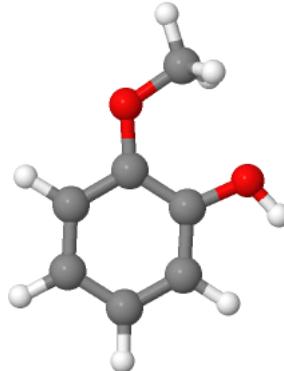


Guaiacol

Edition des infos générales (/admin/Molecule/add_molecule/90-05-1)



JSmol

Colonne	Moyennes	Ecarts types	Nombre de réf
DB-Wax	1863.68	22.13	<u>28</u>
DB-5	1086.93	19.55	<u>14</u>
DB-1	0	0	<u>0</u>
FFAP	1863.5	7.79	<u>3</u>
OV-101	1056	0	=

Standard indisponible

Substance aromatisante autorisée dans l'alimentation Pas de source référencée.

Log de Kow : 1.34000

M/Z : 124.0524

IC50 ABTS(µM) : Indisponible

Température d'ébullition : 205°C

Le composé Guaiacol appartient à la famille des Phenol ayant une activité antioxydante (IC50(ABTS) inconnue. Il est présent dans les matrices suivantes : aloe arborescens mill. var. natalensis berger, basil (leaf), beer, bourbon, bread, brew coffee, brewed coffee, cacao powder, cereal coffee brew, chocolate, coffee, grape berry, ground coffee, honey, liquor, orange, red wine, rice, rum, sesame seed oil, tea, tea (rooibos), thym leaf, vanilla, whey powder, whisky, white wine, wine, yogurt. Aucune valeur pour la longueur d'ondes d'absorption n'est disponible. C'est un composé dont les descriptifs sont fumée, médicament, phenol, sweet, burnt, spicy, chimique, bacon, grass, fat, chêne, caramel, thé, smoke, wood, rose, balsamic, désinfectant, rance, floral. Ses seuils de perception sont de 1.000 µg/L dans la matrice "beer", 2.500 µg/L dans la matrice "coffee", 10.000 µg/L dans la matrice "Model wine", 9.500 à 25.000 µg/L dans la matrice "Water", 3.000 µg/L dans la matrice "whisky", 50.000 à 1050.000 µg/L dans la matrice "wine".

Temps de rétention

Matrices concernées

Matrices	Référence soulignant la présence
aloe arborescens mill. var. natalensis berger	10.1021/jf990116i (http://dx.doi.org/10.1021/jf990116i)
basil (leaf)	10.1016/j.foodchem.2004.05.056 (http://dx.doi.org/10.1016/j.foodchem.2004.05.056)
beer	10.1021/jf051167k (http://dx.doi.org/10.1021/jf051167k)
beer	10.3390/fermentation4010020 (http://dx.doi.org/10.3390/fermentation4010020)
bourbon	10.1007/978-3-540-69934-7 (http://dx.doi.org/10.1007/978-3-540-69934-7)
bread	Potent odorants of rye bread crust- differences from the crumb and from wheat bread crust
brew coffee	10.1007/s002170000169 (http://dx.doi.org/10.1007/s002170000169)
brewed coffee	10.1021/jf061178t (http://dx.doi.org/10.1021/jf061178t)
cacao powder	10.1007/978-3-540-69934-7 (http://dx.doi.org/10.1007/978-3-540-69934-7)
cacao powder	10.1007/s00217-005-1147-y (http://dx.doi.org/10.1007/s00217-005-1147-y)
cereal coffee brew	Identification of Aroma Active Compounds of Cereal Coffee Brew and Its Roasted Ingredients
chocolate	10.1021/jf0114177 (http://dx.doi.org/10.1021/jf0114177)
coffee	
coffee	10.1007%2Fs00217-001-0459-9 (http://dx.doi.org/10.1007%2Fs00217-001-0459-9)
coffee	10.1007/s002170100305 (http://dx.doi.org/10.1007/s002170100305)
coffee	10.1021/jf990609n (http://dx.doi.org/10.1021/jf990609n)
coffee	10.4236/jwarp.2014.64039 (http://dx.doi.org/10.4236/jwarp.2014.64039)
coffee	Changes in Headspace Volatile Concentrations of Coffee Brews Caused by the Roasting Process and the Brewing Procedure
coffee	Czerny M. and Grosch W., Potent odorants of raw arabica coffee. Their changes during roasting, <i>J. Agric. Food Chem.</i> , 2000
coffee	Holscher W., Vitzthum O. and Steinhart H., Identification and sensorial evaluation of aroma-impact-compounds in roasted Colombian coffee, <i>CafÃ© Cacao ThÃ©â€, 1990</i>
coffee	http://wiki.triestecoffeecluster.com/index.php?title=Aroma (http://dx.doi.org/http://wiki.triestecoffeecluster.com/index.php?title=Aroma)
coffee	http://www.flavourjournal.com/content/1/1/14 (http://dx.doi.org/http://www.flavourjournal.com/content/1/1/14)
coffee	Mayer F. and Grosch W., Aroma simulation on the basis of the odorant composition of roasted coffee headspace, <i>Flavour Fragr.</i> , 2001
grape berry	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
ground coffee	New Aroma Index to Determine the Aroma Quality of Roasted and Ground Coffee During Storage
honey	10.1002/jssc.200600413 (http://dx.doi.org/10.1002/jssc.200600413)
liquor	
orange	Identification of Sulfur Volatiles in Canned Orange Juices Lacking Orange Flavor
red wine	10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6 (<a href="http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6">http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6)
red wine	10.1007/s00217-009-1189-7 (http://dx.doi.org/10.1007/s00217-009-1189-7)
red wine	10.1016/j.aca.2005.10.035 (http://dx.doi.org/10.1016/j.aca.2005.10.035)
red wine	10.1016/j.chroma.2012.01.002 (http://dx.doi.org/10.1016/j.chroma.2012.01.002)

