

## Hydrocarbons &amp; Petrochemicals

If you are unable to locate the compound or the format you require, please telephone or fax us with your requirements, we will be delighted to provide a quotation. All products are shipped with a Certificate of Analysis or Gravimetric Certificate with the appropriate Material Safety Data Sheet upon request. "L" catalogue numbers are 10ng/µl solutions in an appropriate solvent. "C" catalogue numbers are certified, neat.

## Aliphatic Hydrocarbons - Alkanes

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
n-Pentane	C5 C 15977500	5ml	CA	n-Docosane	C22 C 13057700	0.25g	CA
n-Hexane	C6 C 14195500	5ml	CA	n-Tricosane	C23 C 17805000	0.1g	DA
n-Heptane	C7 C 14126000	5ml	CA	n-Tetracosane	C24 C 17395800	0.25g	CC
n-Octane	C8 C 15711000	5ml	CA	n-Pentacosane	C25 C 15973500	20mg	CH
n-Nonane	C9 C 15623000	5ml	CA	n-Hexacosane	C26 C 14191200	20mg	CH
n-Decane	C10 C 12095000	1ml	CA	n-Heptacosane	C27 C 14122300	20mg	EA
n-Undecane	C11 C 17896300	1ml	CA	n-Octacosane	C28 C 15710050	0.25g	CA
2,2,4,6,6-Pentamethylheptane	C12 C 15975500	20mg	DH	n-Nonacosane	C29 C 15621000	10mg	FC
n-Dodecane	C12 C 13060000	5ml	CA	n-Triacontane	C30 C 17609000	0.1g	DC
n-Tridecane	C13 C 17818000	1ml	CA	n-Hentriacontane	C31 C 14085500	20mg	FA
n-Tetradecane	C14 C 17396500	5ml	CA	n-Dotriacontane	C32 C 13084000	0.25g	CH
n-Pentadecane	C15 C 15973700	1ml	DC	n-Tritriacontane	C33 C 17894800	20mg	EA
n-Hexadecane	C16 C 14191500	0.1g	DC	n-Tetracontane	C34 C 17430500	20mg	DF
2,2,4,4,6,8,8-Heptamethylnonane	C16 C 14123500	0.25g	CA	n-Pentatriacontane	C35 C 15981700	20mg	FA
n-Heptadecane	C17 C 14122500	1ml	DC	n-Hexatriacontane	C36 C 14199000	0.1g	DA
n-Octadecane	C18 C 15710100	1ml	DC	n-Octatriacontane	C38 C 15711280	20mg	EC
n-Nonadecane	C19 C 15622000	0.25g	CA	n-Tetracontane	C40 C 17395500	0.1g	EA
n-Eicosane	C20 C 13112700	0.25g	CA	n-Tetratetracontane	C44 C 17430000	20mg	DF
n-Heneicosane	C21 C 14085000	20mg	CE	n-Hexacontane	C60 C 14191000	10mg	GD

## Miscellaneous Saturated Hydrocarbons

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
2-Methylbutane	CA15084380	0.25g	CA	Methylcyclopentane	C 15085040	0.25g	CA
2-Methylpentane	C 15121200	0.25g	CA	Methylcyclohexane	C 15085000	1ml	CC
3-Methylpentane	CA15121300	0.25g	CA	cis-1,2-Dimethylcyclohexane	C 12726410	0.1g	CC
2,2-Dimethylbutane	CA12726100	0.1g	CA	trans-1,2-Dimethylcyclohexane	CA12726420	0.1g	CC
2,3-Dimethylbutane	CA12726110	0.1g	CA	1,3-Dimethylcyclohexane	C 12726430	0.1g	CC
2,3-Dimethylpentane	C 12728300	0.25g	CA	1,4-Dimethylcyclohexane	C 12726460	0.1g	CC
2,4-Dimethylpentane	C 12728400	0.1g	CC	Ethylcyclohexane	C 13324000	0.25g	CC
2,5-Dimethylhexane	C 12727600	0.1g	CC	Propylcyclohexane	C 16525000	0.25g	CC
3-Methylheptane	C 15087800	0.1g	DH	Isopropylcyclohexane	C 14463600	0.25g	CA
2,2,4-Trimethylpentane	C 17883000	5ml	CA	Butylcyclohexane	C 10931130	0.25g	CA
2,3,4-Trimethylpentane	C 17883100	0.25g	CC	tert.-Butylcyclohexane	C 10931150	0.25g	CA

