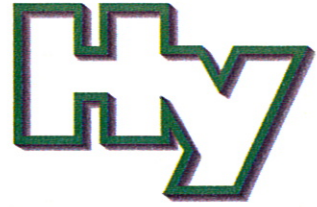


Hygiene-Institut des Ruhrgebiets

Institut für Umwelthygiene und Toxikologie
Direktor: Prof. Dr. rer. nat. L. Dunemann



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45879 Gelsenkirchen

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Reference-No.: K-216445-12-Ko
Contact person: Dr. Andreas Koch

Gelsenkirchen, 09.05.2012

TEST CERTIFICATE according to the KTW-Guideline

Product: hose Refitex® Cristallo

Test specimen: fibre reinforced hose, inner diameter: 6 mm outer diameter: 12 mm,
uncolored

The test specimen meets the requirements according to the test report **Ref.-No.: K-216445-12-Ko** dated **09.05.2012** for the following applications and temperatures:

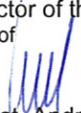
Applications:	cold water (23°C)	warm water (60°C)	hot water (85°C)
Pipes with DN < 80 mm (domestic distribution)	---	---	---
Pipes of diameter 80 mm ≤ DN < 300 mm (supply pipes)	---	---	---
Pipes of diameter DN ≥ 300 mm (main pipes)	---	---	---
Fittings for pipes with DN < 80 mm	passed	---	---
Fittings for pipes with 80 mm ≤ DN < 300 mm	passed	---	---
Fittings for pipes with DN ≥ 300 mm	passed	---	---
Sealings for pipes with DN < 80 mm	passed	---	---
Sealings for pipes with 80 mm ≤ DN < 300 mm	passed	---	---
Sealings for pipes with DN ≥ 300 mm	passed	---	---
Tanks in the domestic installations including repair systems	---	---	---
Tanks other than in domestic installations including repair systems	---	---	---

as far as technically suited.

If pipes, sealings or fittings and ancillaries do not differ in their material composition and process of manufacture, testing of the smallest diameter of the product range is sufficient.

This test certificate is valid beginning with the date of issue and is ending by **09.05.2017** as far as there are no changes in the formula. After this time it can be extended for further 5 years if demanded.

The Director of the Hygiene-Institute
on behalf of


Dr. rer. nat. Andreas Koch
Head of the Dept. for water
hygienic material testing



The assessment was based on the assumption that the used starting substances and monomers used to manufacture the product may completely known and no other substances are present in the product. The validity of this document expires in case of modifications in the composition of the product or the processing conditions. The results and evaluations refer to the groups of test items. This document may not be published without our written permission only complete and unchanged or duplicated.



DECLARATION OF COMPLIANCE FOR MATERIALS AND ARTICLES INTENDED TO COME INTO CONTACT WITH FOOD

1. We hereby certify that the supplied hose REFITTEX CRISTALLO (notes and/or simulants used in the migration tests, as indicated in point 3 of this declaration, allow to determine foodstuffs which may come into contact with the product according to the Annex III of Regulation (EU) n. 10/2011 and D.M. 26/04/1993, n°. 220 and following revisions and amendments) produced by:

Fitt S.p.A. Via Piave, 8 36066 Sandrigo, VI (Italy) Tel. +39 0444 46 10 00 Fax +39 0444 46 10 99
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complies

with all relevant regulations, and particularly with the following:

- Regulation (EU) 10/2011,
- Regulation 1935/2004/EC,
- Directive 2002/72/EC, 2007/19/EC and following amendments,
- Regulation EC 2023/2006 (GMP),
- Regulation 1895/2005/EC

and with the following Italian Regulations:

- Ministerial Decree 174 of 24/09/2008 amending D.M. 21/03/1973 and following revisions and amendments,
- DPR 777/82 and following revisions and amendments.

2. The above mentioned product is manufactured with the following materials suitable for food contact:

- Inside layer made of PVC plasticized (contact side).
- Reinforcement in polyester thread.
- Outside layer made of PVC plasticized.

3. The following substances subject to restrictions and/or specifications are used in the above mentioned products:

Substance name	Ref. No	CAS No	SML [mg/kg]	Group restriction No	Restrictions and specifications
Terephthalic acid, bis(2-ethylhexyl)ester	92200	0006422-86-2	LMS = 60 mg/Kg	(32)	-
Soybean oil, epoxidised	88640	0008013-07-8	LMS = 60.0mg/Kg LMS = 30.0 mg/Kg*	-	(*) In the case of PVC gaskets used to seal glass jars containing infant formulae and follow-on formulae as defined by Directive 2006/141/EC or processed cereal-based foods and baby foods for infants and young children as defined by Directive 2006/125/EC, the SML is lowered to 30 mg/kg. Oxirane < 8 %, iodine number < 6.
Polyethylene waxes, oxidised	80077	0068441-17-8	LMS = 60 mg/Kg	-	-
Calcium salts of fatty acid	-	-	-	-	no SML, DUAL USE (art. 11 3a)
Zinc salts	-	-	LMS = 25mg/Kg as Zinc	-	-
Octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	68320	0002082-79-3	LMS = 6mg/Kg	-	-
Vinyl chloride	26050	0000075-01-4	ND*	-	(*) 1 mg/kg in final product

4. We certify that:

- The article meets the overall migration limits and specific migration limits under the following test conditions:
 - Simulant A: AQUEOUS SOLUTION OF ETHANOL at 10% v/v (for aqueous foodstuffs).
Testing time and temperature: 10 days at 40°C,
 - Simulant B: AQUEOUS SOLUTION OF ACETIC ACID at 3% p/v (for acid foodstuffs).
Testing time and temperature: 10 days at 40°C,
 - Simulant C: AQUEOUS SOLUTION OF ETHANOL at 20% v/v (for alcoholic foodstuffs).
Testing time and temperature: 10 days at 40°C.
 - Simulant D2: VEGETABLE OIL (for fatty foodstuffs).
Testing time and temperature: 2 hours at 40°C, for repeated use.

The product complies with the overall migration limits and other specific restrictions under which the monomers and/or additives contained in the material can be submitted, at the abovementioned usage conditions. All declared is supported by analytical tests carried out in compliance with the DM 21/03/1973 and articles 17 and 18 of Regulation (EU) 10/2011 in conjunction with Annex V or based on calculations made taking into account the % of the substances submitted to migration limits in the test conditions. Calculations presume that 1 kg of food enters into contact with 6 dm² of product. We remind that the Migration Limit is 60 mg/Kg food [ppm], also expressed as 10 mg/dm² (if the certificate reports mg/kg it is possible to convert it into mg/dm² dividing the value by 6) and we underline that the change in the analytical tolerance is between 10 and 20% (12 mg/kg or 2 mg/dm²).

5. We suggest giving notice to the writing Society if the usage conditions of the product do not correspond to the advice here supplied or whether the foodstuff which come into contact with the product (Food Contact Material) is different from the applicable conditions and from the simulants listed above.
6. The user of the product which is intended to come into contact with food has the responsibility of informing the writing Company about any restriction due to particular component characteristics (additives and aromas) of the foodstuff which has to be transported.
7. This declaration complies with art. 16 of the 1935/2004/EC Regulation.

8. Industrial or commercial usage of the product concerned in this declaration is subject to the evaluation of its compliance to actual regulations and to the technological suitability to the declared final usage.
9. This declaration is valid as from the date indicated below and will be renewed when substantial changes in the processing (final product/raw material) will bring about modifications in some necessary requirements or when new amendments to the regulations mentioned at point 1) will require new controls to verify the compliance.
10. Moreover, we inform that all necessary support documents are at the disposal of the control authorities, in accordance with art. 16, par. 1 of Regulation 1935/2004/EC.
11. Declaration Code: 13LA01993-13LA05091-14LA01341

Date: 28/02/2014

This document and its attachments are addressed solely to the person or company above and contain confidential information.





ANWENDUNGEN UND STRUKTUR

Schlauch mit Textilverstärkung für den Durchfluss von Lebensmittelflüssigkeiten, mit Luftdruck. Flexibler PVC-Schlauch mit Textilverstärkung.

APPLICATIONS AND STRUCTURE

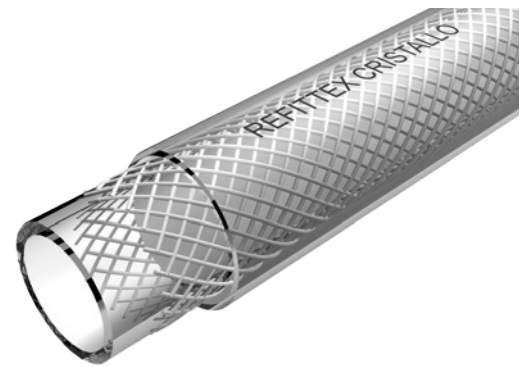
Hose suitable for compressed air passage and food liquids passage. Flexible PVC hose with textile reinforcement.

TECHNISCHE HAUPT-EIGENSCHAFTEN MAIN TECHNICAL FEATURES

- Flexibel - Flexibility
- Glatte Oberfläche - Smooth surface
- Ozonbeständig - Ozone resistance
- Chlorbeständig - Chlorine resistance
- 20°C/+60°C Temperaturbeständigkeit - Working temperature

Unter Beachtung der Europäischen Richtlinie Reg. (EU) 10/2011 für Simulanten A-B-C-D2; und der Richtlinie KTW-C für das Trinkwasser.

In compliance with the European regulation Reg.(EU)10/2011 for simulating liquids A-B-C-D2. In compliance with the KTW-C guidelines for the contact with drinkable water.



PHTHALATFREIE ZUSAMMENSETZUNG*
PHTHALATE FREE FORMULATION*

Icon: Inside Diameter	Icon: Inside Diameter	Icon: Outside Diameter	Icon: Thickness	Icon: Working Pressure	Icon: Bursting Pressure	Icon: Vacuum	Icon: Bending Radius	Icon: Length	Icon: Weight
I - Ø	I - Ø	A - Ø	DICKE	BETRIEBSDRUCK	BERSTDRUCK	VAKUUM	BIEGUNGSRADIUS	LÄNGE	NENNGEWICHT
Ø INSIDE	Ø INSIDE	Ø OUTSIDE	THICKNESS	WORKING PRESSURE	BURSTING PRESSURE	VACUUM	BENDING RADIUS	LENGTH	WEIGHT PER METER

inc	mm	mm	mm	bar	bar	mH ₂ O	mm	m	g/m
-	4	10,00	3	30	90	-	-	100	79
3/16	5	11,00	3	26	78	-	-	100	92
1/4	6	12,00	3	20	60	-	-	25	103
1/4	6	12,00	3	20	60	-	-	50	103
1/4	6	12,00	3	20	60	-	-	100	103
5/16	8	14,00	3	20	60	-	-	25	126
5/16	8	14,00	3	20	60	-	-	50	126
5/16	8	14,00	3	20	60	-	-	100	126
-	9	15,00	3	20	60	-	-	100	138
-	9	15,00	3	20	60	-	-	50	138
-	9	15,00	3	20	60	-	-	25	138
3/8	10	16,00	3	20	60	-	-	50	149
3/8	10	16,00	3	20	60	-	-	25	149
-	12	18,00	3	12	36	-	-	50	172
-	12,50	18,50	3	-	-	-	-	50	178
1/2	13	19,00	3	12	36	-	-	50	184
1/2	13	19,00	3	12	36	-	-	25	184
1/2	13	20,00	3,5	12	36	-	-	50	221
-	15	21,00	3	12	36	-	-	50	207
-	15	21,00	3	12	36	-	-	25	207
5/8	16	22,00	3	10	30	-	-	50	218
5/8	16	24,00	4	10	30	-	-	50	302
3/4	19	26,00	3,5	10	30	-	-	25	296
3/4	19	26,00	3,5	10	30	-	-	50	296
3/4	19	27,00	4	10	30	-	-	50	346
-	20	28,00	4	10	30	-	-	50	362
1	25	33,00	4	8	24	-	-	25	436
1	25	33,00	4	8	24	-	-	50	436
1	25	34,00	4,5	12	24	-	-	25	498
1	25	34,00	4,5	12	24	-	-	50	498
-	30	38,00	4	7	21	-	-	25	514
-	30	38,00	4	7	21	-	-	50	514
11/4	32	40,00	4	7	21	-	-	25	543
11/4	32	40,00	4	7	21	-	-	50	543
11/4	32	42,00	5	7	21	-	-	25	695
11/4	32	42,00	5	7	21	-	-	50	695
11/2	38	48,00	5	6	18	-	-	25	808
-	40	50,00	5	6	18	-	-	25	846
13/4	45	55,00	5	5	15	-	-	25	940
2	50	60,00	5	5	15	-	-	25	1032
2	50	64,00	7	5	15	-	-	25	1500
2	50	66,00	8	5	15	-	-	25	1740