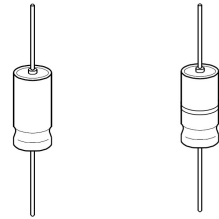


# Aluminium Electrolytic Capacitor

# Material Data Sheet

<b>Product Class</b>	<b>Axial-lead Capacitors</b>	
<b>Date</b>	<b>10/09/2019</b>	
<b>IMDS ID if available</b>	-	
<b>Version</b>	<b>08</b>	

Product Part (IMDS: semi component)	Material Class (IMDS: Material)	Material (Classification) VDA 231	Substance	TMPS** [wt%]	CAS if applicable	typical mass of material [wt-%]	Traces see 1)
<b>Active Part</b>	Light Metals	1B1	Aluminium	100	7429-90-5	35	
	Acids, Bases, Salts	6F	Ethylene glycol or Gamma-butyrolactone	65 or (90 if without NMP)	107-21-1 96-48-0	25	
	Acids, Bases, Salts	6F	1-methyl-2-pyrrolidinone (NMP) ***)	25	872-50-4		
	-	-	Others *)	10	-		
	Paper, Cardboard	5C	Cellulose	100	9004-34-6	9	
<b>Encapsulation</b>	Light Metals	1B1	Aluminium	99,5	7429-90-5	19	
	-	-	Others *)	0,5	-		
	Paper, Cardboard	5C	Cellulose	99,6	9004-34-6	1,5	
	-	-	Others *)	0,4	-		
	Duomer	2D	Phenolic resin	100	9003-35-4	2,8	
	Elastomer	2B	EPDM rubber	41,5	25038-36-2	2,4	
	Inorganic, solid	4A	Silicon dioxide	13	7631-86-9		
	Inorganic, solid	4A	Kaolinite	28,5	1318-74-7		
	Lubricant	6B	Paraffin	10,5	8012-95-1		
	-	-	Others *)	6,5	-		
	Thermoplastics	2A	PTFE	100	9002-84-0	0,1	
	Thermoplastics	2A	PET	90	25038-59-9	2	
	-	-	Others *)	10	-		
<b>Termination</b>	Iron and Steel	1A	Iron	99	7439-89-6	1	
	-	-	Others *)	1	-		
	Heavy Metals	1C12	Copper	100	7440-50-8	2	
	Heavy Metals	1C8	Tin	60	7440-31-5	0,2	
	Heavy Metals	1C15	Lead	40	7439-92-1		