## Unsaturated Hydrocarbons

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
1-Hexene	C 14202100	0.25g	CC	1-Dodecene	C 13061500	0.25g	CA
2-Hexene	CA14202200	0.1g	CC	1-Tridecene	C 17818700	0.1g	CE
1-Heptene	C 14128100	0.1g	CE	1-Tetradecene	C 17397100	0.25g	CA
cis-2-Heptene	C 14128200	0.1g	CE	1-Hexadecene	L 14192800CY	10ml	CC
trans-2-Heptene	C 14128300	0.1g	CE	1-Octadecene	C 15710400	0.25g	CA
cis-3-Heptene	L 14128400CY	10ml	CE	1-Eicosene	C 13113300	0.1g	CE
trans-3-Heptene	L 14128500CY	10ml	CE	2-Methyl-1-pentene	C 15124200	0.1g	CE
1-Octene	CA15711300	0.25g	CA	4-Methyl-1-pentene	CA15124400	0.1g	CE
trans-2-Octene	CA15711400	0.1g	CE	cis-4-Methyl-2-pentene	CA15124700	0.1g	CE
1-Nonene	C 15625100	0.1g	CH	2-Ethyl-1-butene	CA13321200	0.1g	CC
4-Nonene	C 15625400	0.1g	CH	2,4,4-Trimethyl-1-pentene	C 17883200	0.25g	CC
1-Decene	C 12096000	0.25g	CA	2,4,4-Trimethyl-2-pentene	C 17883300	0.25g	CC
1-Undecene	C 17896700	0.1g	CA				

## Aromatic Hydrocarbons

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
Benzene	C 10535000	5ml	BF	tert-Butylbenzene	C 10931100	0.25g	BF
Toluene (Methylbenzene)	C 17594000	5ml	BH	Isobutylbenzene	C 14394600	0.25g	BF
o-Xylene (1.2-Dimethylbenzene)	C 17945000	5ml	CH	n-Pentylbenzene (n-Amylbenzene)	C 15983100	0.25g	CA
m-Xylene (1.3-Dimethylbenzene)	C 17945100	5ml	CH	sec-Pentylbenzene(sec-Amylbenzene)	C 15983200	0.25g	CA
p-Xylene (1.4-Dimethylbenzene)	C 17945200	5ml	CH	tert-Pentylbenzene(tert-Amylbenzene)	C 15983300	0.25g	CA
1,2,3-Trimethylbenzene (Hemimellitene)	C 17880600	0.25g	CA	n-Hexylbenzene (Phenylhexane)	C 14207000	0.1g	CC
1,2,4-Trimethylbenzene (Pseudocumene)	C 17880800	0.25g	CA	n-Heptylbenzene (Phenylheptane)	C 14136000	0.5g	CA
1,3,5-Trimethylbenzene (Mesitylene)	C 17881000	0.25g	CA	n-Octylbenzene (Phenyl-octane)	C 15711800	0.1g	CC
1,2,3,4-Tetramethylbenzene (Prehnitene)	C 17412300	0.1g	CC	n-Nonylbenzene (Phenylnonane)	C 15628000	0.1g	CC
1,2,3,5-Tetramethylbenzene (Isodurene)	C 17412400	0.25g	CA	n-Decylbenzene (Phenyldecane)	C 12098800	0.1g	CA
1,2,4,5-Tetramethylbenzene (Durene)	C 17412500	0.25g	CA	2-Isopropyltoluene (o-Cymol)	CA14465480	10mg	FK
Pentamethylbenzene	C 15975000	0.5g	BF	3-Isopropyltoluene (m-Cymol)	CA14465490	10mg	FK
Hexamethylbenzene	C 14194400	0.25g	CE	4-Isopropyltoluene (p-Cymol)	C 14465500	0.25g	CA
Ethylbenzene	C 13320000	1ml	DC	2-Ethyltoluene	C 13356200	0.1g	BH
n-Propylbenzene	C 16519500	0.5g	CA	3-Ethyltoluene	CA13356300	0.1g	BH
Isopropylbenzene (Cumene)	C 14463500	0.5g	BH	4-Ethyltoluene	CA13356400	0.1g	BH
n-Butylbenzene	C 10930900	0.25g	CA	1,2-Diethylbenzene	CA12605400	0.1g	CE
sec-Butylbenzene	C 10931000	0.25g	BF	1,3-Diethylbenzene	C 12605500	0.1g	CE
				1,4-Diethylbenzene	C 12605600	0.1g	BH

## Aldehydes

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price		
Metlaldehyde	C 14930000	0.5g	CA	Heptanal	C7	CA14125000	0.25g	BH	
Paraldehyde	C2	C 15848200	5ml	CC	Octanal	C8	C 15710900	0.25g	BH
Acetaldehyde	C2	C 10011000	5ml	CE	Nonanal	C9	C 15622900	0.25g	BH
Propionaldehyde	C3	CA16492500	0.25g	BH	Decanal	C10	C 12094800	0.25g	BH
Crotonaldehyde (Butenal)	C4	C 11755000	5ml	CE	Undecanal	C11	C 17896200	0.25g	BH
Butyraldehyde	C4	C 10931740	0.25g	BH	Dodecanal	C12	C 13059800	0.25g	BH
Isobutyraldehyde	C4	CA14395000	0.25g	BH	Tridecanal (tech.)	C13	C 17817900	0.1g	CC
Valeraldehyde (Pentanal)	C5	CA17898500	0.25g	BH	Acrolein (2-Propenal)	CA10045000	5ml	DC	
3-Methylbutyraldehyde	C5	CA15084700	0.25g	BH	Benzaldehyde	CA10532000	0.25g	BF	
Hexanal (Capronaldehyde)	C6	CA14195000	1 ml	BH					

## Aliphatic Alcohols

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price		
Methanol	C1	C 14995000	5ml	CA	2-Dodecanol	C12	C 13061010	0.25g	CA
Ethanol	C2	C 13223000	5ml	CA	1-Tridecanol	C13	C 17818300	0.25g	CC
1-Propanol	C3	C 16415100	5ml	CA	1-Tetradecanol	C14	C 17396800	0.25g	BH
2-Propanol	C3	C 16415200	5ml	CA	1-Pentadecanol	C15	C 15973800	0.25g	BH
1-Butanol	C4	C 10861500	5ml	CA	1-Hexadecanol	C16	C 14192500	0.25g	BH
2-Butanol	C4	C 10861600	5ml	CA	1-Octadecanol	C18	C 15710300	0.25g	BH
tert.-Butanol	C4	CA10861700	1ml	BF	1-Eicosanol	C20	C 13113000	0.1g	CC
1-Pentanol	C5	C 15981100	5ml	BH	1-Docosanol	C22	C 13058000	0.25g	BH
2-Pentanol	C5	C 15981200	5ml	BH	2-Methyl-1-propanol	C 15142000	1g	CA	
3-Pentanol	C5	C 15981300	5ml	BH	2-Methyl-1-butanol	C 15084400	0.25g	BH	
1-Hexanol	C6	C 14196700	1ml	BH	2-Methyl-2-butanol	C 15084410	0.25g	BH	
2-Hexanol	C6	C 14196800	1ml	BH	3-Methyl-1-butanol	C 15084440	0.25g	BH	
3-Hexanol	C6	C 14196900	1ml	BH	2-Methyl-1-pentanol	C 15121800	0.25g	BH	
1-Heptanol	C7	C 14127100	1ml	BH	2-Methyl-3-pentanol	C 15122000	0.25g	CC	
2-Heptanol	C7	C 14127200	1ml	BH	2-Methyl-4-pentanol	C 15122100	0.25g	BH	
1-Octanol	C8	C 15711100	1ml	BH	3-Methyl-3-pentanol	C 15122400	0.25g	BH	
2-Octanol	C8	C 15711200	1ml	BH	2-Ethyl-1-butanol	C 13321000	0.25g	BH	
1-Nonanol	C9	C 15623200	1ml	BH	2,4-Dimethyl-3-pentanol	C 12728500	0.25g	CA	
1-Decanol	C10	C 12095200	1ml	BH	2-Ethyl-1-hexanol	C 13340200	0.25g	CA	
3-Decanol	C10	C 12095400	0.25g	BH	Propargyl alcohol	C 16433000	0.25g	BH	
1-Undecanol	C11	C 17896500	0.25g	BH					
1-Dodecanol	C12	C 13061000	0.25g	BH					

