



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 1 of 16  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 10.01.2014 / 0001  
Replaces revision of / Version: 17.10.2013 / 0001  
Valid from: 10.01.2014  
PDF print date: 17.09.2015  
Petrol Lead Replacement 1:1000

### Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

##### 1.1 Product identifier

**MPEX® PETROL LEAD REPLACEMENT (1:1000)**

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

**Relevant identified uses of the substance or mixture:**

Additive

**Uses advised against:**

No information available at present.

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

Leading Solvent Supplies Ltd, Marston Business Park, Rudgate, Tockwith, YO26 7QF, United Kingdom  
Telephone: ++44 (0)1423 358000, Fax: ++44 (0)1423 222012  
www.mpexdirect.com

Qualified person's e-mail address: sales@mpexdirect.com Please DO NOT use for requesting Safety Data Sheets.

##### 1.4 Emergency telephone

**Emergency information services / official advisory body:**

---

**Telephone number of the company in case of emergencies:**

Tel.: ++44 (0)1423 358000 (9.00 - 17.300h)

#### SECTION 2: Hazards identification

##### 2.1 Classification of the substance or mixture

###### 2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.

###### 2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

Dangerous for the environment, R52-53

Xn, Harmful, R65

R66

##### 2.2 Label elements

###### 2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 2 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 10.01.2014 / 0001  
 Replaces revision of / Version: 17.10.2013 / 0001  
 Valid from: 10.01.2014  
 PDF print date: 17.09.2015  
 Petrol Lead Replacement 1:1000



Danger

### Hazard statement

H319-Causes serious eye irritation. H315-Causes skin irritation. H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

### Prevention

P280-Wear protective gloves and eye/face protection.

### Response

P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. P314-Get medical advice/attention if you feel unwell.

### Disposal

P501-Dispose of contents/container in a safe way.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

## SECTION 3: Composition/information on ingredients

### 3.1 Substance

n.a.

### 3.2 Mixture

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	---
EINECS, ELINCS, NLP	918-481-9 (REACH-IT List-No.)
CAS	(64742-48-9)
content %	70-80
Classification according to Directive 67/548/EEC	Harmful, Xn, R65 R66
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304
Potassium salt of a carboxylic acid	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	-
CAS	CAS n.v.
content %	10-<20
Classification according to Directive 67/548/EEC	Irritant, Xi, R36/38



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 3 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

**Classification according to Regulation (EC) 1272/2008 (CLP)**

Eye Irrit. 2, H319  
Skin Irrit. 2, H315

### **Kerosine (petroleum)**

**Registration number (REACH)**

--

**Index**

649-404-00-4

**EINECS, ELINCS, NLP**

232-366-4

**CAS**

CAS 8008-20-6

**content %**

1-10

**Classification according to Directive 67/548/EEC**

Flammable, R10  
Irritant, Xi, R38  
Harmful, Xn, R65

**Classification according to Regulation (EC) 1272/2008 (CLP)**

Flam. Liq. 3, H226  
Asp. Tox. 1, H304

### **Naphtha (petroleum), hydrodesulfurized heavy**

**Registration number (REACH)**

--

**Index**

649-330-00-2

**EINECS, ELINCS, NLP**

265-185-4

**CAS**

CAS 64742-82-1

**content %**

1-5

**Classification according to Directive 67/548/EEC**

Flammable, R10  
Harmful, Xn, R48/20  
Dangerous for the environment, N, R51  
Dangerous for the environment, R53  
Harmful, Xn, R65  
R66  
R67

**Classification according to Regulation (EC) 1272/2008 (CLP)**

Flam. Liq. 3, H226  
Asp. Tox. 1, H304  
STOT SE 3, H336  
STOT RE 1, H372  
Aquatic Chronic 2, H411

### **Solvent naphtha (petroleum), heavy arom.**

**Registration number (REACH)**

--

**Index**

649-424-00-3

**EINECS, ELINCS, NLP**

265-198-5

**CAS**

CAS 64742-94-5

**content %**

0,1-<1

**Classification according to Directive 67/548/EEC**

Irritant, Xi, R36/38  
Dangerous for the environment, N, R51  
Dangerous for the environment, R53  
Harmful, Xn, R65