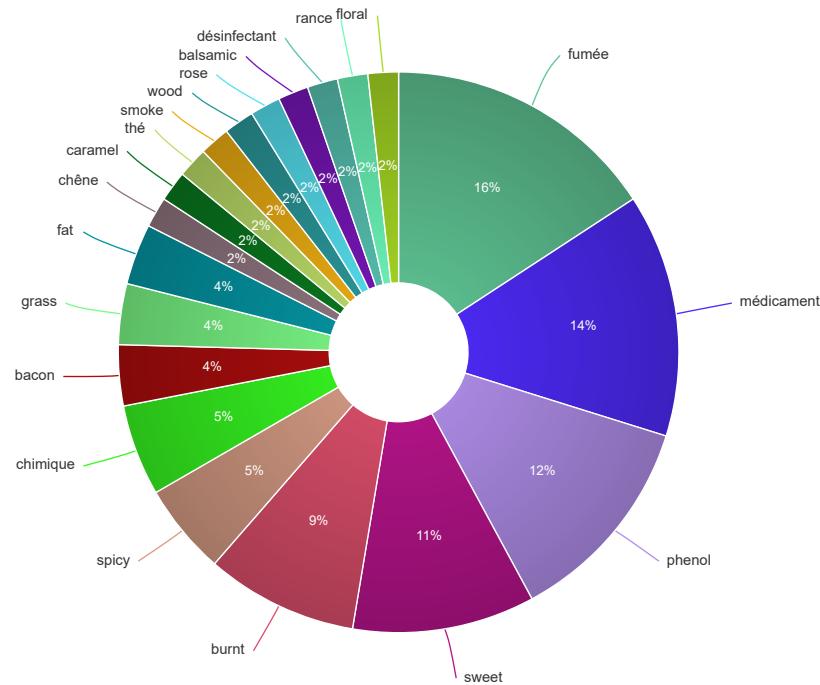
red wine	10.1016/j.foodchem.2012.02.194 (http://dx.doi.org/10.1016/j.foodchem.2012.02.194)
red wine	10.1021/jf001372u (http://dx.doi.org/10.1021/jf001372u)
red wine	10.1021/jf104141f (http://dx.doi.org/10.1021/jf104141f)
red wine	10.1021/jf2050685 (http://dx.doi.org/10.1021/jf2050685)
red wine	Development of aroma compounds in Pinot noir Grapes and their Relative Importance in Wine (Year 1)
rice	:10.1016/j.foodchem.2010.06.061
rum	10.1016/j.foodchem.2011.11.133 (http://dx.doi.org/10.1016/j.foodchem.2011.11.133)
sesame seed oil	10.1021/jf960115f (http://dx.doi.org/10.1021/jf960115f)
tea	10.1021/jf052495n (http://dx.doi.org/10.1021/jf052495n)
tea (rooibos)	Volatile Constituents of Rooibos Tea (<i>Aspalathus linearis</i>) As Affected by Extraction Process
thym leaf	10.1016/j.foodchem.2004.05.056 (http://dx.doi.org/10.1016/j.foodchem.2004.05.056)
vanilla	10.1016/j.foodchem.2005.08.050 (http://dx.doi.org/10.1016/j.foodchem.2005.08.050)
whey powder	https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologies.pdf (http://dx.doi.org/https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologies.pdf)
whisky	10.1007/978-3-540-69934-7 (http://dx.doi.org/10.1007/978-3-540-69934-7)
white wine	10.1016/j.chroma.2010.11.008 (http://dx.doi.org/10.1016/j.chroma.2010.11.008)
white wine	10.1016/j.foodchem.2005.11.045 (http://dx.doi.org/10.1016/j.foodchem.2005.11.045)
white wine	10.1016/j.foodres.2014.02.002 (http://dx.doi.org/10.1016/j.foodres.2014.02.002)
white wine	10.1021/jf026045w (http://dx.doi.org/10.1021/jf026045w)
white wine	10.1021/jf034747v (http://dx.doi.org/10.1021/jf034747v)
white wine	10.1021/jf035341l (http://dx.doi.org/10.1021/jf035341l)
white wine	Identification of Character Impact Odorants of Different White Wine Varieties
white wine	J. Agric. Food Chem., Vol. 45, No. 8, 1997
wine	10.1016/j.chroma.2006.11.106 (http://dx.doi.org/10.1016/j.chroma.2006.11.106)
wine	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
wine	10.1021/jf104324d (http://dx.doi.org/10.1021/jf104324d)
wine	10.1021/jf2050685 (http://dx.doi.org/10.1021/jf2050685)
wine	Environmental Influences on Grape Aroma Potential
yogurt	10.1080/10408390903044081 (http://dx.doi.org/10.1080/10408390903044081)

Descriptifs olfactifs(résumé) :

fumée,médicament,phenol,sweet,burnt,spicy,chimique,bacon,grass,fat,chêne,caramel,thé,smoke,wood,rose,balsamic,désinfectant,rance,floral

Olfactive description

Graphic summary



Références des descriptions

Descriptif aromatique	Référence des descriptifs
bacon	10.3390/fermentation4010020 (http://dx.doi.org/10.3390/fermentation4010020)
bacon	https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologies.pdf (http://dx.doi.org/ https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologie)
balsamic	http://flavornet.org/fkovats.html (http://dx.doi.org/ http://flavornet.org/fkovats.html)
burnt	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
burnt	10.1021/jf300150d (http://dx.doi.org/10.1021/jf300150d)
burnt	Changes in Headspace Volatile Concentrations of Coffee Brews Caused by the Roasting Process and the Brewing Procedure
burnt	http://flavornet.org/fkovats.html (http://dx.doi.org/ http://flavornet.org/fkovats.html)
burnt	Potent odorants of rye bread crust- differences from the crumb and from wheat bread crust
caramel	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
chêne	10.1021/jf034747v (http://dx.doi.org/10.1021/jf034747v)
chimique	10.1016/j.foodchem.2005.08.050 (http://dx.doi.org/10.1016/j.foodchem.2005.08.050)
chimique	10.1021/jf001372u (http://dx.doi.org/10.1021/jf001372u)
chimique	10.1021/jf035341l (http://dx.doi.org/10.1021/jf035341l)
désinfectant	Identification of Sulfur Volatiles in Canned Orange Juices Lacking Orange Flavor
fat	10.1002/ffj.3095 (http://dx.doi.org/10.1002/ffj.3095)
fat	10.1016 /S0021-9673(03)00524-7 (http://dx.doi.org/10.1016 /S0021-9673(03)00524-7)

floral	http://owri.oregonstate.edu/sites/owri.org/files/documents/WineProgressReports/2002-03/Development%20of%20aroma%20compounds%20in%20Pinot%20noir%20Grapes%20and%20their%20Relative%20Importance%20in%20Wine%20(Y (http://dx.doi.org/http://owri.oregonstate.edu/sites/owri.org/files/documents/WineProgressReports/2002-03/Development%20of%20aroma%20compounds%20in%20Pinot%20noir%20Grapes%20and%20their%20Relative%20Importance%20in%20Wine%20(Y
fumée	
fumée	10.1016/j.foodchem.2012.02.194 (http://dx.doi.org/10.1016/j.foodchem.2012.02.194)
fumée	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
fumée	10.1016/j.foodres.2014.02.002 (http://dx.doi.org/10.1016/j.foodres.2014.02.002)
fumée	10.1021/jf034747v (http://dx.doi.org/10.1021/jf034747v)
fumée	10.1021/jf051167k (http://dx.doi.org/10.1021/jf051167k)
fumée	10.1021/jf052495n (http://dx.doi.org/10.1021/jf052495n)
fumée	10.1146/annurev-food-030212-182707 (http://dx.doi.org/10.1146/annurev-food-030212-182707)
fumée	http://flavornet.org/fkovats.html (http://dx.doi.org/http://flavornet.org/fkovats.html)
grass	10.1002/ffj.3095 (http://dx.doi.org/10.1002/ffj.3095)
grass	10.1016 /S0021-9673(03)00524-7 (http://dx.doi.org/10.1016 /S0021-9673(03)00524-7)
médicament	
médicament	10.1002/ffj.3095 (http://dx.doi.org/10.1002/ffj.3095)
médicament	10.1016/j.foodchem.2012.02.194 (http://dx.doi.org/10.1016/j.foodchem.2012.02.194)
médicament	10.1016/j.foodres.2014.02.002 (http://dx.doi.org/10.1016/j.foodres.2014.02.002)
médicament	10.1016/j.talanta.2012.05.043 (http://dx.doi.org/10.1016/j.talanta.2012.05.043)
médicament	10.1146/annurev-food-030212-182707 (http://dx.doi.org/10.1146/annurev-food-030212-182707)
médicament	http://flavornet.org/fkovats.html (http://dx.doi.org/http://flavornet.org/fkovats.html)
médicament	Identification of Sulfur Volatiles in Canned Orange Juices Lacking Orange Flavor
phenol	10.1002/ffj.3095 (http://dx.doi.org/10.1002/ffj.3095)
phenol	10.1016/j.chroma.2006.11.106 (http://dx.doi.org/10.1016/j.chroma.2006.11.106)
phenol	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
phenol	10.1016/j.talanta.2012.05.043 (http://dx.doi.org/10.1016/j.talanta.2012.05.043)
phenol	10.1021/jf001372u (http://dx.doi.org/10.1021/jf001372u)
phenol	10.1021/jf035341l (http://dx.doi.org/10.1021/jf035341l)
phenol	Changes in Headspace Volatile Concentrations of Coffee Brews Caused by the Roasting Process and the Brewing Procedure
rance	10.1002/ffj.3095 (http://dx.doi.org/10.1002/ffj.3095)
rose	10.1021/jf052495n (http://dx.doi.org/10.1021/jf052495n)
smoke	10.3390/fermentation4010020 (http://dx.doi.org/10.3390/fermentation4010020)
spicy	10.1016/j.foodchem.2005.08.050 (http://dx.doi.org/10.1016/j.foodchem.2005.08.050)
spicy	10.1021/jf034747v (http://dx.doi.org/10.1021/jf034747v)
spicy	http://flavornet.org/fkovats.html (http://dx.doi.org/http://flavornet.org/fkovats.html)
sweet	10.1016/j.foodchem.2012.02.194 (http://dx.doi.org/10.1016/j.foodchem.2012.02.194)
sweet	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
sweet	10.1016/j.foodres.2014.02.002 (http://dx.doi.org/10.1016/j.foodres.2014.02.002)
sweet	Development of aroma compounds in Pinot noir Grapes and their Relative Importance in Wine (Year 1)
sweet	http://flavornet.org/fkovats.html (http://dx.doi.org/http://flavornet.org/fkovats.html)
sweet	http://owri.oregonstate.edu/sites/owri.org/files/documents/WineProgressReports/2002-03/Development%20of%20aroma%20compounds%20in%20Pinot%20noir%20Grapes%20and%20their%20Relative%20Importance%20in%20Wine%20(Y (http://dx.doi.org/http://owri.oregonstate.edu/sites/owri.org/files/documents/WineProgressReports/2002-03/Development%20of%20aroma%20compounds%20in%20Pinot%20noir%20Grapes%20and%20their%20Relative%20Importance%20in%20Wine%20(Y

thé	Development of aroma compounds in Pinot noir Grapes and their Relative Importance in Wine (Year 1)	
wood	http://flavornet.org/fkovats.html (http://dx.doi.org/http://flavornet.org/fkovats.html)	

Seuils

Seuil de perception(µg/L) (µg/Kg)	Matrice de seuil de perception	Référence de seuil de perception
0.840		Compilation of Odor Thresholds, Odor Qualities and Retention Indices of Key Food and odorant
1.000	beer	
2.500	coffee	The Compositional Basis of Coffee Flavour Wenny Bekti Sunarharum Bachelor of Agricultural Technology (STP) Master of Food Studies (MFoodSt)
3.000	Model wine	10.1016/j.foodchem.2012.12.048 (http://dx.doi.org/10.1016/j.foodchem.2012.12.048)
9.500	Model wine	V. Ferreira, R. Lopez, J. Cacho, J. Sci. Food Agric. 80 (11) (2000) 1659
9.500	Model wine	10.1021/jf970280a (http://dx.doi.org/10.1021/jf970280a)
9.500	Model wine	
9.500	Model wine	10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6 (<a href="http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6">http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6)
10.000	Model wine	10.1016/j.foodchem.2012.02.194 (http://dx.doi.org/10.1016/j.foodchem.2012.02.194)
10.000	Model wine	10.1021/jf026045w (http://dx.doi.org/10.1021/jf026045w)
1.000	Water	Chetschik, I.; Granvogl, M.; Schieberle P. Comparison of the key aromacompounds in organically grown, raw west-african peanuts (<i>Arachis hypogaea</i>) and ground, pan-Roasted meal produced thereof. J. Agric. Food Chem. 2008, 56, 10237-10243.
2.500	Water	Compilation of Odor Thresholds, Odor Qualities and Retention Indices of Key Food and odorant
3.000	Water	Flament I: Coffee Flavour Chemistry. Chichester: John Wiley and Sons LTD; 2002.
3.000	Water	Rychlik M, Schieberle P, Grosch W. Compilation of Odor Thresholds, Odor Qualities and Retention Indices of Key Food Odorants. Deutsche Forschungsanstalt für Lebensmittelchemie: Garching 1998.
9.200	Water	
9.500	Water	10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6 (<a href="http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6">http://dx.doi.org/10.1002/1097-0010(20000901)80:11<1659::AID-JSFA693>3.0.CO;2-6)
25.000	Water	Compilation of Odor Thresholds, Odor Qualities and Retention Indices of Key Food Odorants
3.000	whisky	10.1007/BF02258900 (http://dx.doi.org/10.1007/BF02258900)
9.500	wine	10.1021/jf2050685 (http://dx.doi.org/10.1021/jf2050685)
10.000	wine	Volatile Compounds in Foods and Beverages
50.000	wine	10.1016/j.chroma.2006.11.106 (http://dx.doi.org/10.1016/j.chroma.2006.11.106)
1050.000	wine	10.1016/j.foodres.2014.02.002 (http://dx.doi.org/10.1016/j.foodres.2014.02.002)