## Aliphatic Diols

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price		
1,2-Propanediol	C3	C 16405200	0.25g	BH	2,5-Hexanediol	C6	C 14195700	0.25g	CE
1,3-Propanediol	C3	C 16405300	0.25g	BH	1,7-Heptanediol	C7	C 14126500	0.25g	CE
1,2-Butanediol	C4	C 10861290	0.25g	BH	1,8-Octanediol	C8	C 15711040	0.25g	CA
1,3-Butanediol	C4	C 10861300	0.25g	BH	2-Ethyl-1,3-hexanediol	C8	C 13340000	0.25g	BH
1,4-Butanediol	C4	C 10861310	0.25g	BH	1,9-Nonanediol	C9	C 15623090	0.25g	BH
2,3-Butanediol	C4	C 10861320	0.25g	BH	1,10-Decanediol	C10	C 12095010	0.25g	BH
1,5-Pentanediol	C5	C 15977700	0.25g	BH	1,12-Dodecanediol	C12	C 13060200	0.25g	BH
2,4-Pentanediol	C5	C 15977800	0.25g	BH	cis-1,2-Cyclohexanediol	C 11824700	0.1g	CE	
1,6-Hexanediol	C6	C 14195600	0.25g	CC	trans-1,2-Cyclohexanediol	C 11824800	0.1g	CE	

## Aliphatic Thiols and Sulfides

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price		
1-Propanethiol	C3	CA16406100	0.25g	CA	Diethylsulfide	CA12607500	0.25g	CA	
2-Propanethiol	C3	CA16406200	0.25g	CA	Diallylsulfide	C 12191000	0.25g	CA	
1-Butanethiol	C4	CA10861410	0.25g	CA	Dipropylsulfide	C 12948000	0.25g	CE	
tert.-Butanethiol	C4	C 10861430	0.25g	CA	Dibutylsulfide	C 12256500	0.25g	CA	
1-Pentanethiol	C5	C 15978100	0.25g	CC	Diphenylsulfide	C 12910000	0.5g	BH	
1-Hexanethiol	C6	C 14195800	0.25g	CC	tert-Dodecanethiol	C12	C 13060300	0.25g	CE
1-Heptanethiol	C7	C 14126600	0.25g	CC	(mixture of isomers)				

