Phase and submission type Phase 1 Phase 2 Phase 3 Interim (Non-PPAP)	PPAP Submission Warrant
PART INFORMATION	
Part Name T50ROSEC4B	Cust. Part Number 2M5T-14197-KA
Shown on Drawing Number 2M5T-14197-KA	Organization Part Number 2M5T-14197-KA
Engineering Change Level EV60-E-11341136-000	Dated 18.03.2002
Additional Engineering Changes N/A	Dated N/A
Safety and/or Government Regulation Yes No	Purchase Order No. 150-76079 Weight (kg) 0,003
Checking Aid Number N/A Checking Aid E	Engineering Change Level N/A Dated N/A
ORGANIZATION MANUFACTURING INFORMATION	CUSTOMER SUBMITTAL INFORMATION
HellermannTyton	Nursan Elektrik Donanim
Organization Name and Supplier/vendor Code	Customer Name/Division
Großer Moorweg 45 Street Address	Burak Ozkaya Buyer/Buyer Code
Tornesch	
City Region Postal code Country MATERIALS REPORTING	Application
Has customer-required Substances of Concern information been reported?	Yes No
Submitted by IMDS or other customer for	ormat: 5496941
If submitted by IMDS, enter Module ID number, version and date trans	
Are polymeric parts identified with appropriate ISO marking codes? REASON FOR SUBMISSION (Check at least one)	○ Yes ○ No ○ n/a
✓ Initial submission	Change to Optional Construction or Material
Engineering Change(s)	Supplier or Material Source Change
Tooling: Transfer, Replacement, Refurbishment, or additional	Change in Part Processing
Correction of Discrepancy	Parts produced at Additional Location
Tooling Inactive > than 1 year	Other - please specify below
REQUESTED SUBMISSION LEVEL (Check one)	
Level 1 - Warrant only (and for designated appearance items, an Appearance Level 2 - Warrant with product samples and limited supporting data submitted level 3 - Warrant with product samples and complete supporting data submit Level 4 - Warrant and other requirements as defined by customer. Level 5 - Warrant with product samples and complete supporting data review.	d to customer. tted to customer.
The results for dimensional measurements, material and functional mass results meet all design requirements	
Mold / Cavity / Production Process(es)	injection moulding / serial mold
DECLARATION	
l affirm that the samples represented by this warrant are representative of our parts Production Part Approval Process Manual 4th Edition requirements including all For samples were produced at the production rate of 100000 pcs / 24hours u documented evidence of such compliance is on file and is available for review. I ha	d-specific requirements. I further affirm that these sing 3 production streams. I also certify that
EXPLANATION/COMMENTS	to note any exceptions non-time desiration below.
Organization Authorized Signature	Print Name i.A.Ch.Grichel Date 16-Dec-2013
Title Assistant PRQM Phone: 04122-701538	Fax: 0049 4122 701 241 Email christian.grichel@hellermanntyton.de
Is each Customer Tool properly tagged and numbered?) No ⑥ n/a
Capacity Requirements	
Source of the Program Approval requirements CPA (Commercial and Program	am Agreement) Detail / Date
Program Approval (<pa>) Requirements APW</pa>	MPW
If Program Approval (<pa>) requirements are not met, indicate date when the requirements</pa>	rements will be met <u>Date</u>
Source of the revised requirements after <pa></pa>	Detail / Date
Revised requirements after <pa> APW</pa>	мрм
If the revised requirements after <pa> are not met, indicate date when the requirements</pa>	
Demonstrated Capacity (recorded in Ford Capacity System (GCP or MCPV) as Purc	:hased Part Capacity)
Enter Capacity Analysis Report "Predicted Good Parts per Week" APW, MPW and date APW	MPW <u>Date</u>
FOR FORD USE ONLY	Interim Status (to be completed by the Organization)
PPAP Non-PPAP a/	(to be completed by the Organization)
Diseased DDAD	n Engineering
Warrant Status: Approved Rejected Accep	Authorization Alert or Alert Report
STA Name	→
Signature e-mail Date	=
P.D. Name	
Signature /b e-mail	Description: (Incomplete PPAP
Date a/ Non-PPAP indicates the part does not satisfy one or more PPAP requirements and is incomplete	Requirements)
Non-PPAP indicates the part does not satisfy one or more PPAP requirements and is incomplete P.D. signature for Priority suppliers on GPDS programs	
Ford GPPSS1 The original copy of this	s document shall remain at the A4 paper size format
	n while the part is active

