



The Lead Education and Abatement Design Group
Working to eliminate lead poisoning globally and to protect the
environment from lead in all its uses: past, current and new uses
ABN 25 819 463 114

TEL for MOGAS manufacture in China - LEAD project FINAL REPORT

by Kevin Chung, Macquarie University, Sydney, Australia, 16th August 2013

In 2013, I had the great opportunity to assist and work alongside The LEAD Group Inc in their aim towards global Lead poisoning prevention and protection of the environment from lead and primary goal of global elimination of leaded petrol. Innospec Inc in the United Kingdom, claims on its website to be the only manufacturer of the additive for leaded petrol in the world [<http://www.innospecinc.com/market/octane-additives>], but that it does not supply it to all the countries which still use leaded petrol [<http://www.state.gov/e/eb/oece/usncp/links/rls/183059.htm>].

The main focus of my work was communicating with the different manufacturing companies especially those that manufacture or previously manufactured TEL for MOGAS (Tetraethyl-Lead additive which turns unleaded petrol into leaded petrol) based in China.

I strived to make contact with various Chinese companies which were suspected of manufacturing TEL for MOGAS and establish confirmation of production. I contacted nine companies and was unsuccessful in eliciting a proper response from two thirds of them. I also contacted relevant government agencies in the area of each of the nine suspected manufacturing plants, by snail mail, email and phone, but none were responsive. Again, when I contacted non-Chinese possible TEL for MOGAS manufacturers, none responded.

However on the more positive side of things a few Chinese companies did provide us with responses and helpful information.

The company known as Beijing Hua Di Union Investment Co provided us with a positive response when we enquired about whether they were manufacturing TEL for MOGAS (Motor Fuel) or Tel for AVGAS (Aviation Fuel). Their response consisted of 'We are manufacturing TEL-B and TEL-CB (for motor gasoline and Avgas)' along with properties of their product which is enough as a confirmation.

A company better known as Chang TDS Chemical was another one of the top likely manufacturers of TEL for MOGAS production, according to The LEAD Group's web-searching results below. Their response from our enquiry came as a surprise and was good news as they claimed to have ceased production of the product TEL for MOGAS several years ago.

One more email sent to Wenzhou Foreign Trade Industrial Product Co.Ltd provided us with confirmation that they were indeed a supplier of TEL for MOGAS, as well as MMT and MTBE (which are both non-lead octane enhancers, that is, additives which can be used in place of TEL to raise the octane of unleaded petrol, thus circumventing the need for TEL).

The LEAD Group Inc.

PO Box 161 Summer Hill 2130 NSW Australia

Phone: 02 9716 0014, Email: www.lead.org.au/cu.html Web: www.lead.org.au

So far the responses and confirmations were then forwarded by email to Jane Akumu from PCFV (Partnership for Cleaner Fuels and Vehicles) of the United Nations Environment Programme (UNEP) in order for PCFV to conduct further investigation. In addition, the information was also sent to Wang Canfa, a local environmental lawyer in Beijing who has taken an interest in the manufacture of TEL for MOGAS in China, because it is illegal.

The ultimate goal of global phase out of leaded petrol will be achieved by The LEAD Group Inc with their continued perseverance, patience and supply of useful information to relevant stakeholders who can take action.

Chinese possible manufacturers of TETRAETHYL LEAD (TEL) or TETRAMETHYL LEAD (TML):

Contact details and quotes from websites stating involvement with TEL production, supply, and export, as at 15 February 2012, 23 August 2012 and 21 March 2013

Results of web-searching by Robert Taylor, Elizabeth O'Brien, Zac Gethin-Damon, and Kevin Chung. The LEAD Group Inc. Australia

Note on acronyms:

"Different types of compound include:

- TEL-B, which contains TEL with bromine in the form of dibromoethane as a scavenger
- TEL-CB, which contains TEL with chlorine and bromine in the form of dichloroethane and dibromoethane as scavengers
- TML-CB is formulated from TML instead of TEL, and also contains toluene, which has a stabilizing effect
- PM-CB/B, which contain mixes of TML and TEL with dichloroethane, dibromoethane and toluene"

URL: <http://www.unep.org/transport/pcf/PDF/TELReport.pdf> Accessed 9 Feb 2012

Four Chinese companies claiming a TEL for MOGAS / TEL-CB manufacturing capability on the web

1. Daqing TST Chemical Industry Co Ltd

49 Huagong Road, Xinghua Village, Longfeng District, Daqing, Heilongjiang Province, China 163714

Tel: +864596703446 Fax: +861356262546

tangsanter@hotmail.com ; daqingtst@hotmail.com; <http://www.dqtst.com/>

"The final customers of this product [tetraethyl lead from **Daqing TST Chemical Industry Co Ltd**] are refinery companies. The use areas for TEL-CB [for motor gasoline] include Eastern Europe, South America, South Asia, Middle East and Africa, and areas for TEL-B [for AvGas] are all over the world."

URL: http://www.tjskl.org.cn/suppliers/czbde197/f-daqing_tst_chemistry_co_ltd.html
Accessed 16 Jan 2013

"Tetraethyl lead output [of **Daqing TST Chemical Industry Co Ltd**] is 2000mt/ year." [2007]

URL: <http://www.ecplaza.net/cbs-industry--selling/2.html> accessed 8 Feb 12

"TetraEthyl

We are the manufacturer of tetraethyl lead in China. We can offer two specifications: TEL-B and TEL-CB. If you are interested in our product, please contact us and we will give ...

FOB Price: Get Latest Price
Daqing TST Chemical Industry Co., Ltd
China
TrustPoints: 0
Contact Now
Related Categories: Other Chemicals
Related Products: Tetra Ethyl Lead, Tel”

[SEARCH RESULT AT URL: <http://www.tradekey.com/products/tetra-ethyl-lead.html> ON 23 August 2012]

2. Guiyang Yifeng Fine Chemical Co., Ltd

Zhazuo, Xiuwen, Guiyang GZ 550201

Tel: +86512366006 Fax: +868512366006

"Company Name:Guiyang Yifeng Fine Chemical Co., Ltd

About Us:The company was established in 2005. Guiyang Yifeng Fine Chemical Co., Ltd is a new Chemical Company specially manufacturing Tetra Ethyl L Lead. Our output is 3000MT per year including TEL-CB (used for autos) and TEL-B (used for aviation) . We are the biggest producer of Tetra Ethyl Lead in the world at present time. Meanwhile, we are the only one legal manufacturer of this commodity in China. We can supply various Tetra Ethyl Lead to any refinery in the world according to their requirement. It can be packaged in both iron drums (250-275kg) or ISO-TANKS (20-22MT) . Any end users or dealers are welcome to contact with us.Company

Business Type: Manufacturer

Product/Service(We Sell):Tetraethyl Lead”

<http://www.b2b77.com/Company/bz/02/E548261.html> Accessed 16th Jan 2013

“TetraEthyl

Guiyang Yifeng Fine Chemical Co., Ltd is a new Chemical Company specially manufacturing tetra ethyl L lead. Our output is 3000MT per year including TEL-CB (used for autos) and T...

FOB Price: Get Latest Price
Supplying Ability: 300
Min Order: 20mt
Guiyang Yifeng Fine Chemical Co., Ltd
China
TrustPoints: 0
Contact Now

Related Products: Gas Lead, Tetraethyl Lead Octane Booster, Tetra Ethyl Lead”

[SEARCH RESULT AT URL: <http://www.tradekey.com/products/tetra-ethyl-lead.html> ON 23 August 2012]

“We are the main manufacturer of TEL (tetraethyl lead, tetra ethyl lead, lead tetraethyl plum bane TEL Pb(C₂H₅)₄) in the world. Our output is 3000mt (compounds) per year. We may supply TEL-CB and TEL-B

Any end user or trading company are welcome to contact us.”