## Ketones

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
Acetone (2-Propanone)	C3 CA10019000	5ml	BF	4-Methyl-2-pentanone	C 15123000	1ml	DC
2-Butanone	C4 C 10862000	5ml	CA	2-Methyl-3-hexanone	C 15088100	0.1g	CE
2-Pentanone	C5 C 15981500	1ml	DC	5-Methyl-2-hexanone	C 15088200	0.25g	CA
3-Pentanone	C5 C 15981600	1ml	DC	2-Methyl-3-heptanone	C 15087900	0.25g	CC
2-Hexanone	C6 C 14197500	1ml	CA	5-Methyl-3-heptanone	C 15088000	0.25g	BH
2-Heptanone	C7 C 14127600	1ml	CA	2,4-Dimethyl-3-pentanone	C 12728700	0.25g	CA
3-Heptanone	C7 C 14127700	1ml	CA	2,6-Dimethyl-4-heptanone	C 12727300	0.25g	CA
4-Heptanone	C7 C 14127800	1ml	CA	Mesityloxid	C 14913000	0.25g	CA
2-Octanone	C8 C 15711250	0.25g	CA	Cyclopentanone	C 11833500	1ml	CA
3-Octanone	C8 C 15711260	0.25g	CA	Cyclohexanone	C 11825500	5ml	CA
2-Nonanone	C9 C 15623220	0.25g	CA	2-Methylcyclohexanone	C 15085010	0.25g	CA
5-Nonanone	C9 C 15623250	0.25g	CA	3-Methylcyclohexanone	C 15085020	0.25g	CA
2-Decanone	C10 C 12095700	1ml	CA	4-Methylcyclohexanone	C 15085030	0.25g	CA
2-Undecanone	C11 C 17896600	1ml	CA	Acetophenone	C 10022000	0.25g	CA
2-Dodecanone	C12 C 13061300	0.25g	CA	Butyrophenone	C 10931900	0.25g	CA
2-Tridecanone	C13 C 17818500	0.25g	CA	n-Nonanophenone	C 15624000	0.1g	CA
3-Methyl-2-butanone	C 15084470	0.25g	CA	Laurophenone	C 14593500	0.25g	CA
2-Methyl-3-pentanone	C 15122800	0.1g	CE				

## Amines

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
n-Propylamine	C 16508000	0.25g	CE				
1-Butylamine	C 10929100	0.25g	BH	Diethylamine	CA12604500	5ml	BH
2-Butylamine	C 10929200	0.25g	BH	Dipropylamine	C 12938000	0.25g	BH
tert.-Butylamine	CA10929300	0.25g	BH	Dibutylamine	C 12250000	1g	BE
Isobutylamine	C 14394400	0.25g	BH	Diisobutylamine	C 12636000	0.25g	BH
1-Pentylamine	C 15982000	0.25g	BH	Dihexylamine	C 12634300	1 ml	BH
3-Methylbutylamine	C 15084500	0.25g	BH	Dibenzylamine	C 12214500	0.25g	BH
Hexylamine	C 14206000	0.25g	BH	Dicyclohexylamine	C 12585000	0.25g	BH
Cyclohexylamine	C 11830500	0.25g	BH	Diphenylamine	C 12890000	0.25g	BH
Benzylamine	C 10569200	0.25g	BH	Triethylamine	CA17832000	0.25g	BH
Heptylamine	C 14135000	0.25g	BH	Tripropylamine	C 17893700	1ml	BH
Octylamine	C 15711700	0.25g	BH	Tributylamine	C 17667500	0.25g	BH
Decylamine	C 12098500	0.25g	BH	Trihexylamine	C 17864000	1ml	BH
1-Dodecylamine	C 13062500	0.25g	BH	Tribenzylamine	C 17662800	0.25g	BH
Tetradecylamine	C 17397500	0.25g	BH				

## Glykol Ethers

Description	Cat. No.	Unit	Price	Description	Cat. No.	Unit	Price
Ethyleneglycol-monomethylether	C 13328200	0.25g	BH	Diethyleneglycol-monobutylether	C 12605900	0.25g	BH
Ethyleneglycol-monoethylether	C 13328100	0.25g	BH	Diethyleneglycol-monobutylether acetate	C 12606000	1g	BE
Ethyleneglycol-monobutylether	C 13328000	1g	CA	Diethyleneglycol-monohexylether	C 12606300	0.25g	BH
Ethyleneglycol-monophenylether	C 13328300	0.25g	BH	1-Methoxy-2-propanol	C 15083000	0.5g	CA
Diethyleneglycol-monomethylether	C 12606400	0.25g	BH	Dipropyleneglycol-monomethylether	C 12938500	0.25g	BH
Diethyleneglycol-monoethylether	C 12606200	0.25g	BH	Tripropyleneglycol-monomethylether	C 17893800	0.25g	BH

# Dr. Ehrenstorfer Reference Materials

## Fuel Standards

### Regular Unleaded Gasoline

2500 ng/µl in methanol YA03001100ME	1ml CA
Unweathered 5000 ng/µl in methanol YA03001200ME	1ml CA
25 % weathered 5000 ng/µl in methanol YA03001300ME	1ml CA
50 % weathered 5000 ng/µl in methanol YA03001400ME	1ml CA
75 % weathered 5000 ng/µl in methanol YA03001500ME	1ml CA

### Regular Unleaded Gasoline without additives

100 ng/µl in methanol XA03001600ME	1ml CA
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### Unleaded Gasoline with Certified Contents of BTEX

Unleaded Gasoline 10,000 ng/µl in methanol YA03001700ME	1ml EA
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### Unleaded Super Gasoline

500 ng/µl in methanol XA03002000ME	1ml CA
2500 ng/µl in MTBE YA03002000MB	1ml CA
Unweathered 5000 ng/µl in methanol YA03002100ME	1ml CA
25 % weathered 5000 ng/µl in methanol YA03002200ME	1ml CA
50 % weathered 5000 ng/µl in methanol YA03002300ME	1ml CA
75 % weathered 5000 ng/µl in methanol YA03002400ME	1ml CA

### Unleaded Super Gasoline without additives

100 ng/µl in methanol XA03002500ME	1ml CA
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## Unleaded Super Gasoline Plus

2500 ng/µl in MTBE YA03003000MB	1ml CA
Unweathered 5000 ng/µl in methanol YA03003100ME	1ml CA
25 % weathered 5000 ng/µl in methanol YA03003200ME	1ml CA
50 % weathered 5000 ng/µl in methanol YA03003300ME	1ml CA
75 % weathered 5000 ng/µl in methanol YA03003400ME	1ml CA

## Unleaded Super Gasoline Plus without additives

100 ng/µl in methanol XA03003500ME	1ml CA
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## Regular Diesel Fuel

500 ng/µl in methanol XA03004000ME	1ml CA
2500 ng/µl in methanol YA03004000ME	1ml CA
Unweathered in methyl tert-butyl ether 5000 ng/µl YA03004100MB	1ml CA
25 % weathered in methyl tert-butyl ether 5000 ng/µl YA03004200MB	1ml CA
50 % weathered in methyl tert-butyl ether 5000 ng/µl YA03004300MB	1ml CA
75 % weathered in methyl tert-butyl ether 5000 ng/µl YA03004400MB	1ml CA

## Regular Diesel Fuel without additives DIN H53 (EN9377-2)

100 ng/µl in methyl tert-butyl ether XA03009000MB	1ml CA
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## Winter Diesel Fuel

500 ng/µl in methanol XA03005000ME	1ml CA
2500 ng/µl in methanol YA03005000ME	1ml CA

Unweathered in methyl tert-butyl ether 5000 ng/µl YA03005100MB	1ml CA
25 % weathered in methyl tert-butyl ether 5000 ng/µl YA03005200MB	1ml CA
50 % weathered in methyl tert-butyl ether 5000 ng/µl YA03005300MB	1ml CA
75 % weathered in methyl tert-butyl ether 5000 ng/µl YA03005400MB	1ml CA

## DIN H53

### Diesel Oil without additives DIN H53 (EN9377-2)

certified CA03009000	1ml CA
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### Mineral Oil without additives DIN H53 (EN9377-2)

certified CA03009010	1ml CA
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### Set Diesel Oil and Mineral Oil DIN H53 (EN9377-2)

3 x 1ml Diesel Oil  
3 x 1ml Mineral Oil  
(both without additives, DIN H53, EN9377-2)

certified CA03009020	2x3x1ml HL
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## Aviation Fuels

### Jet A1

500 ng/µl in methanol XA03006000ME	1ml CA
2500 ng/µl in methanol YA03006000ME	1ml CA
Unweathered in methyl tert-butyl ether 5000 ng/µl YA03006100MB	1ml CA
25 % weathered in methyl tert-butyl ether 5000 ng/µl YA03006200MB	1ml CA
50 % weathered in methyl tert-butyl ether 5000 ng/µl YA03006300MB	1ml CA
75 % weathered in methyl tert-butyl ether 5000 ng/µl YA03006400MB	1ml CA

# Dr. Ehrenstorfer Reference Materials

## AF 1

2500 ng/µl in methanol  
YA03007000ME 1ml  
CA

Unweathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03007100MB 1ml  
CA

25 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03007200MB 1ml  
CA

50 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03007300MB 1ml  
CA

75 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03007400MB 1ml  
CA

## Heating Fuel Oil

2500 ng/µl in methanol  
YA03008000ME 1ml  
CA

Unweathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03008100MB 1ml  
CA

25 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03008200MB 1ml  
CA

50 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03008300MB 1ml  
CA

75 % weathered  
in methyl tert-butyl ether  
5000 ng/µl  
YA03008400MB 1ml  
CA

## Petroleum Benzines

### Benzine 30-50°

2500 ng/µl in methanol  
YA03010000ME 1ml  
CA

### Benzine 40-60°

2500 ng/µl in methanol  
YA03011000ME 1ml  
CA

### Benzine 40-80°

2500 ng/µl in methanol  
YA03012000ME 1ml  
CA

### Benzine 50-70°

2500 ng/µl in methanol  
YA03013000ME 1ml  
CA

### Benzine 60-80°

2500 ng/µl in methanol  
YA03014000ME 1ml  
CA

## Benzine 80-100°

2500 ng/µl in methanol  
YA03015000ME 1ml  
CA

## Benzine 100-120°

2500 ng/µl in methanol  
YA03016000ME 1ml  
CA

## Benzine 100-140°

2500 ng/µl in methanol  
YA03017000ME 1ml  
CA

## Underground Storage Tank Analysis

### LUST Retention Time Standard

n-Hexane	C6
n-Decane	C10
n-Dodecane	C12
n-Tetracosane	C24
n-Octacosane	C28
n-Triacontane	C30
n-Tetracontane	C40

25ng/µl each component  
in dichloromethane 1ml  
YA03000100DI DF

### DRO Mixture 1 (Tennessee/Mississippi)

n-Decane	C10
n-Undecane	C11
n-Dodecane	C12
n-Tridecane	C13
n-Tetradecane	C14
n-Pentadecane	C15
n-Hexadecane	C16
n-Heptadecane	C17
n-Octadecane	C18
n-Nonadecane	C19
n-Eicosane	C20
n-Heineicosane	C21
n-Docosane	C22
n-Tricosane	C23
n-Tetracosane	C24
n-Pentacosane	C25

1000 ng/µl each component  
in hexane 1ml  
YA03000200HE DF

### DRO Mixture 2 (Tennessee/Mississippi)

n-Decane	C10
n-Dodecane	C12
n-Tetradecane	C14
n-Hexadecane	C16
n-Octadecane	C18
n-Eicosane	C20
n-Docosane	C22
n-Tetracosane	C24
n-Hexacosane	C26
n-Octacosane	C28

1000 ng/µl each component  
in methyl tert-butyl ether 1ml  
YA03000300MB DF

## Alkanes Mix 10

n-Decane	C10
n-Undecane	C11
n-Dodecane	C12
n-Tridecane	C13
n-Tetradecane	C14
n-Pentadecane	C15
n-Hexadecane	C16
n-Heptadecane	C17
n-Octadecane	C18
n-Nonadecane	C19
n-Eicosane	C20
n-Heineicosane	C21
n-Docosane	C22
n-Tricosane	C23
n-Tetracosane	C24
n-Pentacosane	C25
n-Hexacosane	C26
n-Heptacosane	C27
n-Octacosane	C28
n-Nonacosane	C29
n-Triacontane	C30
n-Hentriacontane	C31
n-Dotriacontane	C32
n-Tritriacontane	C33
n-Tetratriacontane	C34
n-Pentatriacontane	C35

500 ng/µl in toluene 1ml  
YA03001000TO KE

## Alkanes Mix 12

n-Octane	C8
n-Decane	C10
n-Dodecane	C12
n-Tetradecane	C14
n-Hexadecane	C16
n-Octadecane	C18
n-Eicosane	C20
n-Docosane	C22
n-Tetracosane	C24
n-Hexacosane	C26
n-Octacosane	C28
n-Triacontane	C30
n-Dotriacontane	C32
n-Tetratriacontane	C34
n-Hexatriacontane	C36
n-Octatriacontane	C38
n-Tetracontane	C40

100 ng/µl in toluene 1ml  
XA03011200TO KE

## Gasoline Additives

Dibromomethane  
1,2-Dichloroethane  
Ethylene dibromide  
Methyl tert.-butyl ether

200 ng/µl each component  
in methanol 1ml  
XA03032000ME CE

**B T E X Mixtures**

**Mix of Aromatic Hydrocarbons 2**

Benzene	
Ethylbenzene	
Toluene	
o-Xylene	
m-Xylene	
p-Xylene	
10 ng/µl each compound in methanol	10ml GK
L 19070200ME	
100 ng/µl each compound in methanol	10ml GK
X 19070200ME	

**Aromatic Hydrocarbons Mix 11**

Benzene	
Ethylbenzene	
Toluene	
o-Xylene	
m-Xylene	
p-Xylene	
2000 ng/µl each component in methanol	1ml DA
YA04000100ME	

**Mix of Aromatic Hydrocarbons 13**  
DIN 38407-F19

Benzene	
Ethylbenzene	
Toluene	
o-Xylene	
m-Xylene	
p-Xylene	
1,2,3-Trimethylbenzene	
1,2,4-Trimethylbenzene	
1,3,5-Trimethylbenzene	
10000 ng/µl each component in hexane	1ml EH
YA19071300HE	

**Aromatic VOC Mix 1**

Benzene	
Chlorobenzene	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Ethylbenzene	
Toluene	
m-Xylene	
o-Xylene	
p-Xylene	
2000 ng/µl each component in methanol	1ml DF
YA08020100ME	

**Aromatic VOC Mix 3**

Benzene	
Chlorobenzene	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Ethylbenzene	
Styrene	
Toluene	
m-Xylene	
o-Xylene	
p-Xylene	
100 ng/µl each component in methanol	1ml DH
XA08020300ME	
2000 ng/µl each component in methanol	1ml DH
YA08020300ME	

**PVOC Mixture 3 (Wisconsin)**

Benzene	
Ethylbenzene	
Methyl tert-butyl ether (MTBE)	
Naphthalene	
Toluene	
1,2,4-Trimethylbenzene	
1,3,5-Trimethylbenzene	
o-Xylene	
m-Xylene	
p-Xylene	
1000 ng/µl each component in methanol	1ml DC
YA03032300ME	

**Internal and Surrogate Standards for UST Testing**

**alpha,alpha,alpha-Trifluorotoluene**

2000 ng/µl in methanol	1ml
YA17846000ME	DA

**Chlorinated Aromatics-Mix 1**

1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,2,4-Trichlorobenzene	
1,3,5-Trichlorobenzene	
1,2,3,4-Tetrachlorobenzene	
1,2,3,5-Tetrachlorobenzene	
1,2,4,5-Tetrachlorobenzene	
Pentachlorobenzene	
Hexachlorobenzene	
10ng/µl each component in hexane	1ml DH
LA19060100HE	

**Chlorinated Aromatics-Mix 2**

1,2,3-Trichlorobenzene	
1,2,4-Trichlorobenzene	
1,3,5-Trichlorobenzene	
1,2,3,4-Tetrachlorobenzene	
1,2,3,5-Tetrachlorobenzene	
1,2,4,5-Tetrachlorobenzene	
10ng/µl each component n cyclohexane	1ml DH
LA19060200CY	

**USP / National Formulary for Method 467**

**VOC Mix 1**

Benzene	200 ng/µl
Chloroform (Trichloromethane)	100 ng/µl
1,4-Dioxane dichloromethane (Dichloromethane)	200 ng/µl
200 ng/µl	
Trichloroethene	200 ng/µl
in methanol	1ml
YA03023600ME	DC

**EPA Method 418.1**

**Calibration Oil**

Chlorobenzene	25.0% v/v
n-Hexadecane	37.5% v/v
iso-Octane	37.5% v/v
YA03033000	1ml CE