ENVIRO-BONDÔ
CHEMICAL COMPATIBILITY TEST

Aromatic	Aliphatic
Acids:	Tert-Butylacetic Acid B88403 Butyric Acid B103500 DL Lactic Solution 252476 Propionic Acid P1386 2-Ethylhexanoic Acid E29141 Methanesulfonic Acid 471348

Chemical Name	Test	Results/Observation/Recommended Product
Tert-Butylacetic Acid 98% Clear thick liquid Product: B88403 Batch: 06920KS CAS: 1070-83-3	50 ml of acid 20 gr of EB 300c Tested: EB 300A EB 403	No off gassing or adverse reaction with polymer. No response in 5 minutes, added 20 ml of water absorbed in 5 minutes, with no free liquids. Rec EB 300c w/water, EB 403 as an absorbent
Butyric Acid 99% Clear thick liquid Product: B103500 Batch: 04209AO CAS: 107-92-6	50 ml of acid 20gr of EB 300c Tested: EB 300A EB 403	No off gassing or adverse reaction with polymer: no response with polymer in 5 min. No response with EB 300a, 5 ml of water added with immediate absortion, EB 403 immediate absorbtion with bonding 5 min 100% bonded. Rec EB 300C w/water, or EB 403 absorbent & solidifier. Both or e/o
Lactic Acid 85%+ Water 15% Product: 252476 Batch: 06135CO CAS: 79-33-4 w/water 7732-18-5	50 ml of acid 20 gr of EB 300c Tested: EB 300A EB 403	No off gassing or adverse reaction with polymers. Started to absorb immediately, 5 min. Thick mass, immobilized in 10 min, with no free liquids. solid mass in 30 min. Rec EB 300C

Chemical Name	Test	Results/Observation/Recommended Product
Propionic Acid 99% Product: P1386 Batch: 041K3443 CAS: 79-09-4	50 ml of liquid 20 gr of EB300c Tested: EB 300A EB 403	No off gassing or adverse reaction with polymers. no immediate response, 5 min no response. Added 50 ml of water with immediate response, absorbed immediately with EB 403, and lightly bonded in 10 min. absorbed 100%. Rec: EB 300c w/water or EB 403 as an absorbent
2-Ethylhexanoic Acid 99% Product: E29141 Batch: 01909BI CAS: 149-57-5	50 ml of acid 20 gr of EB 300c Tested: EB 300A EB 403	No off gassing or adverse reaction with polymers: No response with polymer in 5 min. Test with EB 300a no response in 5 min. Added 5ml of water absorbed in 5 minutes. Thick mass in 15 min. an increase of water will speed up absorbtion rate. Rec. EB 300C w/water
Methanesulfonic Acid 70wt. Product: 471348 Batch: 20301HI CAS: 75-75-2	50 ml of acid 20gr of EB 300c Tested : EB 300A EB 403	No off gassing or adverse reaction with polymers, started to absorb immediately, 5 min totally absorbed, 10 min. fully immobilized, formed a solid mass in 30 min. Rec. EB 300C

Aromatic

Aliphatic

Bases:			
Benzylamine	185701	N,N-Diethylethylenediamine	112720
2-Ethylpyridine	112429	3-(Diethylamino)Propylamine	D89204
1-Methylpyrrole	M78801	N,N-Diethylethanolamine	471321
4-Methylpiperidine	M73206	2-Ethylhexylamine	E29508

Chemical Name	Test	Results/Observation/Recommended Product
Benzylamine, 99% Product: 185701 Batch: 03730MI CAS: 100-46-9	50 ml of liquid 50 gr of EB 403 Other tests None	No off gassing or adverse reaction with polymers: No immediate results. 5 minutes absorbed and bonded to one mass in 30 min. Rec. EB 403
2- Ethylpyridine Tan liquid, flammable Product: 112429 Batch: 035F0111 Cas: 100-71-0	50 ml of liquid 50 gr of EB 403 Other tests None	No off gassing or adverse reaction with polymers: Immediate results, 10 min. totally immobilized solid mass Rec EB 403
1-methylpyrrole, 99% Dark Brown liquid, flammable Product: M78801 Batch: 07603AO CAS: 96-54-8	50 ml of liquid 50 gr of EB 403 Other test None	No off gassing or adverse reaction with polymers: Immediate response, bonded to one mass in 5 minutes. Rec. EB 403
4 Methylpiperidine, 96% Liquid Product: M73206 Batch: 15723KO CAS: 626-58-4	50 ml of Liquid 50 gr of EB 403 Other test None	No off gassing or adverse reaction with polymers: immediate results, and a solid mass in 5 minutes. Rec: EB 403

Chemical Name	Test	Results/Observation/Recommended Product
N,N-Diethylethylenediamine 99% Product 112720 Batch 10729HO Cas- 100-36-7	50 ml of liquid 50 gr of EB 300a Tested: EB 300A EB 403	No off gassing or adverse reaction with polymer. EB 300c is of opposite ion exchange which causes it to clump with water added: EB 300A was added to a 50% mix with water, and immobilized all liquids in 1 min. Rec. EB 300A & EB 403 absorbent
3-(Diethylamino) Propylamine, 99+%, Liquid Product: D89204 Batch: 05902KO CAS: 104-78-9	50 ml of liquid 50gr of EB 403	No off gassing or adverse reaction with polymer: Immediate response, bonded to a solid in 5 minutes. Rec. EB 403
N,N-Diethylethanolamine 99.5+% Clear Liquid Product: 471321 Batch: 06610CI CAS: 100-37-8	50 ml of liquid 20 gr of EB 300c	No off gassing or adverse reaction with polymer: No immediate response with EB 300c, A, or EB 403, added 50 ml of water response slow for 5 min. All liquids immobilized in 5 min. Rec EB 300A w/water to absorb & EB 403 as absorbent
2-Ethylhexylamine, 98% Clear Liquid Product: E29508 Batch: 07604MU CAS: 104-75-6	50 ml of liquid 50 gr of EB 403	No off gassing or adverse reaction with polymer: Immediate immobilization, 5 min a solid mass. Rec. EB 403

Aromatic		Aliphatic	
Alcohol/Ethers/Esters:		2-(2-aminoethylamino)-Ethanol	127582
		2-Butylaminoethanol	19550
Phenethyl Alcohol	P13622	Ethylene Glycol Butyl Ether	484288
Propargyl Benzenesulfonate	32541	Ethylene Glycol	102466
		Ethyl Heptanoate	112364
		2-Propanol	154970
		2-Ethylhexyl Acrylate	290815
		Tert-Butyl Methyl Ether	179787
		Ethanol	Y551090
		1-Octanol	X21979

Chemical Name	Test	Results/Observation/Recommended Product
Phenethyl Alcohol 99 % Clear liquid Product: P13622 Batch: 01702HU CAS: 60-12-8	50 ml of liquid 20 gr of EB 300c	No off gassing or adverse reaction with polymer: No immediate results, After 20 min added 50 ml of water, w/ immediate immobilization. Rec. EB 300C w/water
Propargyl Benzenesulfonate, 96% Dark Brown liquid Product: 325341 Batch: 01717JZ CAS: 6165-75-9	50 ml of liquid 20 gr of EB 300c	No off gassing or adverse reaction with polymer: No immediate results. After 20 min added 50 ml water with immediate response and immobilization Rec. EB 300C w/water
2-(2-Aminoethylamino) Ethanol 99% Product: 127582 Batch: 15228MI CAS: 111-41-1	50 ml of liquid 20 gr of EB 300c	No off gassing or adverse reaction with polymer. No immediate results. After 5 min added 50 ml of water with immediate immobilization. Rec EB 300 C w/water
2-Butylaminoethanol Product 19550 Batch 330544/1 Cas- 111-75-1	50 ml of liquid 50 gr of EB403	No off gassing or adverse reaction with polymer: immobilization commenced immediately, and no liquids in 5 min.

