

Regional Institute of Public Health Brno, Gorkého 6

602 00 Brno

FOMA S.p.A. Copper division Via Caselle, 10 25081 Bedizzole (BS) Italy

Mark: 7a / 2010

Handled by: RNDr. Eva Sobočíková

Brno, 18th April 2010

Tel.: 543 423 361

Assessment of health safety of products for direct contact with drinking water

You have asked for health safety testing of a product designed for direct contact with drinking water, "seamless round copper pipes R220, R250, R290", produced by FOMA S.p.A., Via Caselle, 10, 25081 Bedizzole (BS), Italy.

Material used for the completion of the product for direct contact with drinking water:

CU-DHP 99,9 material

Product – straight or spiral pipe, labelled by its mechanical properties (defined in accordance with EN 1173):

- R220 (annealed): Ø 6mm 22mm, wall thickness: 0.7mm 1.5mm
- R250 (semihard): Ø 10mm 22mm, wall thickness: 0.7mm 1.5mm
- R290 (hard): Ø 6mm 28mm, wall thickness: 0.7mm 1.5mm

The following documents have been provided for this verification:

- Certificate of approval for R220, R250, R290 copper pipe types according to DIN EN 1057: 2006 issued by DVGW CERT GmbH, Germany on 1st June 2002, valid until 27th July 2014
- Certificate of mechanical properties of the R220, R250, R290 copper pipes and certificate of the tested material (No. BBKM08 00042-01) issued by LGA Bautechnik GmbH, Germany - TÜV Rheinland certified on 20th February 2008
- Certificate of chemical composition of the material (No. 2009-3627/LC) issued by Certified Laboratory AQM srl, Italy on 22th December 2009

Materials and products designed for direct contact with drinking water must comply with requirements of Notice of Ministry of Health 409/2005 Coll.

Assessment:

Overall assessment of health safety of evaluated products was based on the provided document of the CU-DHP chemical composition:

Material	Cu Material, Identification: Cooper grade CU-DHP 99,9
Document for assessment	Certificate of chemical composition of CU-DHP 99.9 issued by AQM srl, Italy of 22th December 2009
Resolution	The material complies with the requirements of the Notice. It is, however, only suitable for water with a pH ranged $6.5 - 9.5$, with an acid neutralizing capacity $KNK_{4.5}$ of ≥ 1.0 mmol/l and a total carbon dioxide CO_2 concentration ≤ 44 mg/l.*

^{*} Requirements of the Ministry of Health Notice No. 409/2005 Coll., §9, clause 1c

Conclusion:

Based on the above-mentioned documents, we can say that the seamless round copper pipes R220, R250, R290 products produced by FOMA S.p.A., Via Caselle, 10, 25081 Bedizzole (BS), Italy, comply with the requirements of products coming in direct contact with drinking water according to Notice 409/2005 Coll., on Hygienic Requirements of Products coming in Direct Contact with Drinking Water and on Water Treatment with the condition that these products will only be in contact with non-aggressive water complying with requirements of the Notice of the Ministry of Health 409/2005 Coll.

Elaborated by: RNDr. Eva Sobočíková

Approved by: RNDr. Bohumil Pokorný, CSc.

Director of Regional Institute of Public Health Brno

Zdravotní ústav se sídlem v Brně Gorkého 6, 602 00 Brno



Regional Institute of Public Health Brno, Gorkého 6, 602 00 Brno

FOMA S.p.A. Copper division Via Caselle, 10 25081 Bedizzole (BS) Italy

Mark: 7b / 2010

Handled by: RNDr. Sobočíková

Brno 15th April 2010

Phone: +420 543 423 361

FINAL ASSESSMENT OF PRODUCTS COMING IN DIRECT CONTACT WITH DRINKING WATER

According to paragraph 5 of the Law 258/2000 Coll. On Protection of Public Health, as amended, you have asked for verification of the health safety of product "seamless round copper pipes R220, R250, R290", produced by FOMA S.p.A., Via Caselle, 10, 25081 Bedizzole (BS), Italy.

Specified product materials:

CU-DHP 99,9 material

Product - straight or spiral copper pipe

- Product mechanical properties identification defined in accordance with EN 1173

- R220, R250, R290

Presented documents:

- Certificate of approval for R220, R250, R290 copper pipe types according to DIN EN 1057: 2006 issued by DVGW CERT GmbH, Germany on 1st June 2002, valid until 27th July 2014
- Certificate of the mechanical properties for the R220, R250, R290 copper pipes and certificate
 of the tested material (No. BBKM08 00042-01) issued by LGA Bautechnik GmbH, Germany
 TÜV Rheinland certified on 20th February 2008
- Certificate of the chemical composition of the material (No. 2009-3627/LC) issued by Certified Laboratory AQM srl, Italy on 22th December 2009

Based on the provided documents, performed leaching tests and assessments of the results, we can say that:

the products "Seamless round copper pipes R220, R250, R290", producer FOMA S.p.A., Via Caselle, 10, 25081 Bedizzole (BS), Italy

comply

with the requirements on products coming in direct contact with drinking water according to Notice 409/2005 Coll., on Hygienic Requirements on Products coming in Direct Contact with Drinking Water And on Water Treatment with the condition. Based on this assessment, the products can be used when contact with non-aggressive water complying with the requirements of Notice Np. 409/2005 Coll., §9, clause 1c is anticipated.

RNDr. B. Pokorný, CSc.
Director of Regional Institute of Public Health Brno

Phone: 541 421 + Fax: 541 213 548 Bank connection:

Volksbank CZ, a.s. 4010049199/68 Wravotní ústav se sídlem v Brně

/ID No.: 71009531

Gorkého 6, 602 00 Brno

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