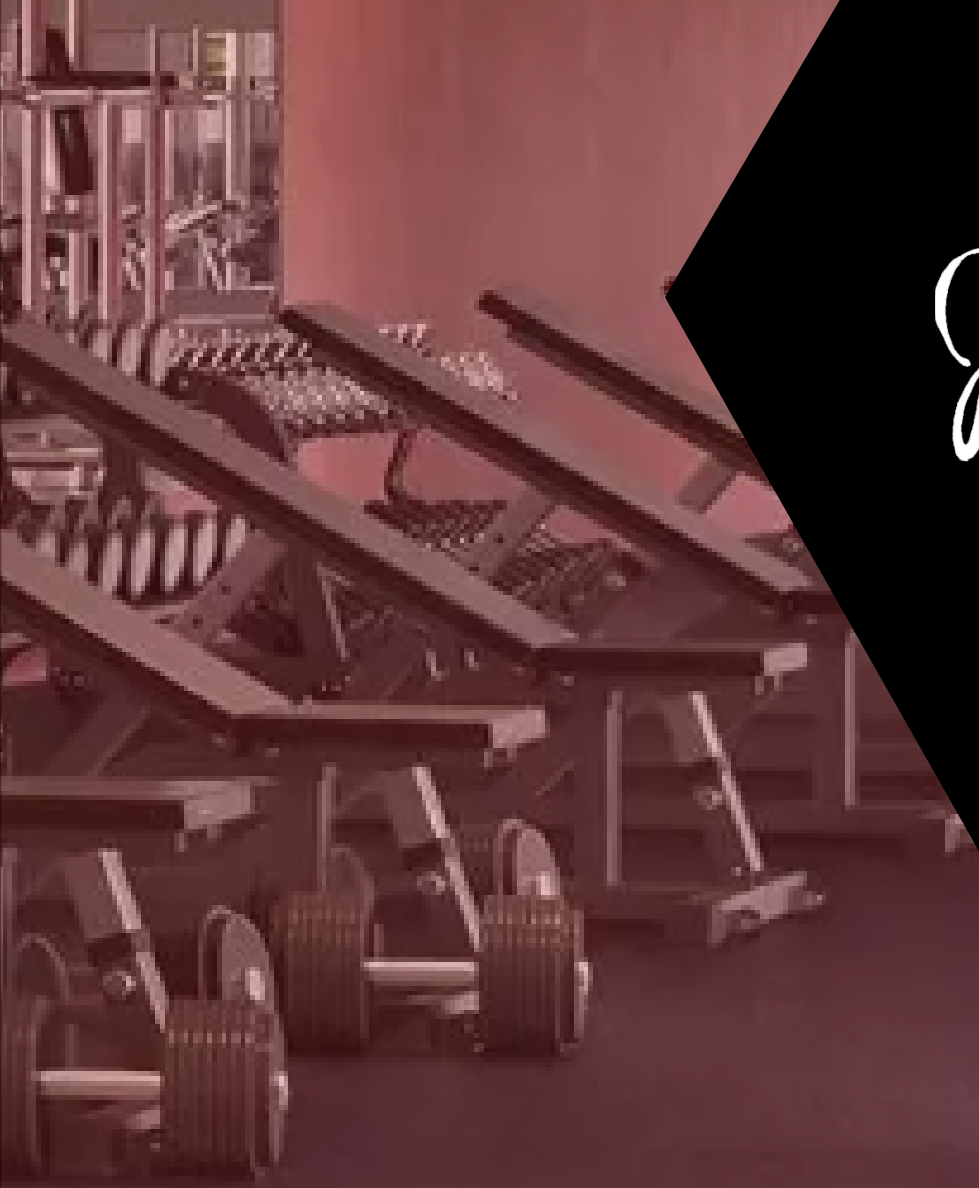

Jaymart

Bladerunner Environmental, Fire & Slip Data

TEST REPORT

WARRES NO. 66523

BS 4790: 1987

METHOD FOR DETERMINATION OF THE EFFECTS OF A SMALL SOURCE OF IGNITION ON TEXTILE FLOOR COVERINGS (HOT METAL NUT METHOD)

SPONSORED BY

BERLEBURGER SCHAUMSTOFFWERK GMBH
POSTFACH 1180
57301 BAD BERLEBURG
GERMANY

THE PROFESSIONALS IN FIRE SAFETY •

Warrington FIRE research
CONSULTANCY • TESTING

Holmesfield Road, Warrington, UK WA1 2DS • Tel: 0925 655116 • Telex 628743 WARRES G • Fax: 0925 655419

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PURPOSE OF TEST

To determine the effects of a small source of ignition on textile floor coverings using the hot metal nut, as specifi in BS 4790: 1987, and to determine the statement which can be made on the label of the carpet, as specified in I 5287: 1988.

DESCRIPTION OF TEST SPECIMENS

The description of the specimens given below has been prepared from information provided by the sponsor of t test. All values quoted are nominal, unless tolerances are given.

The product was "Regupol Ever-Roll", a polyurethane bound rubber flooring having a thickness of 12mm and density of 1000kg/m³.

The specimens were supplied by the sponsor. Warrington Fire Research Centre was not involved in any selecti or sampling procedure.

METHOD OF MOUNTING OF TEST SPECIMENS

The specimens were mounted using method 1 : loose-laid as specified in clause 8.2 of the Standard.

CONDITIONING OF SPECIMENS

The floorcovering specimens were received on the 27th September 1995.

Prior to testing the specimens were conditioned at a temperature of 20 ± 2°C and a relative humidity of 65 ± 2% until the mass of each specimen showed no progressive change greater than 0.25% when determined at 2 hour intervals.

DATE OF TEST

The test was performed on the 9th October 1995.

TEST PROCEDURE

Three specimens were tested in accordance with the procedure given in section 9 of the Standard.

The following effects were noted;

a) Where the effects of ignition do not reach the clamping ring:-

(i) The elapsed time in seconds from the instant of application of the nut to the extinction of any flame.

and

(ii) The time in seconds of any after-glow and/or smouldering subsequent to removal of the nut and to extinction of any flame.

b) Where the effects of ignition reach the clamping ring:-

(i) The time in seconds to reach the ring from the instant of application of the nut.

In both cases (a) and (b) above the radii of the circles that just contain the affected areas on both the use-surface and the under-surface of the specimen were recorded.

For none of the three specimens tested did the effects of ignition reach the clamping ring, consequently only the following measurements were recorded:-

Specimen No:	Time to extinction of flaming (seconds)	Time to extinction of any after-glow and/or smouldering (seconds)	Radius of affected area	
			Use surface (mm)	Under surface (mm)
1	84	NIL	23	NIL
2	81	NIL	24	NIL
3	85	NIL	25	NIL

ASSESSMENT OF THE FLOORCOVERING AS SPECIFIED IN BS 5387: 1988

When the results of the test to BS 4790: 1987 are assessed in accordance with BS 5287: 1988, the minimum information to be given on the manufacturers label should be as follows:

"When tested according to method 1 : loose-laid of BS 4790, has a low radius of effects of ignition (up to 35 mm)".

The specification and interpretation of fire test methods are the subject of ongoing development and refinemen
Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of te
reports over five years old should be considered by the user. The laboratory that issued the report will be able t
offer, on behalf of the legal owner, a review of the procedures adopted for a particular test to ensure that they a
consistent with current practices, and if required may endorse the test report.

RESPONSIBLE OFFICER

D OWEN
Technical Officer -
Reaction to Fire Testing

APPROVED

R. J. SHAW
Director
for and on behalf of
WARRINGTON FIRE RESEARCH CENTRE

DATE OF ISSUE : 10 October 1995

(PC7847)

EC Declaration of Conformity
EG Konformitätserklärung
Déclaration CE de conformité

We / Wir / Nous

BSW GmbH, Berleburger Schaumstoffwerk

Am Hilgenacker 24, 57319 Bad Berleburg, Germany –

declare that the products / erklären, dass die Produkte / déclarons que le produits:

everroll® classic, unversiegelt,
elastischer Bodenbelag aus SBR- und EPDM-Granulat
in Dicken 4,0 / 6,0 / 8,0 / 10,0 / 12,0 mm

are in conformity with the requirements of the directive / stimmen mit den Anforderungen der Richtlinie überein / sont conformes aux prescriptions de la directive:

- **89/106/EEC**
  The EU Construction Products Directive
  Die EU Bauproduktenrichtlinie der europäischen Union
  La Directive UE „Produits de construction"

Applied harmonized standards / Angewandte harmonisierte Normen / Normes harmonisées appliqués:

- **EN 14041**
  Resilient, textile and laminate floor coverings – Essential characteristics
  Elastische, textile und Laminatbodenbeläge – Wesentliche Eigenschaften
  Revêtements de sols résilients, textiles et strafifiés – Caractéristiques essentielles

- **EN 13501-1**
  Fire classification / Klasse des Brandverhaltens / Classification du feu
  E_{fl}

- **EN 13893**
  Slip resistance / Gleitwiderstand / Résistance au glissement
  DS

Notified body / Notifizierte Stelle / Organismes Notifiés:

- **eco-INSTITUT GmbH**, Sachsenring 69, 50677 Köln, Germany

Köln, 06.10 2009

Ulf Pöppel

Geschäftsführer BSW

LEISTUNGSERKLÄRUNG

gemäß Anhang III der Verordnung (EU) Nr. 305/2011
(Bauproduktenverordnung)

REGUPOL

DOP NR.: REGUPOL 018

REGUPOL everroll classic

Elastischer Bodenbelag aus EPDM- und Gummigranulat zur Verwendung in Innenräumen gemäß EN 14041:2008, unversiegelt, in Dicken 4 mm bis 12 mm

REGUPOL BSW GmbH | Am Hilgenacker 24 | 57319 Bad Berleburg | Germany

Bewertung der Leistungsbeständigkeit:	**System 3**
Die notifizierte Stelle	**eco Institut Germany GmbH Notified Body No. 2097,**

hat die Feststellung des Produktes anhand einer Typenprüfung nach System 3 vorgenommen

Wesentliche Merkmale	Leistung	Harmon. Techn. Spezifikation
Brandverhalten gemäß EN 13501-1	Klasse E_{fl}	EN 14041 : 2008
Gehalt an Pentachlorphenol	DL (<0,5ppm)	EN 14041 : 2008
Formaldehydemission gemäß EN 717-2	E1 (<0,124mg/m³)	EN 14041 : 2008
Gleitwiderstand gemäß EN 13893	DS (≥0,3)	EN 14041 : 2008
Elektrostatische Verhalten gemäß EN 1815	Antistatisch (<2,0kV)	EN 14041 : 2008
Wärmeleitfähigkeit gemäß EN 12667	Ca. 0,11W/(mK)	EN 14041 : 2008
Wasserdichtheit gemäß EN 13553	NPD	EN 14041 : 2008

Die Leistungen des Produkts **everroll classic** und dessen Chargen entsprechen der Leistung nach o. g. Tabelle. Verantwortlich für die Erstellung dieser Leistungserklärung ist allein der Hersteller **REGUPOL BSW GmbH**.

Unterzeichnet für den Hersteller und im Namen des Herstellers von:

Rainer Pöppel / CEO
(Name und Funktion)

Bad Berleburg, 13.06.2022
(Ort/Datum der Ausstellung)

(Unterschrift)

REGUPOL BSW GmbH · Am Hilgenacker 24 · 57319 Bad Berleburg · GERMANY

BSW Berleburger Schaumstoffwerk GmbH
Am Hilgenacker 24
57319 Bad Berleburg

Test Report No. B50783-001

This report replaces test report 50783-001 dated 17.02.2016.

Client:	**BSW Berleburger Schaumstoffwerk GmbH Bad Berleburg, DE**
Sample description by client:	**Regupol; Everroll classic**
Sampling by:	Client
Date of arrival of sample:	27.11.2015
Date of report:	24.04.2018
Number of pages of report:	16
Testing parameter:	see table of contents
Testing laboratory:	eco-INSTITUT Germany GmbH, Cologne

Content

Sample view

Internal Sample-no.	Description by customer	Condition upon delivery	Type of sample
A001	Regupol; Everroll classic	without objection	flooring; Batch.: 2/376226; production date: 21.10.2015

Test Report

1 Emission test

1.1 Volatile Organic Compounds (VOC)

Definition of terms:

VOC (volatile organic compounds)	All individual materials with a concentration ≥ 0.001 mg/m³ in retention range C_6 (n-Hexane) to C_{16} (n-Hexadecane) Substances refer to LCI lists / AgBB (DIBt)
TVOC (Total volatile organic compounds)	Sum of all individual substances in retention range C_6 to C_{16}.
CMR-VOC (carcinogenic, mutagenic, reproduction-toxic VOC, VVOC and SVOC)	All individual substances with the following categories: Regulation (EC) No. 1272/2008: Category Car.1A and 1B, Muta. 1A and 1B, Repr. 1A and 1B TRGS 905: K1 and K2, M1 and M2, R1 and R2 IARC: Group 1 and 2A DFG (MAK lists): Category III1and III2
VVOC (very volatile organic compounds)	All individual substances wit concentration ≥ 0.001 mg/m³ in retention range < C_6
TVVOC (Total very volatile organic compounds)	Sum of all VVOC in retention range < C_6
SVOC (semi volatile organic compounds)	All individual materials ≥ 0.001 mg/m³ in retention range > C_{16} (n-Hexadecane) to C_{22} (Docosane)
TSVOC (Total semi volatile organic compounds)	Sum of all SVOC in retention range > C_{16} to C_{22}.
Identified and calibrated substances ($c_{ID\ sub}$), substance specific calculated	Spectrum and retention time are concordant with the calibrated comparison substance
Not identified substances calculated as toluene equivalent ($c_{NI\ tol}$)	Suggestion from the spectrum library with high probability and/or allocation to a group of substances
SER	Specific emission rate (see appendix)
LCI value	Lowest Concentration of Interest; calculated value for the evaluation of VOC, established by the Committee for Health-related Evaluation of Building Products (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten - AgBB)
R value	The quotient of the concentration and the LCI value is generated for every substance which is detected in the test chamber air. The sum of the calculated quotients results in the R value.

List of analysed VOCs:

Aromatic hydrocarbons
Toluene
Ethylbenzene
p-Xylene
m-Xylene
o-Xylene
Isopropylbenzene
n-Propylbenzene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,2,3-Trimethylbenzene
2-Ethyltoluene
1-Isopropyl-4-methylbenzene
1,2,4,5-Tetramethylbenzene
n-Butylbenzene
1,3-Diisopropylbenzene
1,4-Diisopropylbenzene
Phenyl octane
1-Phenyl decane[2]
1-Phenyl undecane[2]
4-Phenylcyclohexene
Styrene
Phenyl acetylene
2-Phenyl propene
Vinyl toluene
Naphthalene
Indene
Benzene
Cresol

Saturated aliphatic substances
Hydrocarbons
3-Methyl pentane[1]
3-Methyl pentane[1]
n-Hexane
Cyclohexane
Methylcyclohexane
n-Heptane
n-Octane
n-Nonane
n-Decane
n-Undecane
n-Dodecane
n-Tridecane
n-Tetradecane
n-Pentadecane
n-Hexadecane
Methylcyclopentane
1,4-Dimethylcyclohexane

Terpenes
Δ-3-Caren
α-Pinene
β-Pinene
Limonene
Longifolene
Caryophyllene
Isolongifolene
alpha-Phellandrene
Myrcene
Camphene
alpha-Terpineol
Longipinene
beta-Caryophyllene
beta-Farnesene
alpha-Bisabolen

Aliphatic alcohols and ether
1-Propanol[1]
2-Propanol[1]
tert-Butanol
2-Methyl-1-propanol
1-Butanol
1-Pentanol
1-Hexanol
Cyclohexanol
2-Ethyl-1-hexanol
1-Octanol
4-Hydroxy-4-methyl-pentan-2-one
1-Heptanol
1-Nonanol
1-Decanol

Aromatic alcohols (phenols)
Phenol
BHT (2,6-di-tert-butyl-4-methylphenol)
Benzylalcohol

Glycols, Glycol ether, Glycol ester
Propylenglycol (1,2-Dihydroxypropane)
Ethylene glycol (Ethandiol)
Ethylene glycol monobutyl ether
Diethylene glycol
Diethylene glycol-monobutyl ether
2-Phenoxyethanol
Ethylene carbonate
1-Methoxy-2-propanol
Glycolic acid butyl ester
Texanol
Butylglycol acetate
Dipropylenglycol mono-methyl ether
2-Methoxyethanol
2-Ethoxyethanol
2-Propoxyethanol
2-Methylethoxyethanol
2-Hexoxyethanol
1,2-Dimethoxyethane
1,2-Diethoxyethane
2-Methoxyethyl acetate
2-Ethoxyethyl acetate
2-Butoxyethyl acetate
2-(2-Hexoxyethoxy)-ethanol
1-Methoxy-2-(2-methoxy-ethoxy)-ethane
Propylene glycol di-acetate
Dipropylene glycol
Dipropylene glycol monomethylether acetate
Dipropylene glycol mono-n-propylether
1,4-Butanediol
Tripropylenglycolmonomethyl ether
Triethylene glycol dimethyl ether
1,2-Propylene glycol dimethyl ether
TXIB
Ethylglycol
Dipropylene glycol-dimethyl ether
Propylene carbonate
Hexylene glycol
3-Methyl-1-butanol
1,2-Propylene glycol n-propyl ether
1,2-Propylene glycol n-butyl ether
Diethylglycol phenyl ether
Neopentyl glycol

Aldehydes
Butanal[1,2]
Pentanal[2]
Hexanal
Heptanal
2-Ethylhexanal
Octanal
Nonanal
Decanal
3-Butenal[2]
3-Pentenal[2]
3-Hexenal
3-Heptenal
3-Octenal
3-Nonenal
3-Decenal
3-Undecenal
Furfural
Glutaraldehyde
Benzaldehyde
Acetaldehyde[1,2]
Propanal[1,2]
Propenal[1,2]
Isobutenal
3-Methyl-3-propanol
Methylisobutylketone
Cyclopentanone
Cyclohexanone

Ketones
Ethylmethylketone[2]
3-Methyl-3-propanol
Methylisobutylketone
Cyclopentanone
Cyclohexanone
Acetone[1,2]
3-Methylcyclopentanone
3-Methylcyclohexanone
Acetophenone
1-Hydroxyacetone

Acids
Acetic acid
Propionic acid
Isobutyric acid
Butyric acid
Pivalic acid
n-Valeric acid
n-Hexanoic acid
n-Heptanoic acid
n-Octanoic acid
2-Ethylhexanoic acid

Esters and Lactones
Methylacetate[2]
Ethyl acetate[1]
Vinyl acetate[2]
Isopropyl acetate
Propyl acetate
3-Methoxy-1-methylethyl acetate
n-Butyl formate
Methylmethacrylate
Isobutylacetate
1-Butyl acetate
2-Ethylhexyl acetate
Methyl acrylate
Ethyl acrylate
n-Butyl acrylate
2-Ethylhexyl acrylate
Adipic acid dimethyl ester
Fumaric acid dibutyl ester
Succinic acid dimethyl ester
Hexandioldiacrylate
Maleic acid dibutyl ester
Butyrolactone
Dibutyl glutarate
Dibutyl succinate
Dimethylphthalate
Texanol
Dipropylene glycol diacrylate

Chlorinated hydrocarbons
Tetrachloroethene
1,1,1-Trichloroethane
Trichloroethene
1,4-Dichlorbenzene

Others
1,4-Dioxane
Caprolactam
N-Methyl-2-pyrrolidone
Octamethylcyclotetrasiloxane
Methenamine
2-Butenonoxime
Triethyl phosphate
5-Chlor-2-methyl-4-isothiazolin-3-one
2-Methyl-4-isothiazolin-3-one (MIT)
Triethylamine
Decamethylcyclopentasiloxane
Dodecamethylcyclopentasiloxane
Tetrahydrofuran (THF)
1-Decene
1-Octene
2-Pentylfuran
Tetramethylsuccinonitrile
Propylencarbonate
Isophorone
Dimethylformamide (DMF)
Tributyl phosphate

1 VVOC
2 SVOC
3 Analysis according to DIN ISO 16000-3

Explanation of the Specific Emission Rate SER

Emission measurements are accomplished in test chambers under defined physical conditions (temperature, relative humidity, room loading, air change rate etc.).

Test chamber measurement results are directly comparable only if the investigations were accomplished under the same basic conditions.

If the differences of the physical conditions refer only to the change of air rate and/or the loading, the "SER" or "specific emission rate" can be used for comparability of the measurement results. The SER indicates how many volatile organic compounds (VOC) are released by the sample for each material unit and hour (h).

The SER can be calculated using the formula below for each proven individual component of the VOC from the data in the test report.

As material units the following are applicable:

l = unit of length (m)	relation between emission and length
a = unit area (m²)	relation between emission and surface
v = unit volume (m³)	relation between emission and volume
u = piece unit (unit = piece)	relation between emission and complete unit

From this the different dimensions for SER result:

length-specific	SER_l	in µg/m h
surface-specific	SER_a	in µg/m² h
volume-specific	SER_v	in µg/m³ h
unit specific	SER_u	in µg/u h

SER thus represents a product specific rate, which describes the mass of the volatile organic compound, which is emitted by the product per time unit at a certain time after beginning of the examination.

$$SER = q \cdot C$$

q specific air flow rate (quotient from change of air rate and loading)
C Concentration of the measured substance(s)

The result can be indicated in milligrams (mg) in place of micro grams (µg), whereby 1 mg = 1000 µg.

Test method TS 16516 with following parameters:

Preparation of test sample:	Date:	01.12.2015
	Pre-treatment:	not applicable
	Masking of backside:	yes
	Masking of edges:	yes, 100 %
	Relationship of unmasked edges to surface:	not applicable
	Charging:	related to area
	Dimensions:	25 cm x 20 cm
Test chamber conditions:		
	Chamber volume:	0.125 m³
	Temperature:	23 °C
	Relative humidity:	50 %
	Air pressure:	normal
	Air:	cleaned
	Air change rate:	0.5 h^{-1}
	Air velocity:	0.3 m/s
	Loading:	0.4 m^2/m^3
	Specific air flow rate:	1.25 $m^3/m^2 \cdot h$
	Air sampling:	28 days after test chamber loading
Analytics:	DIN ISO 16000-3	
	Limit of determination:	2 µg/m³
	DIN ISO 16000-6	
	Limit of determination:	1 µg/m³

Measurement time 28 days after test chamber loading

1.1.1 CMR-VOC$_{28d}$

Test parameter:
Carcinogenic, mutagenic and reproduction-toxic volatile organic compounds (CMR VOC), test chamber, air sampling 28 days after test chamber loading

Test result:

Sample:	A001: Regupol; Everroll classic

No.	Substance	CAS No.	Concentration (Test chamber air) [µg/m³]	CMR classification*)
VOC$_{28d,C}$: Identified and calibrated substances in accordance with LCI list/AgBB, substance specific calculated ($c_{id,sub}$)				
1	**Aromatic hydrocarbons**			
1-30	Naphthalene	91-20-3	1	III2
VOC$_{28d,C}$: Further identified and calibrated CMR substances in addition to LCI list/AgBB, substance specific calculated($c_{id,sub}$)				
-	-	-	n.d.	-
VOC$_{28d}$: Further identified, not calibrated CMR substances, calculated as toluene equivalent ($c_{id,tol}$)				
-	-	-	n.d.	-

*) Classification acc. to Regulation (EC) No. 1272/2008: Category Carc. 1A and 1B, Muta. 1A and 1B, Repr. 1A and 1B, TRGS 905: K1 and K2, M1 and M2, R1 and R2, IARC: Group 1 and 2A, DFG (MAK list): Category III1 and III2

	Concentration (Test chamber air) [µg/m³]	SER$_a$ [µg/m²h]
Sum of VOC with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 1A and 1B, Muta. 1A and 1B, Repr. 1A and 1B TRGS 905: K1 and K2, M1 and M2, R1 and R2 IARC: Group 1 and 2A DFG (MAK list): Category III1 and III2	1	1

n.d. = not detectable

1.1.2 VOC / TVOC 28d

Test parameter:
Volatile organic compounds (VOC), test chamber, air sampling 28 days after test chamber loading

Test result:

Sample:	A001: Regupol; Everroll classic

No.	Substance	CAS No.	Concentration (Test chamber air) [µg/m³]
VOC_{28d}: Identified and calibrated substances in accordance with LCI list/AgBB, substance specific calculated ($c_{sl\ calc}$)			
1	**Aromatic hydrocarbons**		
1-30	Naphthalene	91-20-3	1
2	**Saturated aliphatic hydrocarbons**		
2-10.3	n-Undecane	1120-21-4	1
2-10.4	n-Dodecane	112-40-3	2
2-10.5	n-Tridecane	629-50-5	2
2-10.6	n-Tetradecane	629-59-4	3
2-10.7	n-Pentadecane	629-62-9	1
7	**Aldehydes**		
7-7	Nonanal	124-19-6	2
8	**Ketones**		
8-3	Methylisobutylketone	108-10-1	2
8-5	Cyclohexanone	108-94-1	6
9	**Acids**		
9-1	Acetic acid	64-19-7	5

VOC_{28d}: Further identified and calibrated substances in addition with LCI list/AgBB, substance specific calculated ($c_{sl\ calc}$)			
12	**Others**		
	Benzothiazol	95-16-9	31

VOC_{28d}: Not calibrated substances calculated as toluene equivalent ($c_{nl\ tol}$)			
	not identified	-	1
	not identified	-	2

Total volatile organic compounds	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
$TVOC_{28d}$	**59**	**74**

Total volatile organic compounds	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
$TVOC_{28d,\ substances\ \geq\ 5\ µg/m³}$	42	53

Further VOC sums	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
Sum VOC without LCI	34	43
Sum of bicyclic terpenes	n.d.	n.d.
Sum of sensitising materials with the following categorisations: DFG (MAK lists): Category IV German Federal Institute for Risk Assessment lists: Cat A TRGS 907	n.d.	n.d.
Sum of VOC with the following categorisations: Regulation (EC) No. 1272/2008: Category Carc. 2, Muta. 2, Repr. 2 TRGS 905: K3, M3, R3 IARC: Group 2B DFG (MAK list): Category III3	6	8
C_8 - C_{14} - Alkanes / Isoalkanes	8	10
Sum C_4-C_{11} Aldehydes, acyclic, aliphatic	2	3
Sum C_9-C_{13} Alkyl benzenes	n.d.	n.d.
Sum Cresols	n.d.	n.d.

R-Value (without dimension)$_{28d}$	0.22

n.d. = not detectable

1.1.3 $SVOC_{28d}$

Test parameter:
Semivolatile organic compounds (SVOC), test chamber, air sampling 28 days after test chamber loading

Test result:

Sample:	A001: Regupol; Everroll classic

No.	Substance	CAS No.	Concentration (test chamber air) [µg/m³]
$SVOC_{28d}$: Identified and calibrated substances in accordance with LCI list/AgBB, substance specific calculated($c_{si\ sub}$)			
-	-	-	n.d.
$SVOC_{28d}$: Further identified and calibrated substances in addition to LCI list/AgBB, substance specific calculated($c_{si\ sub}$)			
-	-	-	n.d.
$SVOC_{28d}$: Not calibrated substances calculated as toluene equivalent ($c_{si\ tol}$)			
-	-	-	n.d.

Total semivolatile organic compounds	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
$TSVOC_{28d}$	n.d.	n.d.

Total semivolatile organic compounds	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
$TSVOC_{28d,\ substances \geq 5\ \mu g/m^3}$	n.d.	n.d.

n.d. = not detectable

1.1.4 $VVOC_{28d}$

Test Parameter:
Very volatile organic compounds (VVOC), test chamber, air sampling 28 days after test chamber loading

Test result:

Sample:	A001: Regupol; Everroll classic

No.	Substance	CAS-No.	Concentration (test chamber air) [µg/m³]
$VVOC_{28d}$: Identified and calibrated substances in accordance with LCI list/AgBB, substance specific calculated($c_{28\,sub}$)			
7	**Aldehydes**		
7-21	Propanal	123-38-6	3
$VVOC_{28d}$: Further identified and calibrated substances in addition to LCI list/AgBB, substance specific calculated($c_{28\,sub}$)			
-	-	-	n.d.
$VVOC_{28d}$: Not calibrated, identified substances calculated as toluene equivalent ($c_{28\,tol}$)			
-	-	-	n.d.

Total very volatile organic compounds	Concentration (test chamber air) [µg/m³]	SER_a [µg/m²h]
$TVVOC_{28d}$	**3**	**4**

n.d. = not detectable

1.1.4.1 Formaldehyde$_{28d}$ and Acetaldehyde$_{28d}$

Test parameter:
Formaldehyde and Acetaldehyde, test chamber, air sampling 28 days after test chamber loading

Test method:

Preparation of test sample and Test chamber conditions:	see Volatile organic compounds
Analytics:	DIN ISO 16000-3
Limit of determination:	2 µg/m³ = 0.002 ppm

Test result:

Sample:	A001: Regupol; Everroll classic

Substance	Concentration (Test chamber air) [µg/m³]	Concentration (Test chamber air) [ppm]
Formaldehyde	2	< 0.002
Acetaldehyde	< 2	-

2 Ammonia[ISO]

Test parameter:
Ammonia

Test method:

Analytics:	UV/VIS Spectrometric analysis, Method of DIBt (German Institute for Structural Engineering)
Limit of determination:	0.03 mg/m³

Test result:

Sample:	Concentration (Test chamber air) [mg/m³]	SER [mg/m²h]
A001: Regupol; Everroll classic	0.018	0.023

3 Odour

Test parameter:
Odour, test collective, odour test 28 days after test chamber loading

Test method:

Preparation of test sample:	see 1.1. Volatile organic compounds	
Test chamber conditions:	see 1.1. Volatile organic compounds	
	Air sampling:	28 days after test chamber loading
Analytics:	following DIN EN ISO 16000-28	
Probands:	Quantity:	15
	therefrom female:	6
Evaluation:	Acceptance	Continuous scale from +1 (clearly acceptable) to -1 (clearly unacceptable)

Test result:

Sample:	A001: Regupol; Everroll classic

	Acceptance
Arithmetical mean	-0.4

	Acceptance
Arithmetical mean (background)	0.9
Standard deviation	0.3
half width of the 90% confidence interval	0.1

Cologne, 15.02.2016

Michael Stein, Dipl.-Chem.
(Deputy Technical Manager)

Expert evaluation (M1)

The product **Regupol; Everroll classic** has been tested on behalf of **BSW Berleburger Schaumstoffwerk GmbH**.

This evaluation bases on the test criteria of the Building Information Foundation RTS.
The results of the emission analysis are stated as Specific Emission Rate (SER).

The results documented in the test report were evaluated as follows:

Test parameter	Result	Requirement Emission class M1	Requirement hold [yes/no]
Measurement time: 28 days after test chamber loading			
Sum VOC (C_6-C_{16}) [1]	0.052 mg/m²h	< 0.2 mg/m²h	yes
Formaldehyde	0.003 mg/m²h	< 0.05 mg/m²h	yes
Sum carcinogenic substances (EU cat. 1A and 1B)	< 0.001 mg/m²h	< 0.005 mg/m²h	yes
Ammonia	0.023 mg/m²h	< 0.03 mg/m²h	yes
Odour test			
Measurement time: 28 days after test chamber loading			
Odour	**Akzeptance** -0.4	**Akzeptance** > 0.0	**no**

1) for TVOC only substances ≥ 5 µg/m³ are considered

Test parameter	Result	Requirement Emission class M2	Requirement hold [yes/no]
Measurement time: 28 days after test chamber loading			
Sum VOC (C_6-C_{16}) [1]	0.052 mg/m²h	< 0.2 mg/m²h	yes
Formaldehyde	0.003 mg/m²h	< 0.05 mg/m²h	yes
Sum carcinogenic substances (EU cat. 1A and 1B)	< 0.001 mg/m²h	< 0.005 mg/m²h	yes
Ammonia	0.023 mg/m²h	< 0.06 mg/m²h	yes
Odour test			
Measurement time: 28 days after test chamber loading			
Odour	**Akzeptance** -0.4	**Akzeptance** > 0.0	**no**

1) for TVOC only substances ≥ 5 µg/m³ are considered

Summary evaluation

The product **Regupol; Everroll classic** is categorized in **Emission Class M3**.

Cologne, 24.04.2018

Vanessa Laumann, Dipl.-Chem.
(Project manager)

Jaypