

List of dielectric constants

Substance	Dielectric Constant
A	
Acetal	3.8
Acetaldehyde	15.0
Acetamide (77° C)	59.2
Acetic acid	6.2
Acetoacetic acid ethyl ester	15.0
Acetone	21.5
Acetophenone	18.0
Acetyl bromide	16.2
Acetyl chloride	15.9
Acetylacetone	23.0
Acetylene dibromide	7.2
Acetylene tetrabromide	5.6
Aconite acid ester	6.3
Activated carbon	12.0
Adipic Acid	1.8
Aerosile	1.0
Aether	4.0
Allyl alcohol	20.6
Allyl chloride	8.2
Allyl iodide	6.1
Alum (60° C)	4.2
Aluminium bromide (100° C)	3.4
Aluminium foil	10.8

Substance	Dielectric Constant
Aluminium hydroxide	2.5
Aluminium splinters	7.3
Aluminium sulfate	2.6
Ammonia	15.0
Ammonia salt	4.3
Ammonia solution (25%)	31.6
Amyl amine	4.5
Aniline	7.0
Animal feed grist	2.4
Anisealdehyde	22.3
Anisole	4.5
Anthracite/hard coal	3.2
Antimony hydride	1.8
Argon	1.5
Arsine	2.1
Arsole	2.3
Asbestos	10.0
Ascorbic acid	2.1
Azelaic acid diethylester	5.0
Azoxybenzene (36° C)	5.2
B	
Basalt	2.5
Bauxite	2.5
Beer brew	25.0
Beets cuttings	7.3
Beets seeds	3.5
Bentonite	8.1
Benzal chloride	6.9
Benzaldehyde	17.6
Benzene	2.3
Benzene, heavy	3.2
Benzil (80° C)	10.0

Substance	Dielectric Constant
Benzine	2.0
Benzyl alcohol	13.5
Benzyl chloride	7.0
Benzylamine	4.6
Bitumen	2.8
Black liquor	32.0
Bone fat	2.7
Bonemeal	1.7
Bore oil emulsion	25.0
Bornylacetate	4.6
Bromine	3.1
Butanoic acid	3.0
C	
Cacao beans	1.8
Calcium fluoride	2.5
Camphene	2.3
Caproic acid (71° C)	2.6
Caprylic acid	2.5
Carbazole	1.3
Carbon black	18.8
Carbon disulfide	2.6
Carbon tetrachloride	2.3
Carbonylcyanid	10.7
Caustic potash	3.3
Cellit	1.6
Cellulose	1.2
Cement	2.2
Cement asbestos	3.2
Ceramic compound	17.0
Cetyl alcohol (60° C)	3.6
Chaff	1.5
Chalk	2.1
Chamotte	1.8

Substance	Dielectric Constant
Charcoal	1.3
Chloorhydrin	31.0
Chlorobenzene	5.7
Chlor, fluid	2.1
Chloral	6.7
Chlorinated lime	2.3
Chloroacetic acid	33.4
Chloroform	4.8
Chocolate powder	2.0
Clay	2.3
Coal dust	2.5
Coal (15% moisture)	4.0
Coconut oil (refined)	2.9
Coffee beans	1.5
Coke	3.0
Cola essence	17.3
Concentrated feed	3.2
Copper ore	5.6
Cork powder	1.7
Corn	3.6
Corn grist	2.1
Corn starch syrup	18.4
Cotton fibre flour	3.2
Cream (skin)	19.0
Cresol	11.0
Cresol resin	18.3
Crystal sugar	2.0
Cullet (glass shards)	2.0
Cuminaldehyde	10.7
Cyanogen	2.5
D	
Decalin	2.1

Substance	Dielectric Constant
Degalan	3.1
Desmodur	10.0
Diacetone alcohol	18.2
Diamylether	3.0
Diatomaceous earth	1.4
Dibenzofuran (100° C)	3.0
Dibenzyl (60° C)	2.5
Diesel fuel	2.1
Diethyl carbonate	2.8
Diethylamine	3.8
Dimethyl ether	5.0
Diofan	32.0
Dioxane	2.0
Diphenyl (75° C)	2.5
Dry yeast	2.0
E	
Emulphor	4.0
Epichlorhydrin	23.0
Ethanol (ethyl alcohol)	16.2
Ethyl acetate	6.0
Ethyl benzene	2.4
Ethyl benzoate	6.0
Ethyl mercaptan	6.9
Ethylamine	6.9
Ethylene chlorhydrin	25.0
Ethylene chloride	10.6
Ethylenediamine	15.0
Ethylene oxide (- 1° C)	13.9
F	
Fat coal	3.4
Fatty acid (35° C)	1.7

Substance	Dielectric Constant
Fenchone	12.8
Ferrite pellets	21.0
Ferrosilicon	10.0
Ferrozell	18.3
Fertiliser	4.3
Fiber glass powder	1.0
G	
Glycol	37.0
Glysantin	25.0
Grain grist	3.0
Grain of mustard	3.6
Grain of soy	2.9
Granuform	4.0
Gravel	2.6
Green vitriol	32.4
Guaiacol	11.0
Guano	2.5
Gypsum	1.8
H	
Hazels	2.0
Heating oil	2.1
Heavy fuel oil	2.2
Helium	1.1
Heptanal	9.1
Heptane	1.9
Heptanoic acid (71° C)	2.6
Heptene	2.1
Hexachlorobutadiene	2.6
Hexane	1.9
Hexanol	12.5
Hexene	2.1
Hibiscus	2.8
Honey	24.0

Substance	Dielectric Constant
Hot glue (150° C)	2.3
Hydrazine	58.0
Hydrochloric acid	5.0
Hydrogen	1.2
Hydrogen cyanide	158.0
Hydrogen fluoride (0° C)	83.6
Hydrogen iodide	2.9
Hydrogen peroxide (0° C)	84.2
Hydrogen sulfide	6.0
I	
Ice cream (-20° C)	16.5
Imidazole (100° C)	23.0
Iodine	11.1
Iodobenzene	4.6
Iron(III) oxide red	1.9
Isoamyl acetate	4.8
Isoamyl alcohol	15.6
Isoamyl bromide	6.0
Isoamyl chloride	6.1
Isoamyl ether	2.8
Isoamyl iodide	5.6
Isobutanoic acid	2.6
Isobutyl alcohol	18.1
Isobutyl amine	4.4
Isobutyl benzene	2.3
Isobutyl bromide	7.2
Isobutyl chloride	6.5
Isobutyl cyanide	18.0
Isobutyl iodide	6.5
Isobutyl nitrate	11.7
Isobutyl silane	2.5
Isocyanate	6.1

Substance	Dielectric Constant
Isoprene	2.1
Isopropanol	18.0
Isoquinoline	10.7
Isosafrol	3.3
K	
Ketchup	24.0
L	
Lanolin	4.2
Lard (80° C)	2.1
Latex	24.0
Lauric acid ethyl ester	3.4
Lime	2.0
Linoleic acid	2.7
M	
Malic acid diethylester	10.0
Malt	2.7
Mandelic acid nitrile	18.0
Marble stones small (2-3 mm)	2.5
Meat and bone meal	1.9
Meat and bone meal (alternative)	2.2
Menthol (42° C)	4.0
Mercury diethyl	2.1
Mesityl oxide	15.0
Metal powder	6.0
Methanol (methyl alcohol)	33.0
Methyl acetate	8.0
Methyl cellulose	3.0
Methyl iodide	7.1
Methyl nitrate	23.5

Substance	Dielectric Constant
Methylene bromide	7.0
Methylene chloride	9.0 – 9.1
Methylene iodide	5.3
Mice feed	2.3
Molasses	31.3
Mono chlormethane	9.8
Morpholine	7.3
Mustard	24.0
N	
Naphtalene	2.5
Naphthenic acid	2.6
Nitric acid (98%)	19.0
Nitro phoska	5.4
Nitro varnish	5.2
Nitrobenzene	35.0
Nitroethane	29.0
Nitroglycerin	19.3
Nitroglycol	28.3
Nitromethane	39.0
Nitrosyl bromide	15.2
Nitrosyl chloride	19.0
O	
Oat	4.9
Octane	2.0
Octene	2.1
Octyl bromide	5.0
Oil	2.0
Oleic acid	2.5
R	
Rapeseed grist	2.1
Resin	1.5
Rice	3.0
Rock salt (0-25 mm)	4.3
Rye	6.0

Substance	Dielectric Constant
Rye bran	2.2
S	
Saccharose solution	20.0
Salt water	32.0
Sawdust	1.3
Silica sand	2.0
Silicic acid	2.0
Silicone oil	2.7
Silicone rubber	2.9
Skim milk powder	2.3
Soap flakes	9.2
Soap pellets	3.5
Soda	3.0
Sodium chloride	23.0
Sodium methylate	1.5
Sodium perborate	2.2
Sodium peroxide	2.7
Sodium silicate	16.0
Sodium sulfate	2.7
Soft soap	32.0
Solvent	18.0
Soy flour	4.5
Splints	1.1
Stearic acid	2.3
Styrene	2.4
Sugar	1.8
Sulfur trioxide	3.1
Sulfuric acid	21.9
Sulfuric acid (17%)	31.0
Sulfuric acid (97%)	8.6
Sulphur	3.5
Sulphur dioxide	14.0
Sunflower seeds	2.0
T	

Substance	Dielectric Constant
Talcum	1.5
Tankage	1.9
Tar	4.0
Tartaric acid	35.9
Tea powder	2.0
Terephthalic acid	1.5
Terpinene	2.7
Terpinolene	2.3
Tetrachlorethylene	2.5
Thomaskali dust	3.4
Thujone (0° C)	10.8
Tinder	12.0
Titan tetrachloride	2.8
Tobacco dust	1.8
Toluene	2.4
Tooth paste	18.3
Transformer oil	2.1
Trichloroethylene	3.2
Triethylaluminium	2.9
Triptan	1.9
U	
Ultrasil	1.4
Undecan	2.0
Urea	2.9
V	
Valeric acid	2.7
Vinegar	24.0
Viscose	34.5
W	
Water	80.3
Water (360° C)	10.0
Water, demineralized	29.3
Water, heavy	78.3

Substance	Dielectric Constant
Water-in-oil emulsion	24.2
Wax	1.8
Wheat	4.0
Wheat starch	2.5
White spirit	2.0
Wine	25.0
Wood chips	2.3
Wood swarf	1.5
X	
Xylene	2.3
Xylitol	40.0
Z	
Zinc oxide	1.5
Zinc powder	4.4