

Zakłady Chemiczne Spółdzielnia Pracy in Goleniów	<b>TECHNICAL CONDITIONS FOR ACCEPTANCE</b>	<b>TCA-3/2016</b>
	<b>RUBBER PACKING SHEETS</b>	Page 1 NUMBER OF PAGES – 4 NUMBER OF ANNEXES – 35

## **1. Subject of TCA.**

The subject of the technical conditions for acceptance are rubber packing sheets with material plies or without material plies.

## **2. Application.**

Rubber sheets are designed mainly for performing seals, working statically unstretched.

Rubber sheets are not recommended for use in conditions where they may be exposed to sunlight and ozone.

## **3. Model.**

Depending on the type of caoutchouc contained in product (SBR - styrene-butadiene copolymer, CR-polychloroprene, NBR – butadiene-acrylonitrile copolymer, EPDM - ethylene-propylene-diene terpolymer, NR – natural rubber) the following models of rubber sheets are distinguished:

- SBR – based on SBR,
- SBR/AAA – based on NR and SBR,
- NBR – based on SBR and NBR,
- EPDM – based on SBR and EPDM (ca. 12%),
- CR – based on SBR and CR (ca. 9%),
- NR-L – based on SBR and NR.

## **4. Type.**

Depending on properties in the same kind of rubber, the following types of rubber sheets are distinguished:

- AA – rubber sheets with increased resistance to abrasion,
- AAA – rubber sheets with increased resistance to abrasion and very high strength requirements,
- E – anti-static properties,
- TP – rubber sheets with increased resistance to burning,
- B – rubber sheets with increased resistance to petrol.

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## 5. Appearance.

Color of rubber sheets – normally – black, except rubber sheets NR-L in natural color (beige) or other color agreed with the customer.

Rubber sheets have smooth surfaces on both sides or at customer's request the surface can has the imprinted fabric.

Rubber surface may also have some protection powder from sticking plate, whereby dusting can not be excessive.

## 6. Dimensions and dimensional tolerances for rubber packing sheets.

Thickness mm		Width mm		Length mm		Number of plies
1	±0,3	1 000 or 1 200 or 1 400	±30	10 000	±100	
1,5						1
2						
2,5						
3						
3,5						
4	±0,5	1 000 or 1 200 or 1 400	±30	5 000	±50	1 or 2
5						
6						
8						
10	±0,8	1 000	±30	1 000	±30	1 or 2 or 3
12						
15						
20						
25						
30						
35						
40						
50	±4,0					

It is possible to produce rubber sheet of different dimensions and tolerances, agreed with the customer.

It is possible to produce rubber sheet of different number of plies, agreed with the customer.

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**7. Parameters of rubber sheets are placed in the cards of technical parameters which are annexed to this document.**

No.	Product	No.	Product	No.	Product
1	SBR 50	13	SBR ANTI-STATIC	25	EPDM 75
2	SBR 65	14	NBR 50	26	EPDM 80
3	SBR 75	15	NBR 65	27	EPDM 90
4	SBR 80	16	NBR 80	28	EPDM 65 COLOR
5	SBR 90	17	NBR 90	29	CR 50
6	SBR 50 COLOR	18	NBR 50 COLOR	30	CR 65
7	SBR 65 COLOR	19	NBR 65 COLOR	31	CR 65 COLOR
8	SBR 85 COLOR	20	NBR/AA 55	32	CR/TP
9	SBR/AA 50	21	NRB/B	33	NR-L 45
10	SBR/AA 65	22	EPDM 50	34	NR-L 60
11	SBR/AAA 65	23	EPDM 60	35	NR-L 55 RED GB
12	SBR/AAA 68	24	EPDM 65		

It is possible to produce rubber sheets of different parameters, agreed with the customer.

**8. Bond strength the rubber with material plies.**

For rubber sheets SBR, NR-L no less than 1 kN/m.

For the others no less than 0,5 kN/m.

**9. Unacceptable defects in rubber sheet workmanship.**

Defect determination	Unacceptable value
Blisters	an area above 1cm <sup>2</sup> and above 3 of 1 m <sup>2</sup>
Recesses and protrusions	in size above 1 cm <sup>2</sup> and a depth and a height above: <ul style="list-style-type: none"> <li>• 0,3 mm for rubber sheets to 6mm thick,</li> <li>• 0,5 mm for rubber sheets from 6 to 10mm thick,</li> <li>• 1,0 mm for rubber sheets above 10mm thick,</li> </ul> above 3 of 1 m <sup>2</sup> and for SBR rubber sheet above 5 of 1 m <sup>2</sup>
Traces folded compound after calendering	a depth and a height above 0,2 mm and a length above 100 mm above 1 of 1 m <sup>2</sup>
Foreign bodies <ul style="list-style-type: none"> <li>• metallic</li> <li>• non-metallic</li> </ul>	not permitted with a diameter of more than 1mm above 3 of 1 m <sup>2</sup>

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## **10. Packing.**

Rubber sheet should be rolled into rolls with even edges (without shifted rolls). At the customer's request rubber sheets to 3,5 mm thick can be rolled on paper tubes. Rolls are fastened with a string.

The rolls can be formed in the loading units on wooden pallets in a vertical position or in a horizontal position. The load on the pallet should be secured with propylene tape and shrink wrapped so that it creates with the pallet a compact and stable loading unit.

Rubber sheets with dimensions of 1000x1000 mm should be formed into loading unit on wooden pallets with dimensions of 1050x1050 mm to 1,2 m height. The whole strapped.

Different type of packing, agreed with the customer, is possible.