Marqueurs de qualité

Marqueur de qualité	Variété de qualité	Référence qualité
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Notes

Intitulé	Matrice concernée	Référence notes
Lignin pyrolysis	beer	10.3390/fermentation4010020 (http://dx.doi.org/10.3390/fermentation4010020)
Smoky/phenolic group	brew coffee	10.1007/s002170000169 (http://dx.doi.org/10.1007/s002170000169)
key odorant in coffee	coffee	10.1021/jf990609n (http://dx.doi.org/10.1021/jf990609n)
key odorant in coffee	coffee	10.1007%2Fs00217-001-0459-9 (http://dx.doi.org/10.1007%2Fs00217-001-0459-9)
	tea (rooibos)	
amino acids breakdown	whey powder	https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologies.pdf (http://dx.doi.org/https://www.globalfoodforums.com/wp-content/uploads/2014/04/Robert-McGorrin-Oregon-State-2014-Protein-Trends-Technologies.pdf)
Bacterial (or thermic) transformation of the vanillin in guaiacol	wine	10.1016/j.chroma.2006.11.106 (http://dx.doi.org/10.1016/j.chroma.2006.11.106)
Cabernet sauvignon	wine	10.1021/jf104324d (http://dx.doi.org/10.1021/jf104324d)

Taux de concentration (µg/L) et de dilution

Matrice	Minimum concentration	Moyenne concentration	Maximum concentration	Minimum FD	Moyenne FD	Maximum FD	Action
Basil (feuille)	0.000	0.0000000	0.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/Basil%20%28feuille%29)
beer	0.000	0.4000000	2.000	0.000	64.0000000	128.000	Voir les sources (/Molecule/list_sources/90-05-1/beer)
bourbon	56.000	56.0000000	56.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/bourbon)
brewed coffee	0.000	0.0000000	0.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/brewed%20coffee)
cacao powder	0.000	115.0000000	230.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/cacao%20powder)
chocolate	66.000	81.2500000	99.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/chocolate)
coffee	0.000	172.5401538	1039.626	0.000	861.9047619	3420.000	Voir les sources (/Molecule/list_sources/90-05-1/coffee)
grape	120.000	120.0000000	120.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/grape)
grape berry	7.000	16.1666667	42.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/grape%20berry)
red wine	0.000	13.2696629	55.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/red%20wine)
rum	2.000	2.0000000	2.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/rum)
rye bread	0.000	0.0000000	0.000	1.000	16.5000000	32.000	Voir les sources (/Molecule/list_sources/90-05-1/rye%20bread)
sesame seed oil	320.000	320.0000000	320.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/sesame%20seed%20oil)

Tea infusion	0.000	0.0000000	0.000	16.000	16.0000000	16.000	Voir les sources (/Molecule/list_sources/90-05-1/Tea%20infusion)
thym leaf	0.000	0.0000000	0.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/thym%20leaf)
vanilla	9300.000	9300.0000000	9300.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/vanilla)
whisky	25.000	25.0000000	25.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/whisky)
white wine	0.000	43.3333333	284.000	0.000	4.5614035	50.000	Voir les sources (/Molecule/list_sources/90-05-1/white%20wine)
yogurt	0.000	0.0000000	0.000	0.000	0.0000000	0.000	Voir les sources (/Molecule/list_sources/90-05-1/yogurt)