

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in *Viola odorata***

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	2,6-NONADIEN-1-AL	Flower	--	--		
0	2,6-NONADIEN-1-AL	Leaf	--	--		
0	2,6-NONADIEN-1-OL	Leaf	--	--		
0	2,6-NONADIEN-1-OL	Flower	--	--		
0	3-BETA-FRIEDELANOL	Flower	--	--		
0	ALDEHYDE	Flower	30000	50000		
5	ALPHA-IONONE	Flower	--	--		
0	ALPHA-IRONE	Flower	--	--		
9	BENZYL-ALCOHOL	Leaf	--	--		
9	BENZYL-ALCOHOL	Flower	--	--		
13	BETA-IONONE	Flower	--	--		
0	BETA-IRONE	Flower	--	--		
2	BETA-NITROPROPIONIC-ACID	Root	10	20		
47	BETA-SITOSTEROL	Plant	330	330	-0.4341454543450208	
5	CYANIN	Flower	53000	53000		
0	D-DIHYDRO-ALPHA-IONONE	Flower	--	--		
0	D-DIHYDRO-BETA-IONONE	Flower	--	--		
0	DIETHYL-PHTHALATE	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	ENANTHIC-ACID	Leaf	--	--		
0	EO	Essential Oil	900	1200	-1.3350520743601195	
0	EO	Flower	300	1700	-0.36672560272657334	
0	EO	Root	380	380	-0.6368933349929101	
76	EUGENOL	Flower	147	357	-0.37653084625288163	
76	EUGENOL	Leaf	--	--		
61	FERULIC-ACID	Plant	--	--		
2	FRIEDELIN	Leaf	160	160		
2	GAULTHERIN	Plant	--	--		
0	HEPTENOL	Flower	--	--		
7	ISOBORNEOL	Flower	--	--		
75	KAEMPFEROL	Plant	--	--		
0	L-ZINGIBERENE	Flower	--	--		
15	MALIC-ACID	Flower	--	--		
21	METHYL-SALICYLATE	Root	--	--		
0	MYROSIN	Seed	--	--		
0	N-2-OCTEN-1-OL(?)	Leaf	--	--		
0	N-HEPTENOL	Leaf	--	--		
0	N-HEPTYL-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	N-HEXANOL	Flower	--	--		
0	N-HEXANOL	Leaf	--	--		
0	N-HEXENOL(?)	Leaf	--	--		
0	N-OCTENOL(?)	Leaf	--	--		
0	OCTADIENOL(?)	Flower	--	--		
0	OCTENOIC-ACID	Leaf	--	--		
0	OCTYLIC-ACID	Leaf	--	--		
0	ODORATINE	Root	14100	14100		
13	PALMITIC-ACID	Leaf	--	--		
0	PARMONE	Flower	--	--		
2	PIPERONAL	Flower	--	--		
6	PROPIONIC-ACID	Leaf	--	--		
176	QUERCETIN	Plant	--	--		
87	RUTIN	Flower	20000	20000	-0.45214806529802004	
34	SALICYLIC-ACID	Leaf	--	--		
0	SALICYLIC-ACID-METHYL-ESTER	Root	--	--		
5	SAPONINS	Root	1000	25000	-0.545236603114766	
44	SCOPOLETIN	Plant	--	--		
9	SINAPIC-ACID	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TRIACETOAMINE	Root	--	--		
0	UNDECANONE-2	Flower	--	--		
28	VANILLIN	Flower	--	--		
0	VIOLAQUERCITRIN	Flower	--	--		
0	VIOLARUTIN	Flower	20000	20000		
1	VIOLIN	Flower	--	--		
1	VIOLIN	Root	--	--		
0	VIOLUTOSIDE	Plant	--	--		