		Rec: EB 403

Chemical Name	Test	Results/Observation/Recommended Product
Ethylene Glycol Butyl Ether, 99% Clear liquid Product: 484288 Batch: 13723CO CAS: 111-76-2	50 ml of liquid 20 ml of EB 300c	No off gassing or adverse reaction with polymer: No immediate results, after 10 min added 20 ml of water with immediate response. Immediate immobilization. Rec. EB 300C w/ 20-40% water. Is not absorbed with EB 403
Ethylene Glycol, 99+% Clear thick liquid Product: 102466 Batch: 13723CO CAS: 107-21-1	50 ml of liquid 20 ml of EB 300c	No off gassing or adverse reaction with polymer: no immediate response. Mixed 50 ml of water with 5 min. immobilization. Rec. EB 300c w/water
Ethyl Heptanonate, 99% Product 112364 Batch 10825HO Cas- 106-30-9	50 ml of sample 50 gr of EB 403	No off gassing or adverse reaction with polymer: immediate response with a solid mass in 5 minutes. Crosslink bonding did occur, w/ immobilization Rec: EB 403
2-Propanol 99.5+% Clear thin liquid Product: 154970 Batch: 051K3485 Cas: 67-63-0	50 ml of liquid 20 gr of 300c	No off gassing or adverse reaction with polymer: no immediate absorption. 5 min. added 20ml of water, fully absorbed in 5 min. Rec: EB 300C and EB 403 as an absorbent
2-Ethylhexyl Acrylate 98% Clear liquid Product: 290815 Batch: 09511EO CAS: 103-11-7	50 ml of liquid 50 gr of EB 403	No off gassing or adverse reaction with polymer: immediate response, bonded to a solid mass in 5 minutes. Rec: EB 403

Chemical Name	Test	Results/Observation/Recommended Product
Tert-Butyl Methyl Ether 98% Extremely Flammable Liquid Air Sensitive Reagent Product: 179787 Batch: 05453PI CAS: 1634-04-4	Not Tested	Must be tested in a totally closed environment, due to the properties of liquid. It is recommended that EB 403 be used for testing.
Ethanol Alcohol Clear Liquid Product: Y551090 Batch: 03246EO CAS: NONE	50 ml of liquid 20 gr. of EB 300C	No off gassing or adverse reaction with polymer: no immediate response. After 5 min added 50 ml of water w/ slow response. Added 10 gr. EB 300c w/immediate immobilization. Rec. EB 300c
1-Octanol Clear thick liquid, non water soluble Product: X21979 Batch: 079H3403 Cas: 111-87-5	50 ml of liquid 50 gr. EB 403	No off gassing or adverse reaction with polymer: no cross-link bonding in 15 min. However EB-403 worked very well as an good absorbent. Rec. EB 403, as an absorbent.

Aromatic		Aliphatic	
Aldehyd Ketones:			
1-Methyl-2-Pyrrolidinone	443778	Cyclohexanone	C102180
Phenylacetaldehyde	107395	Acetone	A4206
		2-Ethyl-1-Hexanol	E29168

Chemical Name	Test	Results/Observation/Recommended Product
1-Methyl-2-Pyrrolidinone 99% Clear liquid Product: 443778 Batch: 17686EO CAS: 872-50-4	50 ml of liquid 20 ml of EB 300c	No off gassing or adverse reaction with polymer: no immediate response with EB 300C, A, or 403. Absorbed with EB 403 no cross-link bonding. EB 300A w/water will totally encapsulate mass. EB 300C w/water is effected by ion exchange Rec: EB 300A w/water Rec. EB 403 as an absorbent
Phenylacetaldehyde 90+% Liquid Product: 107395 Batch: 06414HO CAS: 122-78-1	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: No immediate results. EB 403 did absorb all the liquid, and after 30 min did have the appearance of some cross-linking. Good absorbent. Rec: EB403 absorbent
Cyclohexanone 99.8% Clear liquid, Product: C102180 Batch: 1152880 CAS: 108-94-1	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: Immediate response, bonded to a solid mass in 5 minutes. Rec. EB 403
Acetone 100% Clear liquid Product: A4206	50 ml of liquid 20 gr. of EB 300c	No off gassing or adverse reaction with polymer: no results in 30 min. Mixed 50 ml of water immediate immobilization.

Batch: 110k3648 Cas: 67-64-1		Rec. EB 300c w/ water

Chemical Name	Test	Results/Observation/Recommended Product
2-Ethyl-1-Hexanol 99+% Liquid Product: E29168 Batch: 11428BO CAS: 104-76-7	50 ml of liquid 20 gr. of EB 300c	No off gassing or adverse reaction with polymer: no immediate response in 5 min, mixed 50 ml of water with immediate immobilization. Rec: EB 300c w/water or EB 403 as an absorbent

Aromatic

Aliphatic

Reactive:	
Phenylacetyl Chloride	P16753
4-Nitrobenzyl Chloride	140112
Methylstyrene	522864
Chlorodimethylsilane	144207
Isopropylsulfonyl Chloride	242705
2-Ethylhexanoyl Chloride	157406
Oxalyl Chloride	O5376
Methyllithium in Diethyl Ether**	197343

Chemical Name	Test	Results/Observation/Recommended Product
Phenylacetyl Chloride 98% Straw color/sweet odor Product: P16753 Batch: 04202AO CAS: 103-80-0	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: initial absorbed liquid, 5 min fully absorbed, cross-linking with polymer, 10 min. fully absorbed and immobilized. Formed a single mass. Rec. EB 403
4-Nitrobenzyl Chloride 99% Solid Product: 140112 Batch 09826CQ CAS: 100-14-1	No Test	Solid at temp. contains Benzene, EB 403 is known to stabilize Benzene. Test with EB 403 in liquid form.
Methylstyrene 99% Mixture of Isomers Product: 522864 Batch: 05219JU CAS: 25013-15-4	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer, Immediate immobilization, 5 min. solid mass. Rec: EB 403
Chlorodimethylsilane 98% - Liquid,	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: immediate results, and a

Product: 144207 Batch: 01313HO CAS: 1066-35-9		solid mass in 5 minutes. Rec: EB 403

Chemical Name	Test	Results/Observation/Recommended Product
Isopropylsulfonyl Chloride 97% Smoke liquid, non water sol. Product: 242705 Batch: 04505KU CAS: 10147-37-2	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: excellent absorption no cross-link bonding in l hr. Rec EB 403 as absorbent
2-Ethylhexanoyl Chloride 98% Clear Product: 157406 Batch: 20916AO CAS: 760-67-8	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer, immediate immobilization, formed a solid mass. 5 min. completely bonded. Rec EB 403
Oxalyl Chloride 98% Yellow liquid/solvent Product: O5376 Batch: 05212HO CAS: 79-37-8	50 ml of liquid 50 gr. of EB 403	Adverse reaction: Some fumes in off gassing: immediate response, bonded to a solid mass in 5 min. Rec. EB 403
Methyllithium 1.6M sol. in Diethyl Ether Product: 197343 Batch: 03818EO CAS: NONE	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: Immediate immobilization. 5 minute solid mass. Rec. EB 403

Aromatic	Aliphatic
Aqueous Acid: 4-Hydroxybenzenesulfonic Acid 65% 171506	Hydrochloric Acid 37% 435570 Nitrilotris (Methylene) Triphosphonic 144797 Sodium Hypochlorite (Bleach) 239305

Chemical Name	Test	Results/Observation/Recommended Product
4-Hydroxybenzenesulfonic Acid 65% Wt. 35% Solution in water Product: 171506 Batch: 12709DS CAS: 98-67-9/w-7732-18-5	50 ml of acid 20 gr. of EB 300c	No off gassing or adverse reaction with polymer: 5 min. started to absorb, 10 min thick mass, 15 min no free liquids, Rec EB 300C
Hydrochloric Acid Product: 435570 Batch: 051K3489 CAS: Not Known	50 ml of liquid 20 gr. of EB 300C	Adverse reaction: Slight off gases, w/a small amount of heat. Immediate immobilization. 5 min immobilized Rec. EB 300C
Nitrilotris (Methylene) Triphosphonic Acid 50 Wt. % Solution in water Product: 144797 Batch: 12307EU CAS: 6419-19-8	50 ml of acid 20 gr. of EB 300c	No off gassing or adverse reaction with polymer: immediate response, 5 min mostly absorbed, 10 min fully absorbed, 20 min thick mass, 12 hrs solid. Rec. EB 300C
Sodium Hypochlorite Light yellow liquid Product: 239305	50 ml of liquid 20 gr. of EB 300A	Adverse Reaction: Some off gassing with increase of volume by 50% foam. Added 50 ml of water totally absorbed with 15 gr. of

Batch: 09126AO CAS: 7681-52-9		EB 300C, in 5 min, a thick white mass with no off gassing. Rec. EB 300c w/50% water

Aromatic

Aliphatic

Aqueous Base:	Sodium Hydroxide 50% 415413

Chemical Name	Test	Results/Observation/Recommended Product
Sodium Hydroxide **50%** Solution in water Clear thick liquid Product: 415413 Batch: 01801HO CAS: 1310-73-2	50 ml of liquid 20 gr. of EB 300c Tested: EB 300A	Adverse Reaction: Small amount of off gassing, and a small heat generated No results. After 5 min added 50 ml of water no response, added 20ml of EB 300a w/immediate results. Total immobilization immediately. Rec. EB 300A

Aromatic

Aliphatic

Solvents - Hydrocarbons & Halogenated:			
Tetrahydrofuran	T5267	1-Octene	O4806
Dimethyl Sulfoxide	D8779	Pentane	158941
Cyclohexane	C8456	Propylene Carbonate	P52652
Bromobenzene	B57702	Chloroform	132950
Toluene	179965	Ether, Anhydrous	443549

Chemical Name	Test	Results/Observation/Recommended Product
TetrahydroFuran 99%+ (Buyllated Toluene) Clear Liquid Product: T5267 Batch: 050K1485 CAS: 109-99-9	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: immediate results 5 min a solid mass. Rec. EB 403
Cyclohexane 99% Clear liquid Product: C8456 Batch: 00759HI CAS: 110-82-7	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: Immediate immobilization, and solid mass in 5 min. Rec. EB 403
Dimethyl Sulfoxide Solid Product: D8779 Batch: 031K3641 CAS: 67-68-5	No test	Solid, at temp. Because it is a solvent, and has flammability properties, and contains hydrocarbons. Rec: EB 403 for testing in liquid.
	50 ml of liquid	No off gassing or adverse reaction with p: immediate response, bonded to a

Bromobenzene 99% Clear liquid Product: B57702 Batch: 16303KI CAS: 108-86-1	50 gr. of EB 403	solid mass in 5 minutes. Rec: EB 403. Benzene if mixed with water will be immobilzed with Rec: EB 300C
Toluene 99.9% Clear thin liquid, Product: 179965 Batch: 070K3706 Cas: 108-88-3	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: immediate immobilization, 5 min stable mass, 20 min a single solid mass. Rec. EB 403, Toluene mixed with water will be immobilized with EB 300C
1-Octene 98% Clear Liquid, Product: O4806 Batch: 09906CO CAS: 111-66-0	50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: Immediate immobilization, 5 min a solid mass. Rec: EB 403

Pentane 98% Clear Liquid Product: 158941 Batch: 10326DO CAS: 109-66-0	50 ml of liquid 50gr of EB 403	No off gassing or adverse reaction with polymer: Immediate immobilization 5 min a solid mass. Rec. EB 403
Propylene Carbonate 99% Clear thin Liquid Water sensitive Product: P52652 Batch: 07145MI CAS: 108-32-7	50 ml of liquid 20 gr. of EB 300c	No off gassing or adverse reaction with polymer. No immediate response w/ EB 300C, A or 403, added 10 ml of water, immediately absorbed. w/EB 300A Rec. EB 300C, w/water or EB 300A

Chloroform Clear Liquid Product: 132950 Batch: 08821KI CAS: 67-66-3	50 ml of liquid 20 gr. of EB 300c 50 ml of liquid 50 gr. of EB 403	No off gassing or adverse reaction with polymer: 5 min partially absorbed. 10 min absorbed, 15 min immobilized Tested with EB 403 w/ Immediate immobilization. 5 min a solid mass with cross-linking. Rec. EB 403
Either Anhydrous 99% Extremely Flammable Liquid Air Sensitive Reagent Product: 443549 Batch: 08236DO CAS: 60-29-7	Not Tested	Must be tested in a totally closed environment, due to the properties of the liquid. It is recommenced that EB 403 be used for testing. The properties would indicate that immobilization would occur immediately with EB 403