“Brief Introduction

Guiyang Yifeng Fine Chemical Co., Ltd is a new Chemical Company specially manufacturing Tetra Ethyl L Lead. Our output is 3000MT per year including TEL-CB (used for autos) and TEL-B (used for aviation) . We are the biggest producer of Tetra Ethyl Lead in the world at present time. Meanwhile, we are the only one legal manufacturer of this commodity in China.

We can supply various Tetra Ethyl Lead to any refinery in the world according to their requirement. It can be packaged in both iron drums (250-275kg) or ISO-TANKS (20-22MT) .

Any end users or dealers are welcome to contact with us.

URL:

http://www.weiku.com/products/3944333/Tetraethyl_Lead_Tetra_Ethyl_Lead_Leadtetraethyl_.html Accessed 21st Mar 2013.

3. Beijing Hua Di Union Investment Co

Room 2203 Building 4 no 88 Jainquo Road, ChaoYang, Beijing, China 100024,

Tel: +8610-5804612 Ext.:85 Fax: +861085800462

hd@hd777.com.cn ; huadilianhe@yahoo.com.cn; <http://www.hd777.com.cn>

"Beijing Hua Di Union Investment Co., Ltd has invested RMB 70,000,000 (USD9,000,000) to set up a manufacturing factory to produce the tetraethyl lead (tetraethyllead; lead tetraethyl;tetraethyl plumbane). There are 25000 square meters in the whole land of the factory. There are more than one hundred employees in the factory. Five of them are senior engineers and eight are engineers. We are a high technical and professional team in the field of producing the tetraethyl lead in China.

“The product of the tetraethyl lead can improve the work efficiency of the engines of the motors and the aircraft. As an additive in the process of refining the crude oil, it can promote the octane value of the fuel. So far the products are sold to the United States, Southeast Asia, East Europe, Middle East and South Africa.

“Our current annual productivity is about 1000 metric tons and it will be up to 4000 metric tons in the early of 2008.

“On 30th June, 2005 the State Environmental Protection Administration (SEPA) and China General Administration for Customs have jointly announced a proclamation that from 10th July, 2005 each exporter of the tetraethyl lead in China should apply and get their approval before exporting. So far we, Beijing Hua Di Union Investment Co., Ltd, are the only one who

already got the Formal Special Written Permit from the concerning issuing authority Chemical Registration Center of State Environmental Protection Administration.”

URL: http://www.e-djtrade.com/local/servlet/RequestProcessor?event=LeadsDesc.Click&offer_id=OF00078668
05 Accessed 16 Jan 2013

“Specification

Motor Gasoline (TEL-CB)

Pure Lead Content w% m/m (With Titration Method): ≥ 39.4

“Inspection Method

Pure Tetraethyl Lead, $Pb(C_2H_5)_4$: ≥ 61.48

“Compound Composition, w% m/m

Dibromoethane $C_2H_4Br_2$

(Ethane Dibromide) : 17.9 ± 0.5

Dichloroethane, $C_2H_4Cl_2$

(Ethane Dichloride) : 18.8 ± 0.5

Gasoline : Up to 100 “

URL: <http://www.hd777.com.cn/specification.htm> Accessed 9 Feb 2012

4. Wenzhou Foreign Trade Industry Product Co.

RM1302.F13, International Trade Centre No.8 Liming West Road, Ouhai District WENZHOU Province , Zhejiang Province, China 325000

Tel : 86-577-8886-2150

Fax : 86-577-8886-2784

Homepage : <http://lizhiwang.en.ecplaza.net>

Contact :

Mr. MARK WANG

“We can supply T.E.L.(Tetraethyl Lead) in large quantity Capacity of production was 3000mt/year”

URL: <http://www.ecplaza.net/trade-leads-seller/tetraethyl-lead-t-e-l--1358861.html>
Accessed 16th Jan 2013

[Tetraethyl lead is not listed on their extensive chemical list at <http://lizhiwang.en.ecplaza.net/> , but “Petro additives” is listed]

URL: <http://lizhiwang.en.ecplaza.net/> Accessed 16th Jan 2013

“Dear Sir or Madam

Our factory produced high quality TETRA ETHYL LEAD (T.E.L.)

Purity : 61.48

Ethylene Dibromide : 17.86
Ethylene dichloride : 18.81
Anti oxidant : 0.06
Density : 1.65
Freezing point : -33'C
Packing in bulk by Iso-tank or by drums

Welcome contact us with your order in details,”

- “Main Markets:North America,South America,Eastern Europe,Southeast Asia,Africa,Oceania,Mid East,Eastern Asia,Western Europe”
URL: http://www.weiku.com/products/5449918/Tetra_Ethyl_Lead.html Accessed 21st Mar 2013

One Chinese company claiming a TEL for MOGAS / TEL-CB manufacturing capability in the past on the web

5. TDS Chemical Corp., Ltd

Suit 5d, No 520 Yi-Shan Rd, Xuhui District, Shanghai Province, China 200235

Tel: +862134245366, +862134240366, Fax: +862164384070

<http://tdschem.LookChem.com/> ; <http://www.tdschem.com/>

Welcome to professional TDS Chemical Corp.,Limited specialized in gasoline Octane booster, MMT, Octane enhancers , Cetane booster, Gasoline antiknock additive, Gasoline performance additive, Diesel cetane improver, Gasoline additive, Gasoline fuel additives, Antiknock, Antiknock-819 (A819), Antiknock-818 (A818), gasoline dope, antiknock dope, diesel dope, knock-sedative dope, TDS-1510 62% MMT Manganese 15.10%, TDS-2440 98% MMT Manganese 24.4%, CMT, Tetraethyl Lead (TEL), Ferrocene, Catocene, PPD for diesel oil,

TDS has been involving in Gasoline Antiknock Additives, Gasoline Performance Additives and Diesel Cetane Improver since 1997. It took the prime business of TEL manufacturing, and gradually transfers to producing and supplying solutions to enhance the performance of products across diverse industries.

It has more than one decade of experience in producing Octane booster and has been supplying its service to the worldwide customers. Currently, it has developed the effective superior Non-Metal Gasoline fuel additives, Gasoline additive, Octane booster, Antiknock & Diesel Cetane Improver for Un-leaded gasoline and diesel oil.

URL: <http://www.tdschem.com/> (16th Jan 2013)

“About US

TDS CHEMICAL CORP., LIMITED was established as a specialty manufacturer and supplier of fuel additives TDS was one of the few manufacturers in the world able to manufacture Tetraethyl Lead for both Motor Gasoline and Avgas production for Aircraft. With its close collaboration to leading Chinese Scientific and Research Organizations, TDS has become a

respected manufacturer of advanced Fuel Additives. With a dedicated manufacturing plant in Zhejiang Province, TDS is leading the way in the supply of fuel additives such as CMT, MMT, Ferrocene and Catocene, a leading engine propulsion additive, used in both racing cars and in rocket propulsion. As the Refining Industry is aware, the ever tightening gasoline regulations coupled with ever stringent environmental regulations, has meant many refiners are facing a octane deficit. This has meant many refiners having to import large amounts of costly high octane gasoline to form a gasoline pool. In markets where the end price of the gasoline is controlled by governments, this has added to the financial burden imposed on the refiner. Additives introduced to replace products such as Tetraethyl Lead has often failed to adequately meet the octane requirement whilst at the same time have proved to be exceedingly expensive. TDS has for several years been actively engaged with a leading Science & Research Institute in the development of its patented Antiknock Additives, Antiknock-819 and Antiknock-818. These additives were introduced solely to provide a cost effective replacement for TEL and other additives. The Antiknock-819 series is totally metals free whilst the Antiknock-818 series contain metals (non-lead) well within international regulations for the use of metal additives in fuel. The above range of Antiknock compounds are addressing and providing to refiners the requisite octane numbers at a highly competitive cost. TDS looks forward to working with its customers in producing and supplying these key additives Full details can be obtained from us and samples will be provided.”

URL: <http://tdschem.lookchem.com/> Accessed 16 Jan 2013

Four Chinese companies claiming a TEL manufacturing capability on the web

6. Shandong JiaCheng

Room 1415 Niniquan Street, No 350 Shahekou, Liaoning Province, China 116000

Tel: +8618698636737 [Mr Ning Jiang]

“We are the biggest producer of Tetra Ethyl Lead in the world at present time”

URL: <http://jiachengsd.en.ecplaza.net/> Accessed 16 Jan 2013

“We are the only one legal manufacturer of this commodity in China.”

URL: http://www.tradekey.com/profile_view/uid/5233682/Shandong-Jiacheng.htm

Accessed 15 Feb 2012

“TetraEthyl

we are the only one legal manufacturer of this commodity in China. Any end users or dealers are welcome to contact with us.

FOB Price: 100 ton

Min Order: 1ton

Shandong Jiacheng

China

TrustPoints: 0

Contact Now

Related Categories: Chemical Auxiliary Agent

Related Products: Ethyl Liquid, Tetraethyl Lead, Tetraethyl Lead”

[SEARCH RESULT AT URL: <http://www.tradekey.com/products/tetra-ethyl-lead.html> ON 16th Jan 2013]

7. Noble Chemicals Industrial Co. Ltd

Ningyuan Town, Qianshan Dist, Anshan City, Anshan, Liaoning Province, China 114000

TEL +:864128411518 FAX: +86412567368

WEB: <http://www.noblechemi.com> [Website in Chinese **only**, Accessed 15 Feb 2012]

Contact: Mr. Jason Jiang Manager, Exporting

“Noble Chemicals Industrial Company Limited was established in May 2005, has become a professional supplier in world industrial and fine chemical fields, our product’s range cover industrial chemicals, catalysts, pharmaceuticals and custom synthesis.

“With working hard, smart decision, standardize management and talented employee, Noble Chemicals Industrial Company Limited grows up very fast and becomes a very important chemicals products exporting company in China.

“Our company was known for top-quality products and excellent service, We uses advanced management system and strict inspection method to ensure the stable quality of our products. We all believe "quality is our life and customers is God"

“Noble Chemicals Industrial Company Limited has won great amount of market shares and reputations in Europe Union, United States, Canada, Russia, Middle east, South Africa and other countries and regions.”

Website: www.noblechemi.com “

URL: http://www.tradekey.com/profile_view/uid/2436581/Noble-Chemicals-Industrial-Co-Ltd.htm Accessed 16 Jan 2013.

Noble Chemicals Website:

“Tetraethyl Lead (TEL) [available for] Order” URL: http://www.noblechemi.com/cgi/search-en.cgi?f=product_en&t=product_en&w=product_en&cate2=Industrial [Website now also in English, Accessed 16 Jan 2013]

8. Lanzhou Petrochemical Company

10 Yumen Street Lanzhou, Xigu District, Gansu Province China 730060

TEL: +86-0931-7982274

Our Chemical – “Top Chemical Information Provider” - Website:

97242-16-5 Information

Tetraethyl lead aviation gasoline localization of research success ||| \

After six months of the 97242-16-5 new network information in the 97242-16-5 effort, Lanzhou Petrochemical Company completed the 97242-16-5 domestic production of tetraethyl lead No. 100 Industrial trial production of aviation gasoline. Recently, the 97242-16-5 national authority designated by the 97242-16-5 Civil Aviation Flight University of China conducted flight tests, the 97242-16-5 performance of new products reach the 97242-16-5 standard, marking the aviation gasoline, tetraethyl lead used in the localization of a 97242-16-5 major breakthrough in research.

Earlier, China's production of aviation gasoline additive tetraethyl lead has been relying on foreign imports. For the full realization of the domestic aviation gasoline, effective alternative to imported components of tetraethyl lead to early identification of aviation fuel made by the State Committee for approval agrees, Lanzhou Petrochemical Company, the use of domestic production of tetraethyl lead No. 100 aviation piston engine fuel flight test. In the tests, new products and imported manufactured tetraethyl lead aviation gasoline No. 100 considerable performance, which confirmed that the domestic production of tetraethyl lead No. 100 aviation piston engine fuel to meet the training series piston engine aircraft requirements.

URL: http://www.ourchemical.com/catalogs_97/97242-16-5.html (accessed 16 Jan 2013)

9. Fuel Additives Co., Ltd

Contact Person : [lynn lin](#) (Sales)

Company:

Fuel Additives Co., Ltd

Address:

lanshan, Linyi, Shandong, China

Telephone: 86-539-4819319

Mobile:860-5964819319

Fuel Additives Co., Ltd is a new Chemical Company specially manufacturing Tetraethyl Lead. Our output is 10000MT per year including TEL-CB (used for autos) and TEL-B (used for aviation) . We are the biggest producer of Tetraethyl Lead in the world at present time. Meanwhile, we are the only one legal manufacturer of this commodity in China.

URL: <http://www.tradekey.com/company/Fuel-Additives-Co-Ltd-5871690.html> accessed 16 Jan 2013

NB: One UAE Supplier claiming a Chinese TEL-CB manufacturing capability on the web

Non Chinese possible manufacturers of TETRAETHYL LEAD (TEL) or TETRAMETHYL LEAD (TML):

Contact details and quotes from websites stating involvement with TEL production, supply, and export, as at 14 March 2013

Results of web-searching by Kevin Chung, The LEAD Group Inc. Australia

Note on acronyms:

“Different types of compound include:

- TEL-B, which contains TEL with bromine in the form of dibromoethane as a scavenger
- TEL-CB, which contains TEL with chlorine and bromine in the form of dichloroethane and dibromoethane as scavengers
- TML-CB is formulated from TML instead of TEL, and also contains toluene, which has a stabilizing effect
- PM-CB/B, which contain mixes of TML and TEL with dichloroethane, dibromoethane and toluene”

URL: <http://www.unep.org/transport/pcf/PDF/TELReport.pdf> Accessed 9 Feb 2012

Four Non Chinese companies claiming a TEL for MOGAS / TEL-CB manufacturing capability on the web

10. JSC ‘INTEHENERGORESOURCЕ’

Russia, 121099, Moscow, Smolenskaya sq.3, Moscow, Russian Federation 121099

Phone: 7-095-937-8395

Fax: 7-095-937-8200

Homepage:

Contact: Mr Eugenu Gordonov

“Dear Sirs!

Our company JSC “INTEHENERGORESOURCЕ” from Russia is a producer of gasoline and oil additives, also we are busy in wholesale trade of chemicals and petrochemicals.”

“We offer you Tetraethyl Lead (TEL, CAS num. 78-00-2)”

URL: <http://www.ecplaza.net/trade-leads-seller/tetraethyl-lead-TEL---488647.html>

Accessed 14th Mar 2013

Best regards,

Eugenu Gordonov

Deputy General Director

Tel: +7(095)937-83-95 / 922-60-90

Fax:+7(095)937-82-00

E-mail: market@iter.ru

Dear Sirs!

Our company JSC "INTEHENERGORESOURCE" from Russia is a producer of gasoline and oil additives, also we are busy in wholesale trade of chemicals and petrochemicals.

