	<b>INPUT MATERIAL SPECIFICATION</b>	Code: BP0402-SC055 Issue: <b>5</b> Page: 1 of 3
Name: <b>FATTY ACID</b>		

### 1. SUBJECT AND PURPOSE OF THIS SPECIFICATION:

This specification defines required properties of FATTY ACID which is used in the SBR production process for preparing emulsifier for SBR TYPE 1502, at FSK – Elemir, and it serves as a basis for establishing the input material quality compliance with the specified requirements, i.e. as acceptability criteria.

### 2. APPLIED IN:

Purchasing Department  
Production Planning  
SBR Production  
FSK Quality  
FSK Laboratory Dept.  
FSK Logistics Office

### 3. REFERENCES TO OTHER DOCUMENTS:

MP0600-PR001      IMS Document Control Procedure  
BP0300-PR01      Purchasing Procedure  
BP0402-PK457      FSK Inspection and Test Plan for Input Raw Material and Chemicals Standards / Methods:

ISO 660, ISO 3657, ISO 3961, ISO 6321  
FSK interna 10.2.07.4  
ASTM E 203

**4. MADE BY:**                      SBR Production Senior Engineer/Head of Laboratory Department






**5. CONTROLLED BY:**      Assistent Production Manager/ Chif quality engineer


**6. APPROVED BY:**      FSK Manager

### 7. THIS SPECIFICATION IS TO BE DELIVERED TO:

Production Dept. Manager (1x)  
Quality and Standardization Dept. Manger (1x)  
Purchasing Dept. Manager (1x)  
Production Planning Manager (1x)  
FSK Manager / Chif quality engineer (1x)  
Assistent Production Manager/ SBR Production Senior Engineer  
Head of Laboratory Department (1x)

### 8. TECHNICAL PROPERTIES

	Made by:		Controlled by:		Approved by:	Applied since	Copy No
Position:	SBR Production Senior Engineer	Head of Lab. Dept.	Chif quality engineer	Assist. Product. Manager	FSK Manager	01.04.2020.	
Name:	M. Asurdžić	M. Saravolac	B. Jolović	K. Petrović	S. Petrić		
Signature:							

 <b>PETROHEMIJA</b> FSK Elemir Synthetic Rubber Factory	<b>INPUT MATERIAL SPECIFICATION</b>	Code: BP0402-SC055 Issue: <b>5</b> Page: 2 of 3
<b>Name: FATTY ACID</b>		

**Table 1** shows the specified technical properties of FATTY ACIDS (a mix of acids, fractions from C<sub>10</sub> to C<sub>18</sub>) which are necessary to be checked before delivery acceptance, in accordance with the FSK Inspection and Test Plan for Input Raw Materials and Chemicals (BP0402-PK457).






**Table 1**


Ord. No.	PROPERTY	METHOD	UNIT	RANGE OF ALLOWABLE VALUES
1.	Acid number	ISO 660	mg KOH/g	202 - 208
2.	Saponification number	ISO 3657	mg KOH/g	202 - 208
3.	Iodine number	ISO 3961	gJ <sub>2</sub> /100g	40 - 45
4.	Melting point	ISO 6321	°C	42 - 48
5.	Original colouring Iodine No	FSK int.10.2.07.4	mgJ <sub>2</sub> /100ml	max 7
6.	Iodine No. after 15 h / 100°C	FSK int.10.2.07.4	mgJ <sub>2</sub> /100ml	max 15
7.	Moisture	ASTM E 203	wgt %	max 0,5
8.	Mn content	*	wgt ppm	max 1
9.	Cu content	*	wgt ppm	max 1
10.	Iron content	*	wgt ppm	max 10
11.	Unsoapy matters content	*	wgt %	max 1,5
12.	Polyunsaturated acids content	*	wgt %	max 0,8
13.	Appearance	Visual		Viscous paste

*\*Upon request testing can be made out of FSK premises*

**Fatty acid (GH composition):**

Ord.No.	Testing	Unit	Ca
1.	Lauric, C-12	wgt %	1,0
2.	Myristic, C-14	wgt %	4,0
3.	Pentadecanoic, C-15	wgt %	0,5
4.	Palmitic, C-16	wgt %	26,0
5.	Hexadecene, C-16=1	wgt %	3,0
6.	Margarine, C-17	wgt %	1,0
7.	Stearic, C-18	wgt %	27,0
8.	Octadecenoic, C-18=1	wgt %	37,5
9.	Octadecadienoic, C-18=2	wgt %	2,0
10.	Octadecatrienoic, C-18=3	wgt %	< 0,5
11.	Higher than, C=22	wgt %	Traces

	Made by:		Controlled by:		Approved by:	Applied since	Copy No
Position:	SBR Production Senior Engineer	Head of Lab. Dept.	Chif quality engineer	Assist. Product. Manager	FSK Manager	<b>01.04.2020.</b>	
Name:	<b>M. Asurdžić</b>	M. Saravolac	B. Jolović	K. Petrović	S. Petrić		
Signature:							

	<b>INPUT MATERIAL SPECIFICATION</b>	Code: BP0402-SC055 Issue: <b>5</b> Page: 3 of 3
Name: <b>FATTY ACID</b>		

**9. DELIVERY AND PACKAGING:**

9.1. FORM (STATE) OF INPUT MATERIAL: Viscous paste (60°C)

9.2. DELIVERY: tank cars

9.3. TRANSPORT: tank trucks or wagons equipped with heating system (60°C)

9.4. ALTERNATIVE DELIVERY AND/OR PACKAGING: None

**10. MARKING AND ACCOMPANYING DOCUMENTS**

Each packaging unit must have clearly written data as follows:

- Product name
- Manufacturer's data (Company name)
- Lot number
- Packaging unit net mass
- Production date
- Expiry date

Each lot of a single delivery must be accompanied by the following documents:

- test report
- safety data sheet (plus storage instruction if available)
- delivery note

**11. CRITERION FOR ESTABLISHING PRODUCT ACCEPTABILITY**

**11.1 QUALITY CONFORMITY TO REQUIREMENTS**

A product conforms to the requirements if its properties are within the allowable tolerances in all the points, and if all the requirements of this specification are fulfilled.

**11.2 CONSISTENT QUALITY DELIVERIES**

Input material delivery must comply with the approved sample for purchasing. A sample for purchase approval is inspected in accordance with the FSK Inspection and Test Plan for Input Raw Materials and Chemicals.

The supplier is obliged to submit information about any modification(s) in its production process and change(s) referring to its production location, as well as to deliver samples produced under the new conditions.

After documents and samples inspection is completed the Synthetic Rubber Plant shall issue an approval for input material application and deliveries.

**11.3 CRITERION FOR ACCEPTABILITY**

The criterion for delivery acceptance shall be satisfied if the inlet inspection certifies quality and quantity as stated in the accompanying documents and if all the requirements of this specification are fulfilled.

	Made by:		Controlled by:		Approved by:	Applied since	Copy No
Position:	SBR Production Senior Engineer	Head of Lab. Dept.	Chief quality engineer	Assist. Product. Manager	FSK Manager	<b>01.04.2020.</b>	
Name:	<b>M. Asurdžić</b>	M. Saravolac	B. Jolović	K. Petrović	S. Petrić		
Signature:	