**Classification according to Regulation (EC) 1272/2008 (CLP)**

Flam. Liq. 3, H226  
Asp. Tox. 1, H304  
Eye Irrit. 2, H319  
Aquatic Chronic 2, H411

### **1,2,4-trimethylbenzene**

**Substance for which an EU exposure limit value applies.**

**Registration number (REACH)**

--

**Index**

601-043-00-3

**EINECS, ELINCS, NLP**

202-436-9

**CAS**

CAS 95-63-6

**content %**

0,01-<1

**Classification according to Directive 67/548/EEC**

Flammable, R10  
Harmful, Xn, R20  
Irritant, Xi, R36/37/38  
Dangerous for the environment, N, R51  
Dangerous for the environment, R53



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 4 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

### Classification according to Regulation (EC) 1272/2008 (CLP)

Flam. Liq. 3, H226  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
STOT SE 3, H335  
Skin Irrit. 2, H315  
Aquatic Chronic 2, H411

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

Danger of aspiration

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

Immediate admittance to a hospital.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Irritation of the eyes

With long-term contact:

Product removes fat.

Dermatitis (skin inflammation)

Inhalation:

Irritation of the respiratory tract

Dizziness

Headaches

Ingestion:

Nausea

Vomiting

Danger of aspiration

Oedema of the lungs

Chemical pneumonitis (condition similar to pneumonia)

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

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

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

#### Unsuitable extinguishing media

High volume water jet

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



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

GB

Page 5 of 16  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 10.01.2014 / 0001  
Replaces revision of / Version: 17.10.2013 / 0001  
Valid from: 10.01.2014  
PDF print date: 17.09.2015  
Petrol Lead Replacement 1:1000

In case of fire the following can develop:

Oxides of carbon

Toxic gases

Explosive vapour/air mixture

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

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

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping

### 6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

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

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Keep out of access to unauthorised individuals.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Solvent resistant floor

Do not store with oxidizing agents.

Protect from direct sunlight and warming.

Store in a well ventilated place.



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 6 of 16  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 10.01.2014 / 0001  
 Replaces revision of / Version: 17.10.2013 / 0001  
 Valid from: 10.01.2014  
 PDF print date: 17.09.2015  
 Petrol Lead Replacement 1:1000

Store in a dry place.  
**7.3 Specific end use(s)**  
 No information available at present.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):  
 550 mg/m<sup>3</sup>

<b>Chemical Name</b>	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Content %:70-80
WEL-TWA: 800 mg/m <sup>3</sup>	WEL-STEL: ---	---
BMGV: ---	Other information: (WEL acc. to RCP-method, EH40)	
<b>Chemical Name</b>	Kerosine (petroleum)	Content %:1-10
WEL-TWA: 500 mg/m <sup>3</sup> (Aromatics)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
<b>Chemical Name</b>	Naphtha (petroleum), hydrodesulfurized heavy	Content %:1-5
WEL-TWA: 100 mg/m <sup>3</sup> (AGW)	WEL-STEL: 2(II) (AGW)	---
BMGV: ---	Other information: ---	
<b>Chemical Name</b>	Solvent naphtha (petroleum), heavy arom.	Content %:0,1-<1
WEL-TWA: 500 mg/m <sup>3</sup> (Aromatics)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
<b>Chemical Name</b>	1,2,4-trimethylbenzene	Content %:0,01-<1
WEL-TWA: 25 ppm (125 mg/m <sup>3</sup> ) (Trimethylbenzenes, all isomers or mixtures) (WEL), 20 ppm (100 mg/m <sup>3</sup> ) (EU)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

1,2,4-trimethylbenzene						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	100	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	100	mg/m <sup>3</sup>	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	16171	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	100	mg/m <sup>3</sup>	
Workers / employees	Human - blood	Long term, local effects	DNEL	100	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	29,4	mg/m <sup>3</sup>	



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 7 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

