

Harmful: may cause lung damage if swallowed.

LEAD SUBSTITUTE

Safety Phrases

S2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feeding stuffs.
S46	If swallowed, seek medical advice immediately and show this container or label.
S56	Dispose of this material and its container to hazardous or special waste collection point.

2.3. Other hazards**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

Distillates (Petroleum), Hydrotreated Light; Kerosine - Unspecified	60-100%
CAS-No.: 64742-47-8	EC No.: 265-149-8
Classification (EC 1272/2008) Asp. Tox. 1 - H304	Classification (67/548/EEC) Xn;R65
HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	1-5%
CAS-No.:	EC No.: 918-481-9
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Asp. Tox. 1 - H304	Classification (67/548/EEC) Xn;R65. R10.
KEROSENE	1-5%
CAS-No.:	EC No.: 232-366-4
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R65. Xi;R38. R10.
PETROLEUM DISTILLATES	<1%
CAS-No.: 64742-82-1	EC No.: 265-185-4
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. N;R51/53. R10,R66.

LEAD SUBSTITUTE

PETROLEUM NAPHTHA		<0.5
CAS-No.: 64742-94-5	EC No.: 265-198-5	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. Xi;R36/38. N;R51/53.	
PHENOL, (DIMETHYLAMINO)METHYL-,POLYISOBUTYLENE DERIVS.		1-5%
CAS-No.:	EC No.:	
Classification (EC 1272/2008) Aquatic Chronic 3 - H412	Classification (67/548/EEC) R52/53.	
POTASSIUM CARBOXYLATE		1-5%
CAS-No.: 3164-85-0	EC No.:	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38. R52.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Keep the affected person warm and at rest. Get prompt medical attention.

Inhalation

Get medical attention if any discomfort continues. Move injured person into fresh air immediately. Call an ambulance. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Bring these instructions.

Ingestion

Immediately rinse mouth and drink plenty of water. If person becomes uncomfortable or if ingested in large amounts (100-150 ml for an adult person): Take to hospital along with these instructions.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Rinse with water. Get medical attention if irritation persists after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Do not rub eye. Get medical attention promptly if symptoms occur after washing.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. NOTE! Effects may be delayed. Keep affected person under observation.

LEAD SUBSTITUTE

Inhalation.

No specific symptoms noted.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact

Skin irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Blistering may occur.

Eye contact

Irritating and may cause redness and pain. May cause blurred vision and serious eye damage.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Foam, carbon dioxide or dry powder. Water. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

No specific precautions due to the small quantities handled.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Leave danger zone immediately.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces. Avoid contact with eyes and prolonged skin contact. Provide adequate ventilation. Avoid inhalation of spray mist and contact with skin and eyes.

6.2. Environmental precautions

Avoid discharge into water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking.

Ventilate. Collect with absorbent, non-combustible material into suitable containers.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid eating, drinking and smoking when using the product. Avoid contact with skin and eyes. Do not handle broken packages without protective equipment.

LEAD SUBSTITUTE**7.2. Conditions for safe storage, including any incompatibilities**

Keep upright. Store in tightly closed original container. Keep away from heat, sparks and open flame.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****8.2. Exposure controls**

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

In case of inadequate ventilation use suitable respirator.

Hand protection

Use suitable protective gloves if risk of skin contact. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

Wash contaminated clothing before reuse. Wash promptly with soap & water if skin becomes contaminated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Clear liquid.
Colour	Orange.
Solubility	Insoluble in water
Initial boiling point and boiling range	175°C
Melting point (°C)	Scientifically unjustified.
Relative density	0.813g/cm 20°C
Vapour density (air=1)	Scientifically unjustified.
Vapour pressure	Scientifically unjustified.
Evaporation rate	Scientifically unjustified.
Viscosity	1 cSt 20°C
Decomposition temperature (°C)	Scientifically unjustified.

LEAD SUBSTITUTE

Odour Threshold, Lower
Scientifically unjustified.
Odour Threshold, Upper
Scientifically unjustified.
Flash point >76°C
Auto Ignition Temperature (°C)
Scientifically unjustified.
Flammability Limit - Lower(%)
Scientifically unjustified.
Flammability Limit - Upper(%)
Scientifically unjustified.
Partition Coefficient
(N-Octanol/Water)
Scientifically unjustified.
Oxidising properties
Not available.

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Reacts strongly with alkaline metals and metal powder.

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid exposing to heat and contact with strong oxidising substances.

10.5. Incompatible materials

Materials To Avoid
Strong oxidising substances.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Toxic Dose 1 - LD 50
>5000 (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; Kerosine - UNSPECIFIED) mg/kg (oral rat)
Toxic Conc. - LC 50
5200 (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; Kerosine - UNSPECIFIED) mg/m³/30h (inh-rat)

Inhalation
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Medical Considerations
Risk of chemical pneumonia after aspiration.

LEAD SUBSTITUTE**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity**

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l 2200 (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; Kerosine – UNSPECIFIED)

12.2. Persistence and degradability**Degradability**

There are no data on the degradability of this product.

12.3. Bioaccumulative potential**Bioaccumulative potential**

No data available on bioaccumulation.

Partition coefficient

Scientifically unjustified.

12.4. Mobility in soil**Adsorption/Desorption Coefficient**

Not available.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number**14.2. UN proper shipping name****14.3. Transport hazard class(es)****Transport Labels**

No transport warning sign required.

14.4. Packing group**14.5. Environmental hazards**

LEAD SUBSTITUTE

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code****SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	04/10/2012
Revision	6
Supersedes date	17/01/2012 v5
Safety Data Sheet Status	Approved.

Risk Phrases In Full

R10	Flammable
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R65	Harmful: may cause lung damage if swallowed.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H412	Harmful to aquatic life with long lasting effects.
H304	May be fatal if swallowed and enters airways.
EUH066	Repeated exposure may cause skin dryness or cracking.
H411	Toxic to aquatic life with long lasting effects.