**Sum in total:** 100

sizes D x L [mm]	weight [g]	part numbers	part numbers	part numbers	part numbers	part numbers	part numbers	part numbers	part numbers	part numbers
12 x 30	5,1	B41684S 477Q 1	B41690A8477Q 7	B41691A8477Q 7	B41692A8227Q 9	B41693A7337Q 7	B41694A5477Q 9	B41695A7687Q 7	B41696A7228Q 7	B43697A5476Q
14 x 25	5,7	B41684S 687Q 1	B41691A5108Q 9	B41691A8687Q 7	B41692A8337Q 7	B41693A7337Q 9	B41694A7108Q 7	B41695A7687Q 9	B41696A7477Q 9	B43697A5476Q 7
14 x 30	6,8	B41684S7108M 4	B41691A5158Q 7	B41691B7108Q 7	B41692A8477Q 7	B41693A7477Q 9	B41694A7337Q 7	B41695A8227Q 7	B41696A7687Q 7	B43698A5226Q 7
16 x 25	7,4	B41684S7108M 5	B41691A5208Q 7	B41691B8477Q 7	B41692A8477Q 9	B41693A7687Q 9	B41694A7337Q 9	B41695A8227Q 9	B41696A7687Q 9	B43698A5336Q
16 x 30	8,9	B41684S7228T 2	B41691A5337Q 9	B41691S7128Q 2	B41692A8687Q 7	B41693A8107Q 7	B41694A7477Q 7	B41695A8337Q 7	B41696B7228Q 7	B43698A5336Q 7
16 x 35	10,4	B41684S7228T 2G 1	B41691A5477Q 7	B41692A5108Q 9	B41692B7158Q 7	B41693A8107Q 9	B41694A7477Q 9	B41695A8337Q 9	B43698S5106T 4	B43699A5476Q
16 x 39	11,7	B41684S7477T 1	B41691A5477Q 9	B41692A5158Q 7	B41692B7228Q 7	B41693A8337Q 7	B41694B5158Q 7	B41695A8477Q 7	B43698S5226T 3	B43699B5476Q
18 x 25	9,3	B41684S7477T 3	B41691A7108Q 7	B41692A5158Q 9	B41692B8687Q 7	B41693A8337Q 9	B41694S5158Q 2	B41695A8687Q 7	B43698S6156T 1	B43699A5476Q
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20 x 29	13,5	B41684S7687T 2	B41691A7337Q 9	B41692A5687Q 9	B41693A 107Q 9	B41693A9107Q 9	B41694A5158Q 9	B41695S7228Q 7	B43693A1476Q 7	
21 x 30	16,5	B41684S7687T 3	B41691A7477Q 7	B41692A7108Q 7	B41693A 227Q 7	B41693A9157Q 7	B41694A5228Q 7	B41695A5108Q 9	B43693A1476Q 9	
21 x 35	17,0	B41684S7687T 6	B41691A7477Q 9	B41692A7108Q 9	B41693A 227Q 9	B41693A9157Q 9	B41694A5338Q 7	B41695A5158Q 7	B43693A2226Q 7	
21 x 39	20,0	B41684S7687T 8	B41691A7687Q 7	B41692A7158Q 7	B41693A 477Q 7	B41693A9337Q 7	B41694A5687Q 7	B41695A5158Q 9	B43693A2226Q 9	
21 x 49	25,0	B41684S8227T 11	B41691A7687Q 9	B41692A7228Q 7	B41693A5108Q 7	B41693A9477Q 7	B41694A5687Q 9	B41695A2228Q 7	B43693A2476Q 7	
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Not Part of a Product Class																																																																																																																															
<b>Contact</b>	Perosa, Eduardo	<b>Important remarks:</b> 1) The declaration limit is 0.1% as defined by IEC 62474 (IEC PAS 61906). Traces are product parts, substances etc. that are below a percentage of 0.1 % by weight, if not otherwise regulated. 2) This Material Data Sheet contains typical values of the respective products set forth herein. We expressly point out that all values and statements contained herein are based on our best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. TDK ELECTRONICS AG AND ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH REGARD TO THE STATEMENTS AND VALUES CONTAINED HEREIN, INCLUDING BUT NOT LIMITED TO ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PURPOSE.																																																																																																																													
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<b>Address</b>	Bernardo Joaquim Ferreira, 624 – Gravatá, RS, Brazil																																																																																																																														
	Tel: +55 51 3484 7000      mailto: epqm.gc@tdk-electronics.tdk.com																																																																																																																														
<p>*) others: (not declarable or prohibited substances acc. GADSL)</p> <p>**) typical mass percentage of substance</p> <p>***) Following products present NMP:</p> <table border="0"> <tr><td>B41684S 477Q 1</td><td>B41691A8157Q 9</td><td>B41692A8477Q 9</td><td>B41693A8687Q 7</td></tr> <tr><td>B41684S 477Q 3</td><td>B41691A8227Q 7</td><td>B41692A8687Q 7</td><td>B41693B 477Q 7</td></tr> <tr><td>B41684S 687Q 1</td><td>B41691A8227Q 9</td><td>B41692B5228Q 7</td><td>B41693S8477M 1</td></tr> <tr><td>B41684S7108M 4</td><td>B41691A8477Q 7</td><td>B41692B7158Q 7</td><td>B41695A5108Q 7</td></tr> <tr><td>B41684S7108M 5</td><td>B41691A8687Q 7</td><td>B41692B7228Q 7</td><td>B41695A5108Q 9</td></tr> <tr><td>B41684S7228T 2</td><td>B41691B5158Q 7</td><td>B41692B8687Q 7</td><td>B41695A5158Q 7</td></tr> <tr><td>B41684S7228T 2G 1</td><td>B41691B7108Q 7</td><td>B41692S7158Q 1</td><td>B41695A5158Q 9</td></tr> <tr><td>B41684S8227T 3</td><td>B41691B8477Q 7</td><td>B41692S7228Q 1</td><td>B41695A5228Q 7</td></tr> <tr><td>B41684S8227T 4</td><td>B41691S7128Q 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<p><b>The products set forth herein are <u>NOT</u> RoHS-compatible</b>. RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8<sup>th</sup>, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.</p>																																																																																																																															