



03/19/2021

Mr. Seyfettin Kilinc
Subor Boru Sanayi Ve Ticaret A.S.
Ahmetler Mahallesi
Karapurcek 54430 Sakarya
Turkey

Subject: Revised Authorized Registered Formulation for Standard 61

Enclosed is a copy of your revised Authorized Registered Formulation. This complete formulation must be at the identified facility location for review by an NSF Auditor, conducting the annual/follow-up audits. Each product is identified by Document Control Code (DCC number) located in the upper left hand corner of the each page. All previous and now outdated Authorized Registered Formulations for your products are replaced with the enclosed revisions.

The NSF audit of your facility, including materials/process verification and product sampling, will be guided by this formulation. Failure to maintain this information at the facility may require special follow-up audits or result in removal of products from Listing.

As a reminder, you are not permitted to make any formulation changes to NSF Certified products without prior written approval from NSF. Only those specific material/ingredients and use levels indicated in the Authorized Registered Formulation are authorized for use in the Certified Product. To obtain authorization for an alternate supplier (or other modification) please contact your Account Manager at 1-800-NSF-MARK to request the appropriate forms. For customers outside the USA, please use 1-734-769-8010 and ask for your Account Manager.

If you have any questions about the Authorized Registered Formulation, please contact your Account Manager indicated below.

Enclosure: Authorized Registered Formulation

Account Manager: Javier Marin, 34-679-193 453, jmarin@nsf.org

Facility: 0B021

DCC: PM03529

NSF/ANSI Standard 61 - Drinking Water System Components - Health Effects**Authorized Registered Formulation****Reason For Revision:** W0669219 - Approval of New Formulation 2 - ARFs PM03464 and PM03529**Customer Name:** Subor Boru Sanayi Ve Ticaret A.S.**Facility Location:** Turkey**Customer Number:** 0B020**Facility At:** Sakarya, Turkey**Facility Number:** 0B021**Function:** Pipe**Size:** 300 - 4000 mm**Trade Name(s)**

Subor GRP Pipe

Category: PIPE, SECTION 4 - PIPES AND RELATED PRODUCTS**Material Type:** Fiberglass Reinforced Polyester (FRP)**Temperature:** Cold (73 °F / 23 °C)**Auditor Notes**

Please note resin percentage of pipe in sample collected.

Sample Notes

Please collect (5) 300mm diameter Subor GRP pipe segments in 6" lengths.

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Wetted Parts List

Customer Name: Subor Boru Sanayi Ve Ticaret A.S.

Customer Number: 0B020

Facility Location: Turkey

Facility At: Sakarya, Turkey

Facility Number: 0B021

Part Trade Name	Supplier Name	Formulator Name	DCC	Footnotes
SUBOR GRP PIPE MATERIAL	SUBOR BORU SANAYI VE TICARET A.S.		IA26253	
SUBOR GRP FORMULATION 2	SUBOR BORU SANAYI VE TICARET A.S.		IA34157	1

Notes

Footnote 1: Pipe are produced with continuous filament winding method.

Definitions of Terminology used in this Document:

Trade name: The name given to the ingredient, material or assembly by the company that makes the product.

Supplier: The name of the company that provides an ingredient, material or assembly directly to the company that makes the product covered by this registration. The supplier could be a formulator, distributor, fabricator, molder, extruder, mixer, manufacturer or assembler.

Formulator: The name of the company that prepares a material according to a formula. The formulator and the supplier could be the same company. This field may be blank as this information is only reported when the information is not confidential.

In plant assemblies, compounding and mixing: Components of assemblies, materials (formulated or compounded) or ingredients which are manufactured at this facility are included on

In-Plant Mixer [Compounder] Formulation

Customer Name: Subor Boru Sanayi Ve Ticaret A.S.

Customer Number: 0B020

Facility Location: Turkey

Facility At: Sakarya, Turkey

Facility Number: 0B021

Supporting DCC: IA26253

Trade Name: Subor GRP Pipe Material

Formulation Description: FORMULATION

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
RESIN	NORPOL EPS-01	REICHHOLD KIMYA SAN VE TIC AS	23.4-31%		
RESIN	CE99	CAM ELYAF	23.4-31%		
RESIN	BRE PW 05	BOYTEK A.S.	23.4-31%	IN03477	
RESIN	BRE 311W	BOYTEK A.S.	23.4-31%	IN06598	
RESIN	POLYLITE 721-800	REICHHOLD KIMYA SAN VE TIC A.S.	23.4-31%	IN06599	
RESIN	POLYLITE PD 3535	REICHHOLD INC.	23.4-31%	IN06597	
RESIN	POLYLITE 720-020	REICHHOLD KIMYA SAN VE TIC A.S.	23.4-31%	IN07697	
SAND	SAND (SILICA) SIO2	DUYAN MADENCILIK	13.7-59.4%		
SAND	SAND (SILICA) SIO2	SILTAS	13.7-59.4%		
SAND	SAND (SILICA) SIO2	KUMSAN	13.7-59.4%		
SAND	SAND (SILICA) SIO2	CELIKTAS	13.7-59.4%		
SURFACE MAT	M524	EUROPEAN OWENS CORNING FIB	0-0.06%		
SURFACE MAT	GPES20	TELATEKS TEKSTIL URUN SAN TIC AS	0-0.06%		
GLASS FIBER	MAT8-450	CAM ELYAF SANAYII AS	5-25%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA26253

Trade Name: Subor GRP Pipe Material

Formulation Description: FORMULATION

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	EDR 17	JUSHI	17-48.3%		
GLASS FIBER	111A - LOW TEX TYPE 30® DIRECT ROVING	FLOWTITE TECHNOLOGY CENTER	17-48.3%		
GLASS FIBER	WR 800 G/M2 125 CM	EUROPEAN OWENS CORNING FIB	20-35%		
GLASS FIBER	XL 800	TELATEKS TEKSTIL URUN SAN TIC AS	35-45%		
GLASS FIBER	XT 800	TELATEKS TEKSTIL URUN SAN TIC AS	35-45%		
GLASS FIBER	FGE 311	FORMAX UK LIMITED	35-45%		
GLASS FIBER	FGE 313	FORMAX UK LIMITED	35-45%		
GLASS FIBER	DBT 800	DEVOLD AMT AS	35-45%		
GLASS FIBER	DBL 800	DEVOLD AMT AS	35-45%		
GLASS FIBER	495 EP	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	R25 H	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	SE 1200	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	R25 H	3B	17-48.3%		
GLASS FIBER	KCR5-2400 CHOP ROVING	CAM ELYAF SANAYII AS	17-48.3%		
GLASS FIBER	WR HOOP ROVING	CAM ELYAF SANAYII AS	17-48.3%		
GLASS FIBER	ER-469 HOOP ROVING	CPIC	17-48.3%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA26253

Trade Name: Subor GRP Pipe Material

Formulation Description: FORMULATION

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	P 246	SAINT GOBAIN VETROTEX	17-48.3%		
GLASS FIBER	P192	SAINT GOBAIN VETROTEX	17-48.3%		
GLASS FIBER	ER 24	WEIBO (HARBOR SALES)	17-48.3%		
GLASS FIBER	ER 10K CHOP ROVING	CPIC	17-48.3%		
GLASS FIBER	EDR240-T980	TAISHAN	17-48.3%		
GLASS FIBER	ERS240-T982A	TAISHAN	17-48.3%		
GLASS FIBER	ECR 10K	CPIC	35-45%		
GLASS FIBER	ECT 10K	CPIC	35-45%		
GLASS FIBER	ECT 107C	CPIC	35-45%		
GLASS FIBER	ECRII 107C	CPIC	35-45%		
GLASS FIBER	P246A	OCV	35-45%		
GLASS FIBER	E6DR13-2400-162	JUSHI	35-45%		
GLASS FIBER	ECR 469L	CPIC	35-45%		
GLASS FIBER	ECT 469L	CPIC	35-45%		
GLASS FIBER	ECRII 469L	CPIC	35-45%		
GLASS FIBER	TYPE 30	OCV	35-45%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA26253

Trade Name: Subor GRP Pipe Material

Formulation Description: FORMULATION

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	EST-100-1000	CPIC	35-45%		
GLASS FIBER	EDR 24	JUSHI	17-48.3%		
CATALYST	NOROX FC-100	UNITED INITIATORS	0.23-1%		
CATALYST	TRIGONOX 279	AKZO NOBEL	0.23-1%		
CATALYST	BUTANOX M50	AKZO NOBEL CHEMICALS	0.23-1%		
CATALYST	BUTANOX M50	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX M50	FEZA KIMYA SAN VE TIC AS	0.23-1%		
CATALYST	AKPEROX ER 60-FW	AKPA KIMYA	0.23-1%		
CATALYST	BUTANOX M60	AKZO NOBEL CHEMICALS	0.23-1%		
CATALYST	BUTANOX M60	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX M60	FEZA KIMYA SAN VE TIC AS	0.23-1%		
CATALYST	BUTANOX LPT	AKZO NOBEL CHEMICALS	0.23-1%		
CATALYST	BUTANOX LPT	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX LPT	FEZA KIMYA SAN VE TIC AS	0.23-1%		
CATALYST	AKPEROX ER-59	AKPA KIMYA	0.23-1%		
COBALT	NL-53P	AKZO NOBEL CHEMICALS	0.023-0.1%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA26253

Trade Name: Subor GRP Pipe Material

Formulation Description: FORMULATION

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
COBALT	EGEDRY 112201	EGE KIMYA SANAYI VE TICARET A.S.	0.023-0.1%	IN03478	
COBALT	AKDRY COBALT OCTOALT 10%	AKPA KIMYA	0.023-0.1%		
STYRENE	STYRENE MONOMER	SOLVENTAS	2.34-3.68%		



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In-Plant Mixer [Compounder] Formulation

Customer Name: Subor Boru Sanayi Ve Ticaret A.S.

Customer Number: 0B020

Facility Location: Turkey

Facility At: Sakarya, Turkey

Facility Number: 0B021

Supporting DCC: IA34157

Trade Name: Subor GRP Formulation 2

Formulation Description:

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
RESIN	BVE 780	BOYTEK REÇİNE BOYA VE KIMYA SAN. TIC. A..	2-20%	IN20465	
RESIN	DERAKANE 411-350 WSR EPOXY VINYL ESTER RESIN	INEOS COMPOSITES	2-20%	PM18823	
RESIN	BRE 311W	BOYTEK A.S.	23.4-31%	IN06598	
RESIN	NORPOL-EPS-1 POLYESTER RESIN	REICHOLD A/S	23.4-31%	IA08384	
RESIN	CE99 POLYESTER RESIN	CAM ELYAF SANAYI A.S.	23.4-31%	IA08385	
RESIN	BRE PW 05	BOYTEK A.S.	23.4-31%	IN03477	
RESIN	POLYLITE 721-800 E	REICHOLD KIMYA SAN VE TIC A.S.	23.4-31%	IN06599	
RESIN	POLYLITE PD 3535	REICHOLD INC. ®	23.4-31%	IN06597	
RESIN	POLYLITE 720-020	REICHOLD KIMYA SAN VE TIC A.S.	23.4-31%	IN07697	
SAND	SAND (SILICA) SIO2	DUYAN MADENCILIK	13.7-59.4%		
SAND	SAND (SILICA) SIO2	SILTAS	13.7-59.4%		
SAND	SAND (SILICA) SIO2	KUMSAN	13.7-59.4%		
SAND	SAND (SILICA) SIO2	CELIKTAS	13.7-59.4%		
GLASS FIBER	EDR 24	JUSHI	17-48.3%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA34157

Trade Name: Subor GRP Formulation 2

Formulation Description:

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	MAT8-450	CAM ELYAF SANAYII AS	17-48.3%		
GLASS FIBER	EDR 17	JUSHI	17-48.3%		
GLASS FIBER	111A - LOW TEX TYPE 30® DIRECT ROVING	FLOWTITE TECHNOLOGY CENTER	17-48.3%		
GLASS FIBER	WR 800 G/M2 125 CM	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	XL 800	TELATEKS TEKSTIL URUN SAN TIC AS	17-48.3%		
GLASS FIBER	XT 800	TELATEKS TEKSTIL URUN SAN TIC AS	17-48.3%		
GLASS FIBER	FGE 311	FORMAX UK LIMITED	17-48.3%		
GLASS FIBER	FGE 313	FORMAX UK LIMITED	17-48.3%		
GLASS FIBER	DBT 800	DEVOLD AMT AS	17-48.3%		
GLASS FIBER	DBL 800	DEVOLD AMT AS	17-48.3%		
GLASS FIBER	495 EP	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	R25 H	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	SE 1200	EUROPEAN OWENS CORNING FIB	17-48.3%		
GLASS FIBER	R25 H	3B	17-48.3%		
GLASS FIBER	KCR5-2400 CHOP ROVING	CAM ELYAF SANAYII AS	17-48.3%		
GLASS FIBER	WR HOOP ROVING	CAM ELYAF SANAYII AS	17-48.3%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA34157

Trade Name: Subor GRP Formulation 2

Formulation Description:

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	ER-469 HOOP ROVING	CPIC	17-48.3%		
GLASS FIBER	P 246	SAINT GOBAIN VETROTEX	17-48.3%		
GLASS FIBER	P192	SAINT GOBAIN VETROTEX	17-48.3%		
GLASS FIBER	ER 24	WEIBO (HARBOR SALES)	17-48.3%		
GLASS FIBER	ER 10K CHOP ROVING	CPIC	17-48.3%		
GLASS FIBER	EDR240-T980	TAISHAN	17-48.3%		
GLASS FIBER	ERS240-T982A	TAISHAN	17-48.3%		
GLASS FIBER	ECR 10K	CPIC	17-48.3%		
GLASS FIBER	ECT 10K	CPIC	17-48.3%		
GLASS FIBER	ECT 107C	CPIC	17-48.3%		
GLASS FIBER	ECRII 107C	CPIC	17-48.3%		
GLASS FIBER	P246A	OCV	17-48.3%		
GLASS FIBER	E6DR13-2400-162	JUSHI	17-48.3%		
GLASS FIBER	ECR 469L	CPIC	17-48.3%		
GLASS FIBER	ECT 469L	CPIC	17-48.3%		
GLASS FIBER	ECRII 469L	CPIC	17-48.3%		

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA34157

Trade Name: Subor GRP Formulation 2

Formulation Description:

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
GLASS FIBER	TYPE 30	OCV	17-48.3%		
GLASS FIBER	EST-100-1000	CPIC	17-48.3%		
CATALYST	AKPEROX ER60FW	AKPA KIMYA SAN.VE TIC. LTD., TURKEY	0.23-1%	EI03536	
CATALYST	TRIGONOX 279	AKZO NOBEL CHEMICALS INC.	0.23-1%	EI01514	
CATALYST	BUTANOX M-50	AKZONOBEL	0.23-1%	IN12932	
CATALYST	BUTANOX M50	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX M50	FEZA KIMYA SAN VE TIC AS	0.23-1%		
CATALYST	BUTANOX M60	AKZO NOBEL CHEMICALS INC.	0.23-1%	I8585009	
CATALYST	BUTANOX M60	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX M60	FEZA KIMYA SAN VE TIC AS®	0.23-1%		
CATALYST	BUTANOX LPT	AKZO NOBEL CHEMICALS	0.23-1%	EI07587	
CATALYST	BUTANOX LPT	TBP KIMYASAL MADDELER SAN TIC STI	0.23-1%		
CATALYST	BUTANOX LPT	FEZA KIMYA SAN VE TIC AS	0.23-1%		
CATALYST	AKPEROX ER-59	AKPA KIMYA AMBALAJ SAN. VE TIC.LTD. ETI.	0.23-1%	EI03128	
COBALT	NL-53P	AKZO NOBEL CHEMICALS	0.023-0.1%		
COBALT	EGEDRY 112201	EGE KIMYA SANAYI VE TICARET A.S.	0.023-0.1%	IN03478	

In-Plant Mixer [Compounder] Formulation

Supporting DCC: IA34157

Trade Name: Subor GRP Formulation 2

Formulation Description:

Chemical Name	Trade Name	Supplier Name	% or PPW	DCC	Footnote#
COBALT	AKDRY COBALT OCTOALT 10%	AKPA KIMYA	0.023-0.1%	EI07604	
STYRENE	STYRENE MONOMER	SOLVENTAS	2.34-3.68%		
GLASS FIBER	MAT8-450	CAM ELYAF SANAYII AS	5-25%		

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