

The Automatic Miniature Fire Extinguishers (AMFE) series by JOB is produced in Ahrensburg, Germany (Made in Germany) in accordance to all applicable standards.

JOB is the worldwide leader for sprinkler thermos-bulbs and produces more than 110 million pieces of these temperature detection products annually.

### As the leading brand in fire detection, JOB stands for uncompromised quality!

Besides complying with ISO 9001, ISO 14001 and carrying other relevant certifications from organizations around the globe, JOB has a confirmed failure rate of less than 0,001 ppm in its fire detection components

At this time, there is no certification required for using AMFE for fire protection in electrical devices or machines and there is no standard AMFE can be certified for.

However, the components it is made of components which carry the following certificates:

### The detection device:

JOB sprinkler bulbs are globally certified and carry relevant UL, VDS, LPCB and other certificates.

### The pressure cylinder:

The heavy duty cylinders are manufactured in Germany for robustness and safety. They carry the PI ( $\Pi$ ) mark indicating the compliance with ADR/RID §1.8.7.6.

### The extinguishing agent:

 $3M^{\text{TM}}$  NOVEC<sup>TM</sup> is a globally used ISO, NFPA, VdS (and others) approved, fire extinguishing agent (FK-5-1-12). Additionally, it complies with the REACH requirements.

The AMFE also is RoHS conform.

Using AMFE for fire protection is easy, reliable and safe. Integrating AMFE to enhance fire safety of applications is not "prohibited" or not "not allowed" by any standard or code requirement.

For more information and pricing, please contact JOB or your local authorized JOB partner (see JOB website for a list).

JOB GmbH Kurt-Fischer-Str 30 D-22926 Ahrensburg Germany



Haven 1005 Canadastraat 11 B-2070 Zwijndrecht Tel. +32(0)3 250 77 11 Fax +32(0)3 219 64 42 http://www.mmm.com/be

Registered Office : Hermeslaan 7, B- 1831 Diegem HRB 232 647 VAT BE 402 683 721 Fortis 210-0077944-08



Job GmbH An der Strusbek 5 22926 Ahrensburg Germany

Zwijndrecht, April 10, 2017

### Subject : REACH registration compliance 3M<sup>™</sup> Novec<sup>™</sup> 649 Engineered Fluid

Dear Mr. Eichhorn,

We are pleased to respond to your request regarding 3M's compliance with the European Regulation "REACH" (Registration, Evaluation and Authorisation of Chemicals).

The  $3M^{TM}$  Novec<sup>TM</sup> 649 Fluid Engineered Fluid product contains a chemical substance which is REACH registered in the EU :

- REACH registration nbr. : 01-0000018239-65-0001
- Identified use : heat transfer fluid industrial / professional use in closed systems

I trust you received hereby the required feedback.

Sincerely,

Sun In 954

Dr Piere Vander Elst Product responsibility and regulatory 3M Belgium BVBA Canadastraat 11 – Haven 1005 B-2070 Zwijndrecht Belgium

Tel : + 32 3 250 7889 Fax : + 32 3 250 7847 e-mail : pvanderelst1@mmm.com





Kurt-Fischer-Straße 30 22926 Ahrensburg Germany Telefon:+49-(0)-4102-2114-0 Telefax:+49-(0)-4102-2114-70



# **RoHS-Certification**

Material/Substance Category Name	Present (Y/N)	If yes, Material substance mass (%)	If yes, Detailed information
Cadmium/Cadmium compounds	N		
Hexavalent Chromium/ Hexavalent	N		
Chromium Compounds			
Lead/Lead Compounds	N		
Mercury/Mercury Compounds	N		
Polybrominated Biphenyls (PBBs)	N		
Polybrominated Diphenylethers (PBDEs)	N		

We herewith certify that the Job GmbH Thermo-Bulbs conform with the EU-Directive 2002/95/EC to the RoHS-Standard.

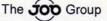
Ahrensburg, 26.07.2006

JOB GmbH

Eduard J. Job President

Bank account: HSH Nordbank AG B. code 21050000 Acc. No.: 1000019286

Geschäftsführer: Eduard J. Job (President) Bodo Müller (CTO) e-mail : job@job-bulbs.com www.job-bulbs.com



### **UL Online Certifications Directory**

### JGIX.R18196 Fusible Links

Page Bottom

### **Fusible Links**

See General Information for Fusible Links

#### JOB GMBH

KURT-FISCHER-STRASSE 30 22926 AHRENSBURG, GERMANY

Thermo Bulb Link , Quick Response in the 135, 155, 165, 175, 200, 212, 250, 286, 325, 360, 400, 450 and 500 F temperature ratings for loads from 1 to 55 lbf incl., having a bearing length of 2 in.

Thermo Bulb Link , Standard Response in the 135, 155, 165 , 175, 200, 212, 286, 360, 450 and 500 F temperature ratings for loads from 1 to 55 lbf incl., having a bearing length of 2 in.

Last Updated on 1999-11-03

**Questions?** 

Notice of Disclaimer

Copyright © 2006 Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright © 2006 Underwriters Laboratories Inc.®"

An independent organization working for a safer world with integrity, precision and knowledge.



R18196

Page Top

ഗ

1.3 Ŵ PA

1.0

30

3

Sp/

-27

163 Š

S

10

5

U.T

5

ŝ

 $\underline{\psi}$ 

# Anerkennung

von Bauteilen und Systemen

# Approval

of Components and Systems

Inhaber der Anerkennung Holder of the Approval JOB GmbH Kurt-Fischer-Straße 30 22926 Ahrensburg

Anerkennungs-Nr.	Anzahl der Seiten	gültig vom <i>(17 MM.JJJ)</i>	gullig bis (TT MM JJJJ)
Approval No.	No. of pages	valid from Idd mm.yyyd	valid until <i>(dd mm.yyyd</i>
G 4990039	4	24.06.2015	23.06.2019

Gegenstand der Anerkennung Subject of the Approval Glasfass-Auslöseelement "G5"

Verwendung Use in ortsfesten Wasserlöschanlagen

Anerkennungsgrundlagen Basis of the Approval VdS 2344:2014-07 VdS 2160:2000-05

Köln, den 22.06.2015

DAkkS Deutsche Akkreditlerungsstelle D-ZE-11149-01-01

Reinermann

Geschäftsführer Managing Director



Leiter der Zertifizierungsstelle Head of Certification Body



**Die Anerkennung** 

umfasst nur das angegebene Bauteil/System in der zur Prufung eingereichten Ausführung

- mit den Bestandteilen nach Anlage 1,
- dokumentiert in den technischen Unterlagen nach Anlage 2,
- zur Verwendung in den angegebenen Einrichtungen der Brandschutz- und Sicherungstechnik

Bei der Anwendung des Gegenstandes der Anerkennung sind die Hinweise nach Anlage 3 zu beachten.

Das Zertifikat darf nur unverändert und mit sämtlichen Anlagen vervielfaltigt werden. Alle Änderungen der Voraussetzungen für die Anerkennung sind der VdS-Zerlifizierungsstelle – mitsamt den erforderlichen Unterlagen - unverzüglich zu übermitteln.

### This Approval

is valid only for the specified component/system as submitted for testing

- together with the parts listed in enclosure 1
- documented in the technical documents according to enclosure 2
- for the use in the specified fire protection and security installations

When using the subject of the approval the notes of enclosure 3 shall be observed. This certificate may only be reproduced in its present form without any modifications including all enclosures. All

changes of the underlying conditions of this approval shall be reported at once to the VdS certification body including the required documentation.

VdS Schadenverhütung GmbH Zertifizierungsstelle Amsterdamer Str. 174 D-50735 Köln

Ein Unternehmen des Gesamtverbandes der Deutschen Versicherungswirtschaft e.V. (GDV), durch die DAkkS akkreditiert als Zertifizierungsstelle für Produkte in den Bereichen Brandschutz und Sicherungstechnik

A company of the German Insurance Association [GDV] accredited by DAkkS as certification body for fire protection and security products

i. V. Hesels



### Anlage / Enclosure 1

Seite / Sheet 1

zur Anerkennungsnummer/ to Approval No. G 4990039 vom/ dated 22.06.2015

Der Gegenstand der Anerkennung umfasst folgende Bestandteile. The subject of the approval comprises the following parts.

Bezeichnung des Gegenstandes Description of Subject	Тур Туре	Kenn-Nr. des Inhabers Holder's Registration No.	Anerkennungsnr Approval No.
Glasfass-Auslöseelement	G5		
Durchmesser: 5,0 mm			
Ansprechtemperaturen: 57 °C 68 °C 79 °C 93 °C 141 °C 182 °C 260 °C			



### Anlage / Enclosure 2

Seite / Sheet 1

zur Anerkennungsnummer/ to Approval No. G 4990039 vom/ dated 22.06.2015

Der Gegenstand der Anerkennung wird durch folgende Unterlagen beschrieben. The subject of the approval is described by the following documents.

Art der Unterlage Type of Document	Kennzeichnung der Unterlage Identification of document	Datum Date	Seiten Pages
VdS-Prüfberichte	WAL 97044 RWA 98019 RWA 99005	16.01.1998 26.11.1998 18.06.1999	
Produktdatenblatt	JOB G5 Standard Response Technical Specification	04/2009	2
Einsatz Schulter für 5,0 mm Glasfass	keine	30.06.1997	1
Einsatz Boden für 5,0 mm Glasfass	keine	30.06.1997	1



### Anlage / Enclosure 3

Seite / Sheet 1

zur Anerkennungsnummer/ to Approval No. G 4990039 vom/ dated 22.06.2015

Hinweise für die Anwendung des Gegenstandes der Anerkennung nach Anlage 1. Instructions for the application of the subject of approval [see enclosure 1].

Bei den Prüfungen des RTI-Wertes wurden die Prüfmuster in einem Sprinkler eingebaut.

Bei den Festigkeitsprüfungen wurden die Prüfmuster in den in Anlage 2 aufgeführten Glasfassaufnahmen eingespannt.

## Loss Prevention Certification Board



# This is to certify

JOB GmbH Kurt- Fischer-Strasse 30, 22926 Ahrensburg, Hamburg, Germany

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix.

> F2.5, F3, F3-SP and G5 Sprinkler Bulbs (refer to attached appendix for details)

which have complied with the requirements of the following:

### LPS 1039 : Issue 5 – (Appropriate parts) Requirements and Testing Methods for Automatic Sprinklers

### Certificate No. 351a

Issue No. 6

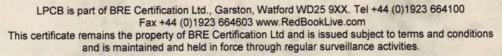
Date of Issue 28th February 2006

This certificate is valid until withdrawn by LPCB. To check the validity and the authenticity of this certificate please visit our website www.RedBookLive.com or contact us.

Signed on behalf of the LPCB

DW yourd

### Name: B W Lywood





Page 1 of 2

©BRE Certification Ltd, 2006

## Loss Prevention certification Board



### APPENDIX TO CERTIFICATE NO. 351a

### JOB GmbH

Kurt-Fischer-Strasse 30, 22926 Ahrensburg, Hamburg, Germany

Product Name Bi	alb Size (mm)	Temperature rating (°C)	LPCB Ref. No.
F2.5 Quick Response (1)	2.5	68,93	351a/01
F3 Quick Response (1)	3	57,68,79,93,141	351a/02
F3-SP 'superior' Quick Response (1)	3	57,68,79,93,141	351a/04
G5	5	57,68,79,93,141,182	351a/03

(1) Suitable for use in quick response sprinklers.

This certificate is valid until withdrawn by LPCB. To check the validity and the authenticity of this certificate please visit our website www.RedBookLive.com or contact us.

Signed on behalf of the LPCB

DU yood

Page 2 of 2

Date of Issue 28th February 2006

Issue No. 6

Name: B W Lywood

LPCB is part of BRE Certification Ltd., Garston, Watford WD25 9XX. Tel +44 (0)1923 664100 Fax +44 (0)1923 664603 www.RedBookLive.com This certificate remains the property of BRE Certification Ltd and is issued subject to terms and conditions and is maintained and held in force through regular surveillance activities.

BF668 Revision 0, 03 January 2006

Page 2 of 2

©BRE Certification Ltd, 2006

Prüf- und Zertifizierungsstelle für Druckgeräte (Notified Body for Pressure Equipment) ZLS-NB-72/12



# ZERTIFIKAT

### Richtlinie 2010/35/EU

Die "Prüf- und Zertifizierungsstelle für ortsbewegliche Druckgeräte" der DEKRA Automobil GmbH bescheinigt hiermit, dass das Unternehmen

### Welz Gas Cylinder GmbH An der Gasanstalt 4-5 D-14712 Rathenow

an der Niederlassung

### Welz Gas Cylinder GmbH An der Gasanstalt 4-5 D-14712 Rathenow

ein Qualitätsicherungssystem mit

### "betriebseigenen Prüfdienst"

gemäß Kapitel 1.8.7.6 ADR unterhält. Der Umfang der Prüfung umfasst erstmalige und

wiederkehrende Prüfung sowie die Überwachung der Herstellung von ortsbeweglichen

Druckgeräten.

Die erforderliche Kennzeichnung mit ggf. Datum der Prüfung und die nachstehend abgebildete Kennzeichnung ist anzugeben.

# TT 2266

Der Nachweis der Übereinstimmung der an den Produkten durchgeführten Prüfungen mit der ADR 2013 wurde im Rahmen einer Nachprüfung (Zulassungsaudit) erbracht. Dieses Zertifikat ist nur in Verbindung mit dem Prüfbericht Nr.: 20140924-31446-1890888964-100-421411-REZERT gültig.

Kenn-Nr. benannte Stelle:	2266		
Datum der Erstzertifizierung:	14.09.2011	Datum der letzten Zertifizierung:	24.09.2014
Dieses Zertifikat ist gültig bis:	23.09.2017	Registrier-Nr.: _	Z-O-025-10498/14
Die Gültigkeit des Zertifikates voraus.	setzt die erfolgreiche jährliche Nachp	prüfung des Qualitätssicherung	gssystems durch die benannte Stelle
Hamburg, 24.09.2014 Zertifizierungsstelle fü	N N N N N N N N N N N N N N N N N N N	<b>2266</b> Kenn-Nr. der Benannten Ste NB 2266 in direkter Rechtsn	
	Tel.: 0711.78 61-25 56	dwerkstraße 15, D-70565 Stuttgart 5 Fax: 0711.78 61-27 17 -industrial.com	

Seite 1 von 1

Bureau Veritas SA is a



Notified Body under the number 0062

### VERITAS CERTIFICAT D'APPROBATION D'UN SERVICE INTERNE D'INSPECTION (SII) **IN-HOUSE INSPECTION SERVICE APPROVAL CERTIFICATE** N° CDG-I-WEL 002-16-DEU Bureau Veritas SA, agissant dans le cadre de son agrément par l'autorité compétente française atteste que : Bureau Veritas SA, acting within the scope of its delegation received from French authority attests that: Nom du demandeur et adresse Welz Gas Cylinder GmbH / Applicant's name and address: An der Gasanstalt 4 Raison Sociale et adresse de l'usine An der Gasanstalt 4 / Name and address of the factory: 14712 Rathenow Germany Nom du responsable du SII / In-House Inspection Service Responsible: Matthias Drumann Après réalisation de l'évaluation (ADR/RID § 1.8.7.6) formalisée suivant le document : After performing the assessment (ADR/RID § 1.8.7.6) as reported in the document: Rapport d'audit d'un SII / In- House Inspection Service Audit Report n° WELZ/IA/160202 En date du (jj/mm/aaaa) / dated (dd/mm/yyyy) 05/02/2016 Type d'équipement / Type of equipment Receptables incl. valves acc. to Report Nr. WELZ/IA/160202 Le Service Interne d'Inspection (SII) est approuvé dans le cadre de : The In-House Inspection Service is approved to perform the following activities: Ia surveillance de la fabrication / Supervision of manufacture les contrôles et épreuves initiaux / Initial inspection and test ✓ les contrôles périodiques / Periodic inspection des fabrications réalisées suivant les agréments de type approuvés et répertoriés au rapport d'audit référencé ci-dessus ou dans le dernier audit périodique en vigueur. Within the framework of the realized manufacturing's following the type approved and listed in the audit report above or in the last periodic audit current. Cette approbation donne l'autorisation au SII de porter la marque « BV » 0062 lorsque nécessaire. This approval gives the authorization to the client to affix the BV mark 0062 where appropriate. Cette approbation demeure valable tant qu'aucuns changements significatifs n'interviennent dans le SII audité, dans les moyens de production ou dans le système qualité. Ces conditions sont vérifiées à chaque audit périodique. This approval remains valid as long as no significant changes are made to the audited IIS, its production rate and its quality system. These conditions are assessed during each periodic audit. Ce certificat a une durée de validité de 3 ans, sauf modification, évolution constructive ou évolution des prescriptions techniques remettant en cause l'aptitude de l'unité de fabrication. Ces évolutions sont vérifiées à chaque audit périodique.

This certificate is valid for 3 YEARS except modification, evolution of manufacturer process and evolution of the technical prescriptions questioning the proficiency of the factory unit. These conditions are assessed during each periodic audit.

Établi à	Le (jj/mm/aaaa)	Approuvé et enregistré en	Signé par	Signature
<i>Made at</i>	On (dd/mm/yyyy)	Approved and Recorded in	Signed by	
Hamburg	08/04/2016	France	Andreas KLATT	ALGAA

Le présent certificat est soumis aux Conditions Générales de Service de Bureau Veritas SA jointes à la demande d'intervention signée par le demandeur. This certificate is subject to the terms of Bureau Veritas SA General Conditions of Service attached to the agreement signed by the applicant. Le présent document ne peut être reproduit que dans son intégralité, avec l'accord de Bureau Veritas SA et du fabricant. The present document shall not be reproduced, except in full, without Bureau Veritas Va and Client's approval.

© Bureau Veritas SA

Chr :