

**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	A-10W ECO		
EC Certification:	-		
Approval number:	BAM-05-M01		
Approval holder:	Worthington Cylinders GmbH Beim Flaschenwerk 1 A-3291 Kienberg / Gaming		
Manufacturer:	Approval holder		
Period of production:	since 2006		
Remarks:	Core hole with felt plug		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.270 ± 0.015	90.5 ± 1.5	≤ 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.180	18
20 up to 60	0.310	0.200	19
Filling conditions for single acetylene cylinders without solvent:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 60	Solvent-free	0.020	19
Filling conditions for acetylene cylinder bundles according to EN 12755 with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 60	0.289 to 0.331	0.180	19

Porous material:	A-10W ECO DMF		
EC Certification:	-		
Approval number:	BAM-05-M02		
Approval holder:	Worthington Cylinders GmbH Beim Flaschenwerk 1 A-3291 Kienberg / Gaming		
Manufacturer:	Approval holder		
Period of production:	since 2006		
Remarks:	Core hole with felt plug		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.270 ± 0.015	90.5 ± 1.5	≤ 2
Filling conditions for single acetylene cylinders with solvent DMF:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 60	0.400	0.209	18
Filling conditions for acetylene cylinders in bundles according to EN 12755 with solvent DMF:			
Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 60	0.385 up to 0.410	0.189	18

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Further porous materials according to Directive 1999/36/EG are not to be excluded by this information.

Information about the cylinders refer only to the volume, detailed information about the type of cylinders is given in the approval.

Contact person: Dipl.-Ing. Christina Hensel, Tel.: +49 (0)30 8104-3494, e-mail: christina.hensel@bam.de

**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	AGA 2 or CASIL 2		
EC Certification:	-		
Approval number:	05 D M2		
Approval holder:	AGA-CRYO Gesellschaft für Industrieausrüstungen mbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1971 until 1994 Revocation of production according to GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.240 ± 0.015	91.5 ± 1.5	≤ 6
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity of the cylinder in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 10	0.310	0.180	18
10 up to 54	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 10			
Cylinder water capacity of the cylinder in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 54	0.285 up to 0.323	0.185	19

Porous material:	AGA 2/2		
EC Certification:	-		
Approval number:	05 D M2/2		
Approval holder:	AGA-CRYO Gesellschaft für Industrieausrüstungen mbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1977 until 1994 Cancellation of production according GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.240 ± 0.015	91.5 ± 1.5	≤ 6
Filling conditions for acetylene cylinders in bundles with solvent DMF:			
Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity of the cylinder in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 54	0.375 up to 0.400	0.1975	-

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	AGA 4 or Casil 4		
EC Certification:	-		
Approval number:	05 DM 4		
Approval holder:	AGA-CRYO Gesellschaft für Industrieausrüstungen mbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1993 until 1999 Production was ceased		
Remarks:	Core hole with silica sand		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.280 ± 0.015	90.5 ± 1.5	≤ 4
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity of the cylinder in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.180	18
20 - 54	0.310	0.200	19
Filling conditions for single acetylene cylinders without solvent:			
Water capacity of the cylinder in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
54	Solvent-free	0.022	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 54	0.285 up to 0.323	0.185	19

Porous material:	AGA 4/4		
EC Certification:	-		
Approval number:	05 D M4/4		
Approval holder:	AGA-CRYO Gesellschaft für Industrieausrüstungen mbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1994 until 1999 Production cancelled.		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.280 ± 0.015	90.5 ± 1.5	≤ 4
Filling conditions for acetylene cylinders in bundles with solvent DMF:			
Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
20 up to 54	0.375 up to 0.400	0.1975	19

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	AGA		
EC Certification:	-		
Approval number:	-		
Approval holder:	Hanseatische AGA-Gas-GmbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1912 until 1954 Cancellation of production according to DruckbehV § 22 Abs. 8		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	-	-	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
-	0.2625	0.1575	-

Porous material:	AGA-H		
EC Certification:	-		
Approval number:	05 D M 1		
Approval holder:	Hanseatische AGA-Gas-GmbH Industriestr. 114 D-21107 Hamburg		
Period of production:	1952 until 1971 Revocation of production according to DruckbehV § 22 Abs. 8		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.345 ± 0.025	79.0 ± 1.0	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
-	0.263	0.1575	-
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 10			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40	0.2375 to 0.2750	0.150	-

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	AL 4		
EC Certification:	-		
Approval number:	01 F M4		
Approval holder:	L' Air Liquide 75, Quai d'Orsay F-75321 Paris Cedex 07		
Period of production:	1979 until 1994 Revocation of placing on the market in Germany according to GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0,250 ± 0,012	91.0 ± 0.5	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.180	18
20 up to 50	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone: (agency did not issue the approval)			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
	0.298 up to 0.335	0.180	-

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	Heiser		
EC Certification:	-		
Approval number:	02 A M5		
Approval holder:	Worthington Cylinders GmbH Beim Flaschenwerk 1 A-3291 Kienberg bei Gaming		
Period of production:	1978 until 1994 Cancellation of new placing in circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.270 ± 0.010	90.0 ± 1.0	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 10	0.305	0.1665	18
20 up to 50	0.305	0.1575	18
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
	0.2800 up to 0.3175	0.145	18

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	HEISER ECO		
EC Certification:	-		
Approval number:	02 A M100		
Approval holder:	Worthington Cylinders GmbH Beim Flaschenwerk 1 A-3291 Kienberg / Gaming		
Manufacturer:	Approval holder		
Period of production:	1993 until 2005 Production cancelled.		
Remarks:	Core hole with felt plug and filter		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0,245 ± 0,015	90.5 ± 1.5	≤ 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.190	19
20 up to 60	0.310	0.200	19
Filling conditions for single acetylene cylinders without solvent:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 60	Solvent free	0.0234	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 60	0.285 up to 0.323	0.185	19

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	HEISER ECO DMF		
EC Certification:	-		
Approval number:	02 A M101		
Approval holder:	Worthington Cylinders GmbH Beim Flaschenwerk 1 A-3291 Kienberg / Gaming		
Manufacturer:	Approval holder		
Period of production:	1995 until 2005 Production is cancelled.		
Remarks:	Core hole with felt plug and filter		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.245 ± 0.015	90.5 ± 1.5	≤ 2
Filling conditions for acetylene cylinders in bundles with solvent DMF: Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 60	0.375 to 0.400	0.188	18

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material::	Linde M I		
EC Certification:	-		
Approval number:	02 D M1		
Approval holder:	Linde AG Seitnerstr. 70 D-82049 Pullach		
Period of production:	1969 until 1993 Cancellation of production according to GefStoffV (since 01.01.1994)		
Remarks:	Safety-disc in cylinders \leq 20 L		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.255 \pm 0.010	91.0 \pm 1.0	\leq 6
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
\leq 20 without safety-disc	0.3125	0.180	18
\leq 20 with safety-disc	0.3125	0.200	19
40 up to 50	0.3125	0.200	19
60	0.3125	0.195	19
Filling conditions for single acetylene cylinders without solvent:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40	Solvent free	0.025	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 50	0.300 up to 0.3375	0.180	19
60	0.300 up to 0.3375	0.175	19

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	Linde M II		
EC Certification:	-		
Approval number:	02 D M2		
Approval holder:	Linde AG Seitnerstr. 70 D-82049 Pullach		
Period of production:	1973 until 1993 Cancellation of production according to GefStoffV (01.01.1994)		
Remarks:			
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.255 ± 0.010	91.0 ± 1.0	≤ 6
Filling conditions for acetylene cylinders in bundles with solvent DMF: Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 75	0.375 up to 0.400	0.175	-

Porous material::	Mikropor A		
EC Certification:	-		
Approval number:	84 D 18		
Approval holder:	Linde AG Seitnerstr. 70 D-82049 Pullach		
Period of production:	1956 until 1972 Cancellation of production according to DruckbehV § 22 Abs. 8		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Granular	0.4725 ± 0.0125	≥ 71	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
5 up to 40	0.263	0.1575	-

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material::	Mikropor A-BASI		
EC Certification:	-		
Approval number:	01 D M2		
Approval holder:	basi Schöberl GmbH + Co Im Steingerüst 57 D-76437 Rastatt		
Manufacturer:	Approval holder		
Period of production:	Since 1944		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Granular	0.4725 ± 0.0125	≥ 71	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
seamless steel (DIN 4664, DIN EN 1964-1) up to 40	0.263	0.1575	-
welded (DIN EN 13322-1) 10 up to 40	0.263	0.1575	-

Porous material:	Mikropor A-KuF		
EC Certification:	-		
Approval number:	01 D M1		
Approval holder:	Kraiss & Friz Neckarstr. 182 D-70190 Stuttgart		
Manufacturer:	Approval holder		
Period of production:	since 1944		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Granular	0.4725 ± 0.0125	≥ 71	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
seamless steel (DIN 4664)	0.263	0.14	-

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	MK2		
EC Certification:	-		
Approval number:	BAM-08-M03		
Approval holder:	Wilhelmsen Ships Service AS PO Box 33 No-1324 Lysaker Norway		
Manufacturer:	Approval holder		
Period of production:	since 2008		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0,290 ± 0,020	89 ± 1	2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40	0,340	0,170	16

Porous material:	N 4		
EC Certification:	-		
Approval number:	05 USA M4		
Approval holder:	Norris Cylinder Company 1351 Main Street Speedway Indiana 46224 USA		
Manufacturer:	Approval holder		
Period of production:	since 1993		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.290 ± 0.020	89.5 ± 1.5	≤ 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
10	0.310	0.180	18
20 up to 54	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 54	0.285 up to 0.323	0.180	19

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	N 4/4		
EC Certification:	-		
Approval code:	05 USA M4/4		
Approval holder:	Norris Cylinder Company 1351 Main Street Speedway Indiana 46224 USA		
Manufacturer:	Approval holder		
Period of production:	since 1993		
Remarks:			
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.290 ± 0.020	89.5 ± 1.5	≤ 2
Filling conditions for acetylene cylinders in bundles with solvent DMF:			
Maximum permissible number of simultaneous fillings: 100			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
50 up to 54	0.375 up to 0.400	0.1975	19

Porous material:	NA		
EC Certification:	-		
Approval number:	01 E M5		
Approval holder:	PRAXAIR ESPAÑA, S.A. Orense 11,5° E-28020 Madrid		
Manufacturer:	Air Liquide Deutschland GmbH		
Period of production:	1991 until 2001 Production cancelled.		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.290 ± 0.010	90.5 ± 1.5	≤ 3
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 10	0.310	0.180	19
20 up to 54	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 54	0.2975 up to 0.335	0.180	19

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**Porous Materials for Acetylene Cylinders:
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dated: August 2010

Porous material:	NLH und NL HMOTA		
EC Certification:	-		
Approval number:	72 CSM 01		
Approval holder:	Linde Technoplyn a.s. U Technoplyno 1324 CZ-19800 Praha		
Retesting at the instigation of:	Air Liquide GmbH Hans-Günther-Sohl-Str. 5 D-40235 Düsseldorf		
Period of production:	1983 until 1994 Approval advanced backward 1991 and re-accord 1992. Cancellation of new placing in circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.240 ± 3 %	93.0 ± 1.0	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
20 and 40	0.2625	0.1575	18

Porous material:	NORAL		
EC Certification:	-		
Approval number:	01 F M6		
Approval holder:	Air Liquide GmbH Hans-Günther-Sohl-Str. 5 D-40235 Düsseldorf		
Manufacturer:	L' Air Liquide F-Villeneuve sur Yonne		
Period of production:	since 1994		
Remarks:	Core hole with beech tree plug and with felt plug		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.280 ± 0.028	90.5 ± 1.5	≤ 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 10	0.310	0.180	18
10 to 54	0.310	0.200	19

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	POR 92		
EC Certification:	-		
Approval number:	02 YU M9		
Approval holder:	Tehnogas-Kraljevo Izletnička Br. 41 36000 Kraljevo (Serbia)		
Period of production:	1991 until 1994 Cancellation of new placing in circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	-		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.260 ± 0.010	91.0 ± 1.0	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 and 50	0.320	0.200	18

Porous material:	SIAD 2		
EC Certification:	-		
Approval number:	02 I M 76 (until 1979: 11 I 30; until 1986: 84 I 63)		
Approval holder:	SIAD Via San Bernadino I-24100 Bergamo		
Period of production:	1971 until 1994 Cancellation of new placing into circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	Core hole with sand		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.270 ± 0.010	90.5 ± 1.5	≤ 5
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
5	0.310	0.180	18
10	0.310	0.185	18
20 up to 50	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 50	0.300 up to 0.3375	0.175	19

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	SIAD AF		
EC Certification:	π 0589		
Approval number:	02 I M 150		
Approval holder:	SIAD Societa Italiana Acetilene & Derivati S.p.A. S.S 525 del Brembo, 1 I-24040 Osio Sopra (BG)		
Manufacturer:	Approval holder:		
Period of production:	Since 1993		
Remarks:	Core hole with pebble granulate, felt plug and steel filter		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.270 \pm 0.010	90.5 \pm 1.5	\leq 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.180	18
20 up to 50	0.310	0.200	19
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
\leq 50	0.289 up to 0.331	0.180	19

Porous material:	T-200		
EC Certification:	-		
Approval number:	02 YU M 5		
Approval holder:	Tehnogas-Inos 36000 Kraljevo (Serbia)		
Retest initiator:	Messer Griesheim GmbH Fütingsweg 34 D-47805 Krefeld		
Period of production:	1981 until 1994 Cancellation of new placing into circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	Core hole with asbestos fibre		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.200 \pm 0.005	92.5 \pm 1.5	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
\leq 10	0.320	0.162	18

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	T-200 A		
EC Certification:	-		
Approval number:	02 YU M 5		
Approval holder:	Tehnogas-Inos 36000 Kraljevo (Serbia)		
Retest initiator:	Messer Griesheim GmbH Fütingsweg 34 D-47805 Krefeld		
Period of production:	1984 until 1994 Cancellation of new placing into circulation in Germany according to GefStoffV (01.01.1995)		
Remarks:	Core hole with silica sand, felt plug and filter		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic	0.200 ± 0.005	92.5 ± 1.5	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
≤ 10	0.320	0.180	18
20 up to 50	0.320	0.200	18
Filling conditions for acetylene cylinders in bundles with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 and 50	0.308 up to 0.345	0.180	18

Porous material:	TEHNOGAS AF		
EC Certification:	-		
Approval number:	02 YU M12		
Approval holder:	Tehnogas-Inos 36000 Kraljevo (Serbia)		
Retest initiator:	Messer GasPack GmbH Gahlingspfad 31 D-47803 Krefeld		
Manufacturer:	Approval holder		
Period of production:	since 1997		
Remarks:	Core hole with silica sand, felt plug and filter		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.255 ± 0.015	91.5 ± 0.5	≤ 2
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.310	0.180	18
20 up to 54	0.310	0.200	19

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	UL 1		
EC Certification:	π 0589		
Marketing authorisation and certificate holder:	LINDE VITKOVICE a.s. Hrbovicka 155/14 CZ-400 01 Ustí nad Labem		
Approval number:	72 CZ 02		
Manufacturer:	Certificate holder		
Period of production:	since 1997		
Remarks:	Core hole with felt plug		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.264 ± 0.01	90 ± 1.5	≤ 3
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.3125	0.180	18
20 up to 50	0.3125	0.200	19
Filling conditions for single acetylene cylinders without solvent:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40	Solvent-free	0.025	19
50	Solvent-free	0.020	19
Filling conditions for acetylene cylinders in bundles according to EN 12755 with solvent acetone:			
Maximum permissible number of simultaneous fillings: 6			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 50	0.291 up to 0.333	0.180	19

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**Porous Materials for Acetylene Cylinders:
Information about Approvals in Germany**

dated: August 2010

Porous material:	UL 2		
EC Certification:	π 0589		
Marketing authorisation and certificate holder:	LINDE VITKOVICE a.s. Hrbovicka 155/14 CZ-400 01 Ustí nad Labem		
Certification number:	BAM-TPED-2007/002		
Manufacturer:	Certificate holder		
Period of production:	since 2007		
Remarks:	Core hole with felt plug		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Monolithic, non-asbestos	0.264 ± 0.01	90 ± 1.5	≤ 3
Filling conditions for single acetylene cylinders with solvent DMF:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
< 20	0.400	0.180	16
20 up to 55.5	0.400	0.200	17
Filling conditions for acetylene cylinders in bundles according to EN 12755 with solvent DMF: Maximum permissible number of simultaneous fillings: 92			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
40 up to 55.5	0.385 up to 0.408	0.180	17

Porous material:	Westfalen		
EC Certification:	-		
Approval number:	86 D 3		
Approval holder:	Sauerstoffwerk Westfalen AG Industrieweg 43 D-48155 Münster		
Manufacturer:	Approval holder		
Period of production:	since 1941		
Type of porous material	Density in kg/L	Porosity in %	Top clearance in mm
Granular	0.500	74.4	-
Filling conditions for single acetylene cylinders with solvent acetone:			
Cylinder water capacity in L	Specified solvent content in kg/L	Max. acetylene content in kg/L	Max. working pressure (15°C) in bar
5 up to 50	0.2625	0.1575	18

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