



Germanischer Lloyd

Germanischer Lloyd AG • P.O. Box 11 16 06 • 20416 Hamburg/Germany

ITW Plexus
Attn. Peter Carbutt
30 Endicott Street
MA 01923, Danvers
United States of America

Head Office Hamburg
Vorsetzen 35
20459 Hamburg/Germany

Phone +49 40 36149-0
Fax +49 40 36149-200
headoffice@gl-group.com
www.gl-group.com

<i>Your reference</i>	<i>Your Letter of</i>	<i>Our reference</i>	<i>Extension</i>	<i>Date</i>
	2007-07-13	115449-07/GuMi	+49 40 3 61 49-4865	2007-09-06

Basic Approval of Adhesives

Dear Mr. Peter Carbutt,

According to your letter of 2007-07-13 and to the results of the material testing we can approve the following products:

Methyl-Methacrylate Adhesive	PLEXUS MA530
Methyl-Methacrylate Adhesive	PLEXUS MA560-1
Methyl-Methacrylate Adhesive	PLEXUS MA590

Please be informed that we have a new edition (Edition 2006) for non-metallic rules with partly new requirements. Especially the value for the tensile lap-shear strength was increased from 9 MPa up to 12 MPa and in addition we have established a test for dimensional stability under heat according to ISO 75-2. In order to obtain a prolongation in 2011 it will be necessary to fulfil the new requirements.

Enclosed please find our certificate **WP 0740002 HH**.

The fees for the approvals will be sent to you separately.

We thank you for the cooperation and remain

Yours faithfully,

Germanischer Lloyd


Daniel Engel

GuMi

Dr. Eva Junghans



Germanischer Lloyd

Statement of Approval

Approval No. **WP 0740002 HH**

The material described below complies with the applicable requirements as given in the Rules and Regulations of Germanischer Lloyd. On this basis the material is

approved as **Duromeric Adhesive**

for the construction of components provided that the recommendations for use as specified by the producer are observed.

Type **Two Component Adhesive**

Description **Methyl-Methacrylate**

Producer **ITW Plexus
30 Endicott Street
MA 01923, Danvers
United States of America**

Normative Reference **Rules for Classification and Construction,
II - Material and Welding Technology
Part 2 Non-Metallic Materials**


Remarks **This approval fulfils the requirements of our Rules for Non-metallic Materials
Edition 2000.**


This document consists of this page and a one-page annex which is integral part of the approval.

This Statement of Approval is valid until 2011-09-05.

Hamburg, 2007-09-06

Germanischer Lloyd


Daniel Engel


Dr. Eva Junghans



Statement of Approval

Germanischer Lloyd

ANNEX

Date: 2007-09-06

Approval No. WP 0740002 HH

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Reference Documents	Technical specifications deposited at Germanischer Lloyd Head Office.
Assessed Documents	Certification Document issued by ITW PLEXUS including test reports and Technical Data Sheets
Fields of Application	Joining of components on condition that the adhesive material is compatible to the base materials and the applicable requirements of the Germanischer Lloyd are met.
Approved Variants	PLEXUS MA530 PLEXUS MA560-1 PLEXUS MA590
Limitations	Any significant changes in design and/or quality of the material will render the approval invalid.

End of Annex

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