HellermannTyton GmbH internal remarks:

PB-No.:

Part Describtion:

18595

T50ROSEC4B

GPN 760/99

Part Submission Warrant

Part Name T50ROSEC4B	e T50ROSEC4B		Cust. Part		2M5T-14197-KA	1	/ 21	2M5T-14197-KA	
Shown on Drawing No. 2M5T-14197-HA		_ (Org. P	art Number	150-76079				
Engineering Change Level EV60-E-11341136-000				_ Dated	18.03.2002				
Additional Engineering Changes	lor No			_ Dated	<u>n/a</u> -76079	Weight (kg)		0,003	
Checking Aid No. n/a Checking Aid Engineering Change				130	n/a	Dated		n/a	
ORGANIZATION MANUFACTURING INFORMATION		CUSTON	IER S	UBMITTAL	. INFORMATION				
HellermannTyton GmbH DUNS: 315430892 Organization Name & Supplier/Vendor Code		Nursan E Customer Na		ik Donanin sion	1		(:	30471)
Großer Moorweg 45 Street Address		Burak Ozl							
Tornesch 25436 Germany		various							
City Region Postal Code Country		Application							
Production Location:									
MATERIALS REPORTING									
Has customer-required Substances of Concern information been reported?		7	Yes	☐ No	n/a				
Submitted by IMDS or other customer format:	ID:	5496941							
			·	□ No	[] n/n				
Are polymeric parts identified with appropriate ISO marking codes?			res	∐ No	✓ n/a				
REASON FOR SUBMISSION (Check at least one)									
NEADON TO TO CODE MICEOUN (CITCON AT TOLOS ONLO)									
✓ Initial Submission				Change to	Optional Constructio	n or Material			
Engineering Change(s)					Material Source Cha	ange			
Tooling: Transfer, Replacement, Refurbishment, or additional			Ц	-	Part Processing				
Correction of Discrepancy					uced at Additional Lo	ocation			
☐ Tooling inactive > than 1 year			Ш	Otner - pie	ase specify below				
REQUESTED SUBMISSION LEVEL (Check one)									
Level 1 - Warrant only (and for designated appearance items, an Appearance Appro	oval Rep	port) submitte	ed to d	customer.					
Level 2 - Warrant with product samples and limited supporting data submitted to cus	stomer.								
Level 3 - Warrant with product samples and complete supporting data submitted to d	custome	er.							
Level 4 - Warrant and other requirements as defined by customer.									
_									
Level 5 - Warrant with product samples and complete supporting data reviewed at o	organiza	tion's manuf	acturır	ng location.					
SUBMISSION RESULTS									
The results for dimensional measurements material and function	onal tes	ts		□ аэре	arance criteria	☐ statistical	process p	ackage	
These results meet all design record requirements:	No	(If "No" - E	xplan	ation Require	ed)				
Mold / Cavity / Production Process <u>injection moulding / serial mold</u>									
DECLARATION									
I affirm that the samples represented by this warrant are representative of our parts which	wore n	nade by a pro	2000	that mosts a	Il Production Part				
Approval Process Manual 4th Edition Requirements. I further affirm that these samples with						100000 pcs /	24	hours.	
I also certify that documented evidence of such compliance is on file and available for rev									
EXPLANATION/COMMENTS: We confirm that the article is dimensionally, func	tional a	ind mechan	ically	consistent v	with the drawing red	quirements			
Is each Customer Tool properly tagged and numbered?		No	7	n/a	0 9				
Organization Authorized Signature i.A.					5_OK	Date		16-Dec-13	
Print Name i.A.Ch.Grichel / i.A. A. Smoczok C	Quality A	Assistant			+49 4122 70	01 330 Fax No.	+4	9 4122 701	241
Title Assistant PRQM E-mail ch.grichel@Heller	rmann ⁻	Tyton.de							
FOR CUSTON	MER US	SE ONLY (IF	APPL	ICABLE)					
PFAF Warrant Disposition. Approved Rejected Other									
Customer Signature							Date		
Print Name		Customer	Tracki	ing Number ((optional)				

Rev #: 01 Rev. Date: 25.07.2012 PPAP Template - Uncontrolled VIEW



HELLERMANN TYTON GROSSER MOORWEG 45

Tornesch, 25436 Attention: MR SEKULIC

Strength @ Yld

Container ID: DVWN5009 - E9509KB

Ascend Performance Materials LLC Nylon Plastics and Polymers 3000 Chemstrand Road Pensacola, Fl 32533 Telephone: (850) 968-7000

Certificate Date: 22-OCT-13 Delivery No: 0382192881 Shipped Qty: 7,000.000 Lbs

(3,175.200 Kgs)

MPa

85

Customer P.O. No: 88234/256114-06

Certificate of Analysis

This certifies that Nyton Resin shipped to you from Ascend Performance Materials LLC has been tested and found to meet required specifications.

The material purchased was produced under a Quality System that meets TS16949 + ISO90()2 criteria.

This Vydyne/Ascend nylon resin meets the relevant requirements of Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("RoHS Directive") and Directive 2002/96/EC on waste electrical and electronic equipment ("WEEE Directive").

If you have any questions or concerns about this letter, please call the Ascend Performance Materials LLC Customer Service Department at 1-888-927-2363.

This product meets the requirements of the following specifications: ASTM D4066 PA0121, ASTM D6779 PA0121, WSK-M4D648A (ESF-M4D 82A), GMP.PA66.018, CMP NY057 AA, MS-DB41 CPN1076, FMVSS 302*, CPN3490, D4000 PA012

Material Type: VYDYNE 22HSP-HT Material No:10326659 Batch No BH13VY13 Date of Mfg 13-AUG-2013 Ascend Performance Materials LLC Specification Lot Data **Property Test Method** <u>Min</u> <u>Max</u> Result Units Relative Visc. ASTM D789[9.34] 45.0 51.0 48.0 N/A Viscosity Num. Sulfuric **ISO 307** 136.9 148.3 143.0 N/A Moisture **ASTM D6869** 80.0 0.20 0.15 % Periodic Data Property Min <u>Date</u> **Test Method** Max Result Units Nom. Str.@ Brk 02/11/13 ISO 527-1,2 / 1A 16.4 25.2 %

Note: This certificate is generated and controlled by electronic means. No signature is required. This document may not be reproduced, except in full, without written consent of the Nylon Plastics and Polymers Department, Ascend Performance Materials LLC.

78

All information contained in this letter is provided for informational purposes only and is not meant to alter or waive the appropriate contractual product specifications. Moisture values are representative of the product at the time it was sampled. If numerical flame spread ratings appear herein, they are not intended to reflect the hazards presented by this or any other material under actual fire conditions. Each end user should determine whether potential fire hazards are associated with the finished product, and whether this resin is suitable for the particular end use.

Ascend and Vydyne are registered trademarks of Ascend Performance Materials LLC.

02/11/13

ISO 527-1,2 / 1A



Certificate of Analysis

according to EN 10204-3.1

AKRO-PLASTIC GmbH
Member of the Feddersen Group

DESCRIPTION OF PRODUCT:

Item number: 02179-S

Material: AKROMID A3 1 S3 schwarz (1139)

PRODUCTION DATA:

Lot-No.:

FS02 49868

CUSTOMER DATA:

Order-No.:

10048206

TESTRESULTS:

Testing:	Norm Testing condition Target		Target Value	Actual Value	Unit
Residual humidity	DIN EN ISO 15512 Meth. B		<= 0,15	0,08	%
Tensile modulus	DIN EN ISO 527-2/1A	1mm/min	2550 ± 300	2289	MPa
Tensile stress at yield	DIN EN ISO 527-2/1A	50mm/min	64,0 ± 5,0	59,3	MPa
Elongation at break	DIN EN ISO 527-2/1A	50mm/min	35,0 ± 15,0	30,4	%
Charpy notched impact strength	DIN EN ISO 179-1/1eA	23°C	15,0 ± 3,0	17,8	kJ/m²
Melt-Volume-Rate	DIN ISO 1133	275/5	48,0 ± 15,0	52,4	cm³/10 min

Date of release:

03.08.2013 09:47

Remarks:

Niederzissen, 03.08.2013

Signature:

i.v. Ute Bürger (inspection representative)

The raw material used in this material complies with the recommendations oft he EU-Guideline 2000/53 of the European Parlament dated 18 September 2000 about old vehicles. It is confirmed herewith that the delivery meets the agreements on receipt of order.

The CoA shall not relieve the recepient from his legal incoming goods inspection and is not to be consired as guarantee of specific material properties.

10000254 Art. Nr.: Wkz. Nr.: 30321/001 Charge: 8175

4500008724/10 Best. Nr.: WE-P: Dienstag, 16 Juli, 2013

Prüfer: Reich/i.O. Werkstoff C75S



Wickeder Westfalenstahl GmbH · Postfach 1464 · D-58734 Wickede (Ruhr)

Abnahmeprüfzeugnis Nr. 227109

EN 10204 - 3.1

Kleiner GmbH

Goeppinger Str. 2-4

D 75179 Pforzheim

12.07.2013

Auftrags Nr. Pos. Dicke **Breite** Länge 01 7613 01.02 0,400 mm 40,00 mm

Ihre Bestellung

4500008724 v. 24.04.13

Chemische Zusammensetzung (%)

Charge C Si Mn P S Ni Cr Mo 082873 0,772 0,197 0,67 0,016 0,001 0,244 0,016 0,002

Mechanisch-technologische Eigenschaften

Dicke 0.39 0,37 mm **Breite** 40.08 40.1 mm Streckgrenze 453 **MPa** 455 **Festigkeit** 588 590 MPa / **Dehnung A80** 21 22 % Rauheit Ra 0.16 0.24 μ m

Kaltgew. Bandstahl in der Guete C 75S, MA, GK, in Ringen Zugfestigkeit 480-640 N/qmm, nach EN 10132/10140, walzm. geoelt, ID 400 mm, AD 1100-1400 mm

nach Ihrer TLB Nr. 19 Vers.4 sowie unserer mail vom 06.07.10

Artikel-Nr.: 010024002700

Lieferant 87375

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen der Bestellannahme entspricht. Diese Bescheinigung wurde durch ein DV-System erstellt und ist ohne Unterschrift gültig.

Qualitätswesen Gorsek Werkssachverständiger

Wickeder Westfalenstahl GmbH Hauptstraße 6 D-58739 Wickede (Ruhr) www.wickeder.de

Fon +49 (0) 23 77 917 - 01 Fax +49 (0) 23 77 917 100 e-mail: info@wickeder.de Gesellschaftssitz: Wickede (Ruhr) Handelsregister Amsberg HRB 4366 VAT-ID-Nr. DE 811884481 Geschäftsführer: Dr. Jürgen E. Platt (Vors.), Dirk Barschkett

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unsere Auftragsnr.: 135407 Ihra Bestellnummer: 450001062J

(Untersch/ift)

Art. Nr.: 30001024 Wkz. Nr.: 30321/001 Charge: 8175

Best. Nr.: 4500010621/10

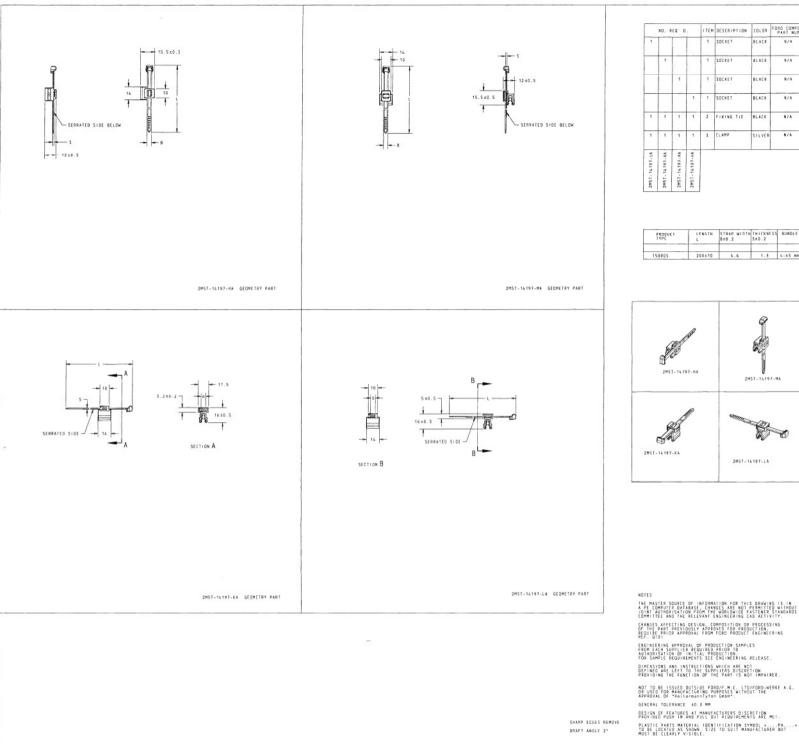
WE- P: Donnerstag, 26 September, 2013

Prüfer: Reich/i.O.
Werkstoff C75S gehärtet

From: +49 2371 9780 26 To: 1 Page: 3/3 Date: 26.09.2013 08:31:47

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