We offer you Tetraethyl Lead (TEL, CAS num. 78-00-2) Quantity - 400 MT

Payment - confirmed and irrevocable L/C at sight Price – by your request

Shipment - within 40 days since we receive your L/C Packing - in steel drums, specially manufactured for TEL handling

If you are interested in TEL, pls.email us and we'll send you the additional information.

Best regards,

Eugenu Gordonov

Deputy General Director

Company Information

Company Name: JSC "INTEHENERGORESOURCE"

Address: Smolenskaya sq.3

City: Moscow

Country: Russian Federation

Zip/Postal Code: 121099

Phone: +7(095)937-83-95 / 922-60-90

Contact Person: Eugenu Gordonov

Email: market@iter.ru

Website: <http://www.iter.ru>

URL: <http://www.worldbid.com/tradeleads/sell/tetraethyl-lead-chemicals-intehenergoresource-trade-317501.html> Accessed: 07/05/13

2. BADRIVISHAL CHEMICALS & PHARMACEUTICALS

Address: Plot No.13, Revenue Colony, Talegaon - Chakan Road, Talegaon Dabhade,, Pune, Maharashtra, India 410507

Phone: 91-2114-329-678

Fax: 91-2114-281-008

Contact: Mr VIVEK RAWAT

“We can offer you Tetraethyl Lead (CAS Number: 78-00-2) from China at best price. We look forward to your valuable inquiries. “

URL: <http://www.ecplaza.net/trade-leads-seller/tetraethyl-lead--3188766.html>

Accessed: 14th Mar 2013

URL: <http://rawatpharma.en.gongchang.com/product/10301574> Accessed 19th Mar 2013

MAIN website does not state Tetraethyl lead at all.

3. Zarys International

Address:

Residence lEpi dOr,
Route National 286,
Versailles, Ile de France,
France 78000

Phone: 33-1-3045-0561

Fax: 33-1-3045-0394

Mobile: 33-6-2820-2512

Contact: Mr Rizwan A.Siddique

“Antiknock Fuel Additive TETRA ETHYL LEAD(TEL-CB)”

URL: <http://www.ecplaza.net/product/anti-knock-compound-for-gassoline--43546-33064.html> Accessed: 14th Mar 2013

Main Website URL: <http://zarysco.en.ec21.com/>

Accessed 19th Mar 2013.

EMAIL: zarysco@wanadoo.fr

URL: <http://www.worldbid.com/directory/details.htm?session=&userID=1074343>

Accessed 19th Mar 2013.

4. Abtex International Ltd.

Address: Unit # 4 Latifabad Hyderabad, Hyderabad, Sindh, Pakistan 78100

Phone: 92-22-3815-384

Fax: 92-22-3866-370

Mobile: 92-321-3002-371

Contact: [Mr. Muhammad Mubeen](#)

EMAIL: info@abtexintl.net

Specification of Tetra Ethyl Lead

Optional Information

Payment : L/c

Packaging : In leak proof drums specially designed for Tetraethyl Lead

Inspection : Available

Samples : Charge

Sample Price : 100 USD

Remarks : Please contact us for the Price

Chemical Properties

Pure TEL	61.48 % (Min)
Ethylene Di Bromide	17.86 %
Ethylene Di Chloride	18.81 %
Para Oxy-Di-Phenyl Amine	0.10 %
Kerosene & Dye	1.75 %

Physical Properties

Speicific Gravity at 20/5° C	1.590
Freezing Point	-33 °C
Ratio by Volume	1.6879 : 1
Specific Gravity at 20/4° C	1.650

Physical Properties

Speicific Gravity at 20/5° C	1.590
Freezing Point	-33 °C
Ratio by Volume	1.6879 : 1
Specific Gravity at 20/4° C	1.650

URL: <http://www.ecplaza.net/product/tetraethyl-lead--42275-29877.html>

Accessed: 14th Mar 2013