Consumer	Human - inhalation	Long term, local effects	DNEL	29,4	mg/m <sup>3</sup>	
Consumer	Human - dermal	Long term, systemic effects	DNEL	9512	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	29,4	mg/m <sup>3</sup>	
Consumer	Human - oral	Long term, systemic effects	DNEL	15	mg/kg bw/d	
Consumer	Human - inhalation	Long term, local effects	DNEL	29,4	mg/m <sup>3</sup>	
	Environment - freshwater		PNEC	0,12	mg/l	
	Environment - marine		PNEC	0,12	mg/l	
	Environment - sewage treatment plant		PNEC	2,41	mg/l	
	Environment - sediment, freshwater		PNEC	13,56	mg/kg dry weight	
	Environment - sediment, marine		PNEC	13,56	mg/kg dry weight	
	Environment - soil		PNEC	2,34	mg/kg dry weight	

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Solvent resistant protective gloves (EN 374).

If applicable

Protective nitrile gloves (EN 374)

Protective gloves made of polyvinyl alcohol (EN 374)

Protective Viton® / fluoroelastomer gloves (EN 374)

Minimum layer thickness in mm:

0,5

Permeation time (penetration time) in minutes:

>= 480

The breakthrough times determined in accordance with EN 374 Part III were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:

If OES or MEL is exceeded.

Gas mask filter A (EN 14387), code colour brown

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Observe wearing time limitations for respiratory protection equipment.



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 8 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Light yellow
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	n.a.
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	0,6 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Upper explosive limit:	7 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,8 kg/l
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	<7 mm <sup>2</sup> /s (40°C)
Explosive properties:	Product is not explosive. When using: development of explosive vapour/air mixture possible.
Oxidising properties:	No

### 9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product has not been tested.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions





# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 9 of 16  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 10.01.2014 / 0001  
 Replaces revision of / Version: 17.10.2013 / 0001  
 Valid from: 10.01.2014  
 PDF print date: 17.09.2015  
 Petrol Lead Replacement 1:1000

No dangerous reactions are known.

### 10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

### 10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

### 10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

## SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

### Petrol Lead Replacement 1:1000

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

### Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5000	mg/m <sup>3</sup> /8h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitizing



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 10 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Carcinogenicity:					OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative, Analogous conclusion
Reproductive toxicity:					OECD 421 (Reproduction/Developmental Toxicity Screening Test)	Negative, Analogous conclusion
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):					OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	No indications of such an effect., Analogous conclusion
Aspiration hazard:						Yes
Symptoms:						unconsciousness, headaches, dizziness
Teratogenicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusion

Kerosine (petroleum)						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Aspiration hazard:						Yes
Symptoms:						respiratory distress, blood in urine (haematuria), diarrhoea, vomiting, fever, blisters, heart/circulatory disorders, mucous membrane irritation, dizziness

Naphtha (petroleum), hydrodesulfurized heavy						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	> 2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	> 5	mg/l/4h	Rat		
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitizing
Germ cell mutagenicity:						Negative
Aspiration hazard:						Yes
Symptoms:						dizziness, unconsciousness, annoyance, skin afflictions, headaches, cramps, drowsiness, mucous membrane irritation, dizziness



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 11 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

Symptoms:						dizziness, unconsciousness, vomiting, annoyance, skin afflictions, heart/circulatory disorders, headaches, cramps, drowsiness, dizziness
-----------	--	--	--	--	--	--

### Solvent naphtha (petroleum), heavy arom.

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Aspiration hazard:						Yes
Aspiration hazard:						Yes
Symptoms:						dizziness, headaches, drowsiness, dizziness

### 1,2,4-trimethylbenzene

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	18	mg/l/4h	Rat		
Symptoms:						dizziness, unconsciousness, headaches, fatigue, dizziness, nausea

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

### Petrol Lead Replacement 1:1000

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment:							n.d.a.
Other adverse effects:							n.d.a.

### Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

(GB)

Page 12 of 16  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 10.01.2014 / 0001  
 Replaces revision of / Version: 17.10.2013 / 0001  
 Valid from: 10.01.2014  
 PDF print date: 17.09.2015  
 Petrol Lead Replacement 1:1000

Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Bioaccumulative potential:	Log Pow		5,5-7,2				
Mobility in soil:	Log Koc		>3				
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Water solubility:			~10	mg/l			Slight

Naphtha (petroleum), hydrodesulfurized heavy							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50		10-100	mg/l			
Toxicity to algae:	LC50		1-10	mg/l			
Persistence and degradability:							Not readily biodegradable

Solvent naphtha (petroleum), heavy arom.							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Persistence and degradability:		28d	58	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Bioaccumulative potential:	Log Pow		3,1				

1,2,4-trimethylbenzene							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	7,72	mg/l			
Toxicity to daphnia:	EC50	48h	3,6	mg/l			

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)  
 13 07 03 other fuels (including mixtures)

Recommendation:

Pay attention to local and national official regulations  
 E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations  
 Empty container completely.  
 Untampered packaging can be recycled.  
 Dispose of packaging that cannot be cleaned in the same manner as the substance.  
 Do not perforate, cut up or weld uncleaned container.  
 Residues may present a risk of explosion.

## SECTION 14: Transport information



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 13 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 10.01.2014 / 0001  
 Replaces revision of / Version: 17.10.2013 / 0001  
 Valid from: 10.01.2014  
 PDF print date: 17.09.2015  
 Petrol Lead Replacement 1:1000

### General statements

UN number: n.a.  
**Transport by road/by rail (ADR/RID)**  
 UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Classification code: n.a.  
 LQ (ADR 2013): n.a.  
 LQ (ADR 2009): n.a.  
 Environmental hazards: Not applicable  
 Tunnel restriction code:

### Transport by sea (IMDG-code)

UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Marine Pollutant: n.a.  
 Environmental hazards: Not applicable

### Transport by air (IATA)

UN proper shipping name:  
 Transport hazard class(es): n.a.  
 Packing group: n.a.  
 Environmental hazards: Not applicable

### Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

## SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions: Yes  
 Comply with trade association/occupational health regulations.  
 Observe youth employment law (German regulation).  
 Observe law on protection of expectant mothers (German regulation).

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: n.a.

### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted R phrases / H phrases, Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).  
 10 Flammable.



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

GB

Page 14 of 16  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 10.01.2014 / 0001  
Replaces revision of / Version: 17.10.2013 / 0001  
Valid from: 10.01.2014  
PDF print date: 17.09.2015  
Petrol Lead Replacement 1:1000

20 Harmful by inhalation.  
36/37/38 Irritating to eyes, respiratory system and skin.  
36/38 Irritating to eyes and skin.  
38 Irritating to skin.  
48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
51 Toxic to aquatic organisms.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
53 May cause long-term adverse effects in the aquatic environment.  
65 Harmful: may cause lung damage if swallowed.  
66 Repeated exposure may cause skin dryness or cracking.  
67 Vapours may cause drowsiness and dizziness.  
H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation  
Skin Irrit. — Skin irritation  
Asp. Tox. — Aspiration hazard  
Aquatic Chronic — Hazardous to the aquatic environment - chronic  
Flam. Liq. — Flammable liquid  
STOT SE — Specific target organ toxicity - single exposure - narcotic effects  
STOT RE — Specific target organ toxicity - repeated exposure  
Acute Tox. — Acute toxicity - inhalation  
STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

### Any abbreviations and acronyms used in this document:

AC Article Categories  
acc., acc. to according, according to  
ACGIH American Conference of Governmental Industrial Hygienists  
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)  
AOEL Acceptable Operator Exposure Level  
AOX Adsorbable organic halogen compounds  
approx. approximately  
Art., Art. no. Article number  
ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)  
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)  
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)  
BCF Bioconcentration factor  
BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)  
BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)  
BMGV Biological monitoring guidance value (EH40, UK)  
BOD Biochemical oxygen demand  
BSEF Bromine Science and Environmental Forum  
bw body weight  
CAS Chemical Abstracts Service  
CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids  
CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques  
CIPAC Collaborative International Pesticides Analytical Council  
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)  
CMR carcinogenic, mutagenic, reproductive toxic  
COD Chemical oxygen demand



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

Page 15 of 16

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revised on / Version: 10.01.2014 / 0001

Replaces revision of / Version: 17.10.2013 / 0001

Valid from: 10.01.2014

PDF print date: 17.09.2015

Petrol Lead Replacement 1:1000

CTFA Cosmetic, Toiletry, and Fragrance Association  
DMEL Derived Minimum Effect Level  
DNEL Derived No Effect Level  
DOC Dissolved organic carbon  
DT50 Dwell Time - 50% reduction of start concentration  
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)  
dw dry weight  
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
EC European Community  
ECHA European Chemicals Agency  
EEA European Economic Area  
EEC European Economic Community  
EINECS European Inventory of Existing Commercial Chemical Substances  
ELINCS European List of Notified Chemical Substances  
EN European Norms  
EPA United States Environmental Protection Agency (United States of America)  
ERC Environmental Release Categories  
ES Exposure scenario  
etc. et cetera  
EU European Union  
EWC European Waste Catalogue  
Fax. Fax number  
gen. general  
GHS Globally Harmonized System of Classification and Labelling of Chemicals  
GWP Global warming potential  
HET-CAM Hen's Egg Test - Chorionallantoic Membrane  
HGWP Halocarbon Global Warming Potential  
IARC International Agency for Research on Cancer  
IATA International Air Transport Association  
IBC Intermediate Bulk Container  
IBC (Code) International Bulk Chemical (Code)  
IC Inhibitory concentration  
IMDG-code International Maritime Code for Dangerous Goods  
incl. including, inclusive  
IUCLID International Uniform Chemical Information Database  
LC lethal concentration  
LC50 lethal concentration 50 percent kill  
LCLo lowest published lethal concentration  
LD Lethal Dose of a chemical  
LD50 Lethal Dose, 50% kill  
LDLo Lethal Dose Low  
LOAEL Lowest Observed Adverse Effect Level  
LOEC Lowest Observed Effect Concentration  
LOEL Lowest Observed Effect Level  
LQ Limited Quantities  
MARPOL International Convention for the Prevention of Marine Pollution from Ships  
n.a. not applicable  
n.av. not available  
n.c. not checked  
n.d.a. no data available  
NIOSH National Institute of Occupational Safety and Health (United States of America)  
NOAEC No Observed Adverse Effective Concentration  
NOAEL No Observed Adverse Effect Level  
NOEC No Observed Effect Concentration  
NOEL No Observed Effect Level  
ODP Ozone Depletion Potential  
OECD Organisation for Economic Co-operation and Development  
org. organic  
PAH polycyclic aromatic hydrocarbon  
PBT persistent, bioaccumulative and toxic  
PC Chemical product category  
PE Polyethylene



# MPEX® Petrol Lead Replacement

## Material Safety Data Sheet

GB

Page 16 of 16  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 10.01.2014 / 0001  
Replaces revision of / Version: 17.10.2013 / 0001  
Valid from: 10.01.2014  
PDF print date: 17.09.2015  
Petrol Lead Replacement 1:1000

PNEC Predicted No Effect Concentration  
POCP Photochemical ozone creation potential  
ppm parts per million  
PROC Process category  
PTFE Polytetrafluorethylene  
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)  
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.  
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)  
SADT Self-Accelerating Decomposition Temperature  
SAR Structure Activity Relationship  
SU Sector of use  
SVHC Substances of Very High Concern  
Tel. Telephone  
ThOD Theoretical oxygen demand  
TOC Total organic carbon  
TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)  
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods  
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))  
VOC Volatile organic compounds  
vPvB very persistent and very bioaccumulative  
WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).  
WHO World Health Organization  
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.  
No responsibility.

These statements were made by:

**Leading Solvent Supplies Ltd, Marston Business Park, Rudgate, Tockwith, YO26 7QF United Kingdom**  
**Tel: +44 (0)1423 358000, Fax: +44 (0)1423 222012**

© by Leading Solvent Supplies Ltd. The copying or changing of this document is forbidden except with consent from Leading Solvent Supplies Ltd.