

# **AGROCHEMICAL SOLUTIONS**

*EUROPE PORTFOLIO*

**Stepan**   
Agricultural Solutions

Growing Through Science



# STEPAN PORTFOLIO

Developing a new formulation for the Agro market is a challenging task that requires significant investment, technical knowledge and time. Through an experienced technical team and a broad product portfolio, Stepan offers solutions that enable to accelerate the development of formulations such as Soluble Liquids (SL), Emulsifiable Concentrates (EC), Microemulsions (ME), Suspensions Concentrates (SC), Oil Dispersions (OD), Dispersible Granules (WG), Wettable Powders (WP), among others.



## Emulsifiers and Wetting Agents

**NINATE®**  
Calcium Dodecylbenzene Sulfonates

**BIO-SOFT® N**  
Fatty alcohol Ethoxylates

**TOXIMUL®**  
Castor Oil Ethoxylates

**NINEX® MT**  
Fatty Acid Ethoxylates

**MAKON® DA and MAKON® UD**  
Decyl and Undecyl Alcohol Ethoxylates

**MAKON® TD**  
Tridecyl Alcohol Ethoxylates



## Dispersants

**STEP-FLOW®**  
Copolymers  
Acrylics/Stearics

**STEPFAC®**  
Phosphate Esters

**STEOL® TSP-16N**  
Ether Sulfates

**MAKON® TSP**  
Tristyrylphenol Ethoxylates

**TOXIMUL®**  
Block Copolymers EO-PO

**STEPSPERSE® DF**  
Lignosulfonates



## Green Solvents

**HALLCOMID®**  
Dimethylamides

**STEPAN® C**  
Methyl Esters

**STEPOSOL®**  
Methyl Esters

**STEPAN® 108**  
Triglycerides



## Generic Solutions

Emulsifying pairs


**STEPGROW®**

Glyphosate Pinoxaden  
Malathion

## Customised solutions

**OMRI products**  
ECOSTEP™

# CUSTOMISED SOLUTIONS

Stepan Trade Name	Application	EPA - 40 CFR 180 status
<b>ADJUVANTS FOR SL GLYPHOSATE</b>		
TOXIMUL® AO	Glyphosate salt (K) 360-540 g/L	910 Not to exceed 83% in a pesticide formulation
STEPFAC® 3675 	Glyphosate salt (IPA) 360-490 g/L	Nonfood Only
AMPHOSOL® DM/MB	Glyphosate salt (IPA) 360-490 g/L	-
<b>GLUFOSINATE SOLUTIONS</b>		
STEPGROW® GL 103	APG- and AES-free Adjuvant SL solution	910
STEPGROW® GL 104 XTRA	APG- and AES-free Adjuvant SL solution	910
STEOL® CS-270 CIT	Glufosinate surfactant : adjuvant	910, 930 Not to exceed 41,1% in pesticide formulation
AMMONYX® LO	Glufosinate surfactant : adjuvant	910 Not to exceed 48,5% in pesticide formulation
<b>PINOXADEN SOLUTIONS</b>		
STEPGROW® PX 103-H and -L	Optimised Emulsifier / Adjuvant solutions	910
<b>MALATHION SOLUTION</b>		
STEPGROW® ML 101	Emulsifier solution for ECs	910, 930 Not to exceed 52.2% in pesticide formulation

Stepan Trade Name	Application	HLB	EPA - 40 CFR 180 status
<b>MULTIPURPOSE EMULSIFIABLE CONCENTRATE SOLUTIONS</b>			
STEPGROW® AB 1004	Emulsifier blend for Methyl esters	-	910, 930
STEPGROW® AB 1024	Emulsifier blends to be used in pair	9,6	910 Not to exceed 75% in pesticide formulation
STEPGROW® AB 1026		12,6	910 Not to exceed 18.7% in pesticide formulation
TOXIMUL® DH-68	Emulsifier blend	12.3	The EU version CANNOT be used as an inert ingredient within the US
TOXIMUL® DM-83	Emulsifier blend	13.5	
TOXIMUL® DL-66	Emulsifier blend	9.5	
TOXIMUL® SO-411	Emulsifier blend, low moisture	-	920, 930

Stepan Trade Name	Application	EPA - 40 CFR 180 status
<b>TANK MIX ADJUVANTS</b>		
STEPGROW® CTE	Compatibility adjuvant to eliminate challenges of complex tank mixes	910, 930 Not to exceed 48.35% in pesticide formulation
STEPGROW® AMS	Low foaming water conditioner adjuvant	910
STEPGROW® DRTS	Drift reduction adjuvant and deposition aid	910, 930
STEPGROW® 90-EU	Spreader/activator adjuvant	920 Data compensation required to be provided to use as an inert in the US

# GREEN SOLVENTS

Stepan Trade Name	C-chain	Function					EPA - 40 CFR 180 status
		EC	EW	SE	OD	DC	
<b>STEPAN® &amp; STEPOSOL® SERIES – Methyl esters of fatty acids derived from vegetable oils</b>							
STEPAN® C-25	Coconut - C8-10	A, S	A, S	A, S	A, C	-	910
STEPAN® C-42	Coconut - C12-14	A, S	A, S	A, S	A, C	-	
STEPAN® C-65 	Coconut - C16-18 & C18-unsatd	A, S	A, S	A, S	A, C	-	
STEPOSOL® ROE-W 	Rapeseed - C16-18 & C18-unsatd	A, S	A, S	A, S	A, C	-	
STEPOSOL® SB-W 	Soybean - C16-18 & C18-unsatd	A, S	A, S	A, S	A, C	-	
STEPOSOL® C-1218	Coconut - C12-16 (even numbered) & C18 unsatd	A, S	A, S	A, S	A, C	-	
<b>STEPAN® – Glyceride</b>							
STEPAN® 108	C8-10	A, S	A, S	A, S	A, C	-	910
<b>HALLCOMID® SERIES – Dimethylamide</b>							
HALLCOMID® DML	C3	S	-	-	-	S	910, 930 Not to exceed 50% in pesticide formulation Data compensation required to be provided
HALLCOMID® M-8-10	C8-10	S	S	S	-	-	920
HALLCOMID® M-9	C9	S	S	S	-	-	910, 930 Not to exceed 20% in pesticide formulation
HALLCOMID® M-10	C10	S	S	S	-	-	920
HALLCOMID® 1025	unsaturated C10	S	S	S	-	-	910 Not to exceed 20% in pesticide formulation
HALLCOMID® 1225	unsaturated C12	S	S	S	-	-	-
HALLCOMID® M-12-14	C12-14	S	S	S	-	-	910 Not to exceed 25% in pesticide formulation

# ANIONICS


Stepan Trade Name	Appearance 25°C	Alkyl Chain	Solvent	Salt	Active typical	EPA - 40 CFR 180 status
<b>CALCIUM DODECYLBENZENE SULFONATES (CADDBS)</b>						
NINATE® 401-A ND	Liquid	Branched	Aromatic & Hexan-1-ol & Propylene Glycol	Calcium	60%	-
NINATE® 60 NO-E	Liquid	Branched	n-octanol	Calcium	58%	910
NINATE® 60L ND	Liquid	Linear	Aromatic & Hexan-1-ol & Propylene Glycol	Calcium	60%	910, 930
NINATE® 60 EPG	Liquid	Linear	2-Ethylhexan-1-ol & Propylene glycol	Calcium	57%	920
NINATE® 60EU	Liquid	Linear	2-Ethylhexan-1-ol	Calcium	59%	920 Not to exceed 26% in pesticide formulation
NINATE® 60B-E	Liquid	Linear	Isobutanol	Calcium	63%	920
NINATE® 70B-E	Liquid	Linear	Isobutanol	Calcium	69%	920
NINATE® 67NB-E	Liquid	Linear	n-butanol	Calcium	67%	910, 930
NINATE® 100 L	Powder	Linear	Solvent free	Calcium	100%	910, 930

Code  
Formulations  
functions


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**WP/WG** : Wettable Powder /Wettable Granules

**A** : Adjuvant  
**C** : Carrier  
**D** : Dispersant  
**E** : Emulsifier

**H** : Hydrotape  
**W** : Wetting Agent  
**S** : Solvent  
 NOP compliant

Stepan Trade Name	Appearance 25°C	Alkyl Chain	Solvent	Salt	Active typical	EPA - 40 CFR 180 status
<b>DODECYLBENZENE SULFONATES (DDBS)</b>						
STEPWET® DF-90 NACCONOL® 90G	Powder	Linear	-	Sodium	92%	920, 930
BIO-SOFT® 411-E	Liquid	Linear	-	IPA	92%	920, 930
<b>DODECYLBENZENE SULFONIC ACID</b>						
BIO-SOFT® LA ACID	Liquid	Linear	-	-	96%	910, 930

Stepan Trade Name	Solvent	Appearance 25°C	Active typical	Function							EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	WP WG	
<b>SODIUM DIOCTYL SULFOSUCCINATES</b>											
STEPWET® DOS 50NC	Water	Liquid	50%	-	W	-	E	E	E	-	910, 930, 940a
STEPWET® DOS 60	Ethanol/water	Liquid	60%	-	W	-	E	E	E	-	910, 930, 940a
STEPWET® DOS 70	Ethanol/water	Liquid	70%	-	W	-	E	E	E	-	910, 930, 940a
STEPWET® DOS 75-PG	MPG/water	Liquid	72%	-	W	-	E	E	E	-	910, 930
STEPWET® DOS 60 ROE 	Methyl ester	Liquid	60%	E	-	-	E	E	E, W	-	910
STEPWET® DOS 64A 150ND	Aromatic 150ND	Liquid	64%	E	-	-	E	E	E, W	-	920
STEPWET® DOS 85	Dry form	Powder	85%	-	-	-	-	-	-	W	910, 930, 940a


Stepan Trade Name	Chemical description	Appearance 25°C	Active typical	Function						EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	
<b>PHOSPHATE ESTERS</b>										
STEPFAC™ TSP-PE 	TSP, 16EO phosphate ester	Liquid	98%	E	D	-	E	E	E, D	920 Not to exceed 20,83% in pesticide formulation
STEPFAC™ TSP-PE K 	TSP, 16EO phosphate ester K salt	Liquid	40%	E	D	-	E	E	E, D	920 Not to exceed 50% in pesticide formulation
STEPFAC™ TSP-PE N 	TSP, 16EO phosphate ester TEA salt	Liquid	98%	E	D	-	E	E	E, D	920 Not to exceed 27,8% in pesticide formulation
STEPFAC™ TSP-PEN-60 	TSP, 16EO phosphate ester TEA salt	Liquid	60%	-	D	-	E	E	-	920 Not to exceed 45,5% in pesticide formulation
STEPFAC™ 8180 	C13, 3 EO phosphate ester	Liquid	100%	E	-	A	E	E	E	910, 920, 930 Not to exceed 30% in pesticide formulation
STEPFAC™ 8181 	C13, 6 EO phosphate ester	Liquid	100%	E	-	A	E	E	E	910, 920, 930 Not to exceed 30% in pesticide formulation
STEPFAC™ 8181 K	C13, 6 EO phosphate ester K salt	Liquid	50%	-	W	A	E	E	-	910, 930 Not to exceed 83% in pesticide formulation
STEPFAC™ 8181 PT3 	C13, 6 EO phosphate ester	Liquid	100%	E	D	A	E	E	E, D	910 Not to exceed 39% in pesticide formulation
STEPFAC™ 8181 PT3K	C13, 6 EO phosphate ester K salt	Liquid	98%	E	D	A	E	E	E, D	910, 930 Not to exceed 41% in pesticide formulation
STEPFAC™ 810 	Alcohol ethoxylate phosphate ester	Liquid	98%	-	A, W	A	-	-	-	910, 930
STEPFAC™ 3675 	Alcohol ethoxylate phosphate ester	Liquid	70%	E	E, W	A	E	E	E	Nonfood only

