

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

**Chemicals Found in Chrysanthemum x morifolium**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
67	1,8-CINEOLE	Plant	24	90	-0.5364006987067864	Wealth of India.
16	ACACETIN	Flower	--	--		Wealth of India.
0	ACACETIN-7-O-GALACTOPURANOSIDE	Flower	--	--		Wealth of India.
0	ACACETIN-7-O-GLUCOSIDE	Flower	--	--		Wealth of India.
0	ACACETIN-7-RHAMNOGLUCOSIDE	Flower	--	--		Wealth of India.
0	ACACETIN-7-RHAMNOGLUCOSIDE-DIHYDRATE	Plant	--	--		
0	ACACIIN	Flower	--	--		Wealth of India.
16	ACETIC-ACID	Flower	--	--		Wealth of India.
28	ADENOSINE	Plant	--	--		
3	ALPHA-CADINOL	Plant	18	70	0.7812684206594567	Wealth of India.
0	ALPHA-COPAENE	Plant	2	5	-0.5147605038264476	Wealth of India.
28	ALPHA-PINENE	Plant	3	14	-0.4715678091747994	Wealth of India.
3	ALPHA-SELINENE	Plant	32	120	1.6504862173312838	Wealth of India.
13	ALPHA-TERPINENE	Plant	6	24	-0.4654209872833327	Wealth of India.
0	AMINOZIDE	Plant	--	--		
0	ANGELOYCUMAMBRIN-B	Plant	--	--		Wealth of India.
0	ANGELOYLAJADIN	Plant	--	--		Wealth of India.
7	ANISALDEHYDE	Flower	--	--		Wealth of India.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	APIGENIN-7-O-GLUCOSIDE	Flower	--	--		Wealth of India.
3	AR-CURCUMENE	Plant	4	15	-0.514502295665997	Wealth of India.
3	ARTEGLASIN-A	Plant	--	--		Wealth of India.
1	BEHENIC-ACID	Flower	--	--		Wealth of India.
24	BENZALDEHYDE	Flower	--	--		Wealth of India.
20	BENZOIC-ACID	Flower	--	--		Wealth of India.
9	BETA-AMYRIN	Flower	--	--		Wealth of India.
0	BETA-CARYOPHYLLENE	Plant	3	12	-0.8116538278799078	Wealth of India.
5	BETA-ELEMENE	Flower	--	--		Wealth of India.
5	BETA-ELEMENE	Plant	2	6	-0.45349400861411276	Wealth of India.
0	BETA-FARNESENE	Plant	20	75	1.3378319203503106	Wealth of India.
13	BETA-PINENE	Plant	0.4	1.5	-0.4338670087455951	Wealth of India.
47	BETA-SITOSTEROL	Flower	--	--		Wealth of India.
35	BORNEOL	Flower	--	--		
35	BORNEOL	Plant	12	45	-0.6302706844154905	Wealth of India.
12	BORNYL-ACETATE	Flower	--	--		Wealth of India.
12	BORNYL-ACETATE	Plant	30	115	-0.39546516463620013	Wealth of India.
0	CALACOLENE	Plant	15	60		Wealth of India.
0	CALAMENE	Plant	2	9	-1	Wealth of India.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Flower	--	--		Wealth of India.
9	CAMPHENENE	Plant	8	30	-0.5545069597862352	Wealth of India.
41	CAMPHOR	Flower	--	--		Wealth of India.
8	CARYOPHYLLENE-OXIDE	Plant	15	57	-0.30752562113988746	Wealth of India.
1	CHLOROCHRYMORIN	Plant	--	--		
20	CHOLINE	Flower	--	--		
0	CHRYSANDIOL	Plant	--	--		Wealth of India.
0	CHRYSANTHEMIN	Plant	--	--		
0	CHRYSANTHEMIN-CHLORIDE	Plant	--	--		
1	CHRYSANTHEMOL	Flower	--	--		Wealth of India.
0	CHRYSANTHEMONE	Plant	--	--		
2	CHRYSANTHENONE	Flower	--	--		Wealth of India.
0	CHRYSARTEMIN-A	Plant	--	--		Wealth of India.
0	CHRYSARTEMIN-B	Plant	--	--		Wealth of India.
4	COSMOIIN	Plant	--	--		
0	CUMAMBRIN-A	Flower	--	--		Wealth of India.
0	DIOSMETIN-7-O-GLUCOSIDE	Flower	--	--		Wealth of India.
0	EO	Flower	--	1400	-0.376713254264274	Wealth of India.
0	EO	Shoot	400	1500	-0.8141965329475307	Wealth of India.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
24	ETHANOL	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
0	FAT	Seed	--	171000	-0.4971732054307718	Wealth of India.
0	GAMMA-CADINENE	Plant	20	75	0.5048602026128912	Wealth of India.
2	GERMACRENE-D	Plant	36	130	-0.3120042673282946	Wealth of India.
0	GLYCERYL-1-MONOBEHENATE	Flower	--	--		Wealth of India.
0	HENEICOSANE	Flower	--	--		Wealth of India.
0	HEXACOSANE	Flower	--	--		Wealth of India.
0	INDICUMENONE	Plant	--	--		Wealth of India.
0	KIKUKETONE-A	Flower	--	--		Wealth of India.
1	LIGNOCERIC-ACID	Flower	--	--		Wealth of India.
53	LINALOOL	Plant	3	10	-0.6629650658166377	Wealth of India.
7	LINALYL-ACETATE	Plant	6	23	-0.567007818782863	Wealth of India.
1	LINARIN	Flower	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
78	LUTEOLIN	Flower	--	--		Wealth of India.
7	LUTEOLIN-7-GLUCOSIDE	Flower	--	--		
22	MYRCENE	Plant	24	90	-0.37722360475393335	Wealth of India.
11	NEROLIDOL	Plant	10	42	-0.18982104327431903	Wealth of India.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Plant	3	14	-0.4166106950305513	Wealth of India.
13	PALMITIC-ACID	Flower	--	--		Wealth of India.
6	PROPIONIC-ACID	Flower	--	--		Wealth of India.
0	QUERCETIN-GLYCOSIDE	Flower	--	--		Wealth of India.
5	SABINENE	Plant	4	17	-0.441840720596955	Wealth of India.
6	STACHYDRINE	Flower	--	--		
8	STEARIC-ACID	Flower	--	--		Wealth of India.
12	STIGMASTEROL	Flower	--	--		Wealth of India.
0	T-MUUROLOL	Plant	23	80		Wealth of India.
71	THYMOL	Flower	--	--		Wealth of India.
0	TRICOSANE	Flower	--	--		Wealth of India.
89	URSOLIC-ACID	Flower	--	--		Wealth of India.