

**Calcium Sulfonate Salts
(CaDDBSA)**

Stepan Agricultural Solutions offers a complete line of calcium sulfonate salts, both linear and branched, using a variety of solvent systems. These products are appropriate for use in emulsifiable concentrates, suspoemulsions and oil dispersions. Stepan Company's manufacturing process produces clear products with minimal color.

Product Overview

Trade Name	CAS No.	Chain Type	Actives (%)	Solvent	Density, g/ml @ 25°C	Flash Point, PMCC, °C (°F)	Pour Point, °C (°F)	EPA Clearances
NINATE® 401-A	68953-96-8	Branched	60	Aromatic 150	1.03	66 (151)	-7 (19)	40 CFR 180.910 40 CFR 180.930
NINATE 50-H ¹	68584-23-6	Linear	50	Alkyl dimethylamide	0.99	>94 (>201)	-14 (7)	40 CFR 180.920
NINATE 50-H-M ¹	68584-23-6	Linear	50	Alkyl dimethylamide	0.99	>94 (>201)	-17 (1)	40 CFR 180.920
NINATE 50-H-ME ¹	68584-23-6	Linear	50	Alkyl dimethylamide and alkyl methyl ester mixture	0.99	>94 (>201)	-9 (16)	40 CFR 180.920
NINATE 60E	68584-23-6	Linear	60	2-Ethyl hexanol	0.99	65 (149)	-17 (1)	40 CFR 180.910 40 CFR 180.930 (<27% in pesticide)
NINATE 60L	68584-23-6	Linear	60	Aromatic 150	1.02	54 (129)	-11 (12)	40 CFR 180.910 40 CFR 180.930
NINATE 70B	68584-23-6	Linear	70	Isobutanol	1.01	32 (90)	7 (45)	40 CFR 180.920

Formulation Examples

Trifluralin 4E (480 g/L) EC

Component	%
Trifluralin	48.75
NINATE 401-A	2.75
Surfactants	3.25
Aromatic 150	45.25

Bifenthrin 2E (240 g/L) EC

Component	%
Bifenthrin	26.04
HALLCOMID® M-8-10	67.97
NINATE 60E	1.26
Surfactants	4.74

Triclopyr 3E (360 g/L) EC

Component	%
Triclopyr	44.40
NINATE 60L	5.60
Surfactants	4.40
Aromatic 150	45.60

Methylated Seed Oil

Component	%
STEPOSOL® ME	90.00
NINATE 50-H	5.00
Surfactants	5.00

¹ For commercial status of this product, please contact your Stepan Sales Representative.

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