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**A** : Adjuvant  
**C** : Carrier  
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Stepan Trade Name	Chemical description	Appearance 25°C	Active typical	Function							EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	WP WG	
<b>ALKYL ETHER SULFATES</b>											
POLYSTEP B-230 SE	Linear C12-14, 2EO - Na salt	Liquid	27,5%	-	-	A	E	E	-	-	Nonfood only
STEOL® CS-230 HA		Liquid	27,5%	-	-	A	E	E	-	-	910, 930
STEOL® CS-270		Liquid	70%	-	-	A	E	E	-	-	910, 930 Not to exceed 41,7% in pesticide formulation
STEOL® CS-270 CIT		Liquid	70%	-	-	A	E	E	-	-	910, 930 Not to exceed 41.1% in pesticide formulation
STEOL® CS-270 CIT HDX		Liquid	70%	-	-	A	E	E	-	-	
STEOL® CA-330-E	Linear C12-14, 3EO - NH4 salt	Liquid	25%	-	-	A	-	-	-	-	920
STEOL® CA-460	C12-15, 3EO - NH4 salt	Liquid	59%	-	-	A	-	-	-	-	910 Not to exceed 50% in pesticide formulation
STEOL® CS-460	C12-15, 3EO - Na salt	Liquid	59%	-	-	A	-	-	-	-	910, 930 Not to exceed 50% in pesticide formulation
STEOL® TSP-16N	TSP, 16EO - NH4 salt	Liquid	93%	E	D	-	E	E	E	-	920 Not to exceed 15% in pesticide formulation
STEOL® TSP-16N-60	TSP, 16EO - NH4 salt 60% in MPG	Liquid	60%	-	D	-	E	E	-	-	920 Not to exceed 25% in pesticide formulation
<b>ALKYL SULFATES</b>											
POLYSTEP B-25 M	Alkyl C10-12 sulfate Na salt	Liquid	38%	-	-	A	E	E	-	-	Nonfood only
STEPANOL® ME-DRY	Alkyl C12-14 sulfate Na salt	Powder	93%	-	W	W	E	E	-	W	910
STEPANOL® WA-100	Alkyl C12-14 sulfate Na salt	Powder	98%	-	W	W	E	E	-	W	910, 930, 940a-c For the 940a and 940b clearances, when ready for use, end-use concentration is not to exceed 350 ppm.
<b>ALPHA OLEFIN SULFONATES</b>											
BIO-TERGE® AS-40 HASB	Sodium C14-16 olefin sulfonate	Liquid	40%	-	A, W	-	E	E	-	-	910
BIO-TERGE® AS-40 KSB		Liquid	40%	-	A, W	-	E	E	-	-	920
BIO-TERGE® AS-90 COARSE		Powder	88%	-	A, W	-	E	E	-	W	920
<b>SODIUM ALKANE SULFONATES</b>											
BIO-TERGE® PAS 7S	Sodium C6-8 Alkane Sulfonate	Liquid	40%	-	-	H	E	E	-	-	-
BIO-TERGE® PAS-8S E	Sodium C8 Alkane Sulfonate	Liquid	40%	-	-	H	E	E	-	-	-
<b>SULFONATED METHYL ESTERS</b>											
ALPHA-STEP® PC-48	Sodium Methyl 2-sulfolaurate and disodium 2-sulfolaurate	Liquid	-	-	W, A	A	E	E	-	-	Nonfood only














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				EC	SC SE	SL	EW	ME	OD	WP WG	
<b>ALCOHOL ETHOXYLATES</b>											
BIO-SOFT® N23-3	C12-15, 3 EO	Liquid	8	E	W	A, W	E	E	-	-	910, 930, 940a
BIO-SOFT® N25-7	C12-15, 7 EO	Paste	12	E	W	A, W	E	E	-	-	
BIO-SOFT® N91-2.5	C9-11, 2,5 EO	Liquid	8,5	E	-	-	E	E	E, W	-	
BIO-SOFT® N91-6	C9-11, 6 EO	Liquid	12.4	E	W	A, W	E	E	-	-	
BIO-SOFT® N91-8	C9-11, 8 EO	Liquid	13.9	E	W	A, W	E	E	-	-	
BIO-SOFT® NC-10	C8-18, 10EO	Paste	14	E	A	A	E	E	E	-	
MAKON® DA-7E	Iso C10, 7 EO	Liquid	12	E	W	A	E	E	E, W	-	
MAKON® UD-5 	C11 branched, 5 EO	Liquid	11	E	W	A	E	E	E, W	-	
MAKON® UD-8 	C11 branched, 8 EO	Liquid	13,2	E	W	A	E	E	E, W	-	
MAKON® TD-6 E	C13 branched, 6 EO	Liquid	10	E	W	A	E	E	E, W	-	
MAKON® TD 10-E	C13 branched, 10 EO	Solid	13,5	E	W	A	E	E	E, W	-	
<b>ALCOHOL ALKOXYLATES</b>											
MAKON® TD-50 	C13, EO-PO	Solid	16	E	E	-	E	E	E	-	910, 930, 940a, 960
MAKON® NF-12 E	C10-12, EO-PO	Liquid	6	E	A	-	E	E	E, W	-	910, 930, 940a
BIO-SOFT® EA 10-85	C8-10, EO-PO	Liquid	15	E	A	A	E	E	E, W	-	910, 930, 940a
MAKON® NF-180	C10, EO-PO	Liquid	-	E	A	A	E	E	E, W	-	910, 930, 940a, 960
<b>OIL ETHOXYLATES</b>											
TOXIMUL® 8240-E 	Castor oil, 36 EO	Liquid	13	E	E	-	E	E	E	-	960
TOXIMUL® 8241 	Castor oil, 30 EO	Liquid	12	E	E	-	E	E	E	-	
TOXIMUL® 8242-E 	Castor oil, 40 EO	Liquid	13	E	E	-	E	E	E	-	
TOXIMUL® 8243 	Castor oil, 20 EO	Liquid	10	E	E	-	E	E	E	-	
TOXIMUL® 8250-E 	Castor oil, 10 EO	Liquid	6,5	E	E	-	E	E	E	-	
TOXIMUL® 8000 	-	Liquid	-	E	E	-	E	E	E	-	
<b>TRISTYRYLPHENOL ALKOXYLATES</b>											
MAKON® TSP-16 	TSP, 16 EO	Liquid	13	E	W, D	-	E	E	E, D	-	910, 920 Not to exceed 15% in pesticide formulation
MAKON® TSP-20 	TSP, 20 EO	Liquid	14	E	W, D	-	E	E	E, D	-	
MAKON® TSP-40 FLAKES	TSP, 40 EO	Flakes	16	E	W, D	-	E	E	E, D	-	910 Not to exceed 15% in pesticide formulation
MAKON® TSP-60 	TSP, 60 EO	Solid	18	E	W, D	-	E	E	E	-	
STEP-FLOW® 1500 	TSP Alkoxyated	Liquid	17	E	W, D	-	E	E	E, W	-	960

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				EC	SC SE	SL	EW	ME	OD	WP WG	
<b>EO-PO BLOCK COPOLYMERS</b>											
TOXIMUL® 8315 	Butyl based EO-PO	Liquid	13	E	W, D	-	E	E	E, W	-	960
TOXIMUL® 8320 		Paste	12	E	W, D	-	E	E	E, W	-	
TOXIMUL® 8320 LM 		Paste	12	E	W, D	-	E	E	E, W	-	
TOXIMUL® 8325		Liquid	11	E	W, D	-	E	E	E, W	-	
TOXIMUL® 8330 		Liquid	17	E	W, D	-	E	E	E, W	-	
TOXIMUL® 8323 	EO-PO-EO	Paste	15	E	W, D	-	E	E	E, W	-	940a, 940c, 960
STEP-FLOW 26 		Paste	13	E	W	A	E	E	E, W	-	
STEP-FLOW 26-18 		Liquid	13	-	W	A	E	-	E, W	-	
STEP-FLOW 26 F 		Liquid	13	E	W	A	E	E	E, W	-	
MAKON P105 		Paste	13	E	W	A	E	E	E, W	-	
MAKON P105-18		Liquid	13	-	W	A	E	-	E, W	-	
MAKON L61		Liquid	3	E	-	-	E	E	E, W	-	
MAKON L62		Liquid	7	E	-	-	-	-	-	-	
MAKON L64		Liquid	15	E	W	A	E	E	E, W	-	
MAKON 17R2		PO-EO-PO	Liquid	6	E	-	-	E	E	E, W	
MAKON 17R4	Liquid		12	E	W	A	E	E	E, W	-	
<b>FATTY ACID ALKOXYLATES</b>											
NINEX® MT-603	Fatty acid Ethoxylate	Liquid	6	E	-	-	E	E	E	-	910, 930
NINEX® MT-610		Liquid	12	E	W	-	E	E	E, W	-	
NINEX® MT-615		Liquid	13	E A	W, A	-	E	E	E, W	-	
NINEX® MT-630F	Fatty acid Alkoxylate	Solid	16	E A	W, A	-	E	E	E, W	-	960
<b>SORBITAN ESTER ETHOXYLATES</b>											
TOXIMUL® SEE-340 E 	Trioleate 20 EO	Liquid	11	E	-	-	E	E	E	-	910
TOXIMUL® SEE-341 E 	Monoleate 20 EO	Liquid	15	E	-	-	E	E	E	-	910, 920, 940a
TOXIMUL® SEE-343 E 	Monolaurate 20 EO	Liquid	16,5	E	-	-	E	E	E	-	910, 930
<b>SPECIALTY PRODUCTS</b>											
STEPAN-MILD® GCC	Glyceryl caprylate/caprate	Paste	4,8	E	-	-	E	E	E, W	-	-
STEPAN-MILD® L3-G/MB	Lauryl lactyl lactate	Liquid	4,75	E	-	A	E	E	E, W	-	
MAPROSYL® 30-F/MB	Sodium lauroyl sarcosinate	Liquid	-	-	W, A	A	E	E	-	-	

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# SPECIALISED WETTING AGENTS

Stepan Trade Name	Chemical description	Appearance 25°C	HLB	Function							EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	WP WG	
STEP-FLOW® 4890-SC	Surfactant blend with Chrystal Growth Inhibition properties	Liquid	-	-	W		-	-	-	-	960
STEP-FLOW® 4894-SC	Surfactant blend	Liquid	-	-	W		-	-	-	-	910, 930, 940a

# POLYMERIC DISPERSANTS


Stepan Trade Name	Chemical description	Appearance 25°C	HLB	Function							EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	WP WG	
STEP-FLOW® 3000	Comb anionic acrylic copolymer	Liquid	-	-	D	-	-	-	-	-	910, 930, 940a
STEP-FLOW® 4000	Comb nonionic acrylic copolymer	Liquid	-	-	D	-	-	-	-	-	910, 930, 940a
STEP-FLOW® 5000	Anionic modified styrene/acrylic copolymer	Liquid	-	-	D	-	-	-	-	-	910, 930, 940a, 940b, 940c
STEP-FLOW® 6000	Nonionic acrylic styrene copolymer	Liquid	-	-	D	-	-	-	-	-	Under assessment
STEP-FLOW® T6	Novel polymeric dispersant	Liquid	-	-	D	-	-	-	-	-	960
STEP-FLOW® HP-1	Polyhydroxystearic acid	Paste	-	-	-	-	-	-	D	-	960
STEP-FLOW® 2000	Nonionic random polymer	Liquid	6	E	-	-	E	E	E, D	-	960
STEP-FLOW® 2004	Nonionic block copolymer	Liquid	4	E	-	-	E	E	E, D	-	960
STEP-FLOW® 2006	Nonionic block copolymer	Paste	6	E	-	-	E	E	E, D	-	960
STEPSPERSE® 3000 	Anionic Acrylic Comb Copolymer	Powder	-	-	-	-	-	-	D	D	910, 930, 940a, 940b, 940c
STEPSPERSE® 5000	Anionic modified styrene/acrylic copolymer	Powder	-	-	-	-	-	-	D	D	960
<b>LIGNOSULFONATES</b>											
STEPSPERSE® DF-500	Na lignosulfonate NaDDBS	Powder	-	-	D, W	-	-	-	-	D, W	920, 930
STEPSPERSE® DF-600	Na lignosulfonate Alcohol ethoxylate	Powder	-	-	D, W	-	-	-	-	D, W	910, 930

Code Formulations functions

**EC** : Emulsifiable concentrate  
**SC/SE** : Suspension Concentrate / Suspoemulsion  
**SL** : Soluble Liquid  
**EW** : Concentrated Emulsion

**ME** : MicroEmulsion  
**OD** : Oil Dispersion  
**WP/WG** : Wettable Powder / Wettable Granules

**A** : Adjuvant  
**C** : Carrier  
**D** : Dispersant  
**E** : Emulsifier

**H** : Hydrotape  
**W** : Wetting Agent  
**S** : Solvent  
 NOP compliant

# CATALYSTS

Stepan Trade Name	Chemical description	Appearance 25°C	Active typical	Function	EPA - 40 CFR 180 status
STEPANATE® PTSA-C99	Para toluene sulfonic acid	Solid (crystals)	97% min	Catalyst	920, 930
STEPANATE® PTSA 65-E	Para toluene sulfonic acid	Liquid	65%		

# OMRI PRODUCTS


Stepan Trade Name	Chemical description	Appearance 25°C	HLB	Function							EPA - 40 CFR 180 status
				EC	SC SE	SL	EW	ME	OD	WP WG	
ECOSTEP™ BC-12	EO-PO block copolymer	Liquid	12	E	W, D	-	E	E	E, W	-	960
ECOSTEP™ CE-13	Castor Oil Ethoxylate	Liquid	13	E	W	-	E	E	E	-	960
ECOSTEP™ SE-11	Sorbitan Ester Ethoxylate	Liquid	12	E	-	-	E	E	E	-	910, 940a
ECOSTEP™ AES	Alkyl Ether Sulfate	Paste	-	-	W	W, A	E	E	-	-	910 not to exceed 41.6% in a pesticide formulation
ECOSTEP™ ROE	Rapeseed Methyl Esther	Liquid	-	A, S	CS	A	S	S	C	-	910

Code Formulations functions

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 **NOP** compliant



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An abstract graphic composed of numerous thin, white, curved lines that flow from the left side of the page towards the right, creating a sense of movement and depth. The lines are more densely packed in some areas and more sparse in others, forming a shape that resembles a stylized wave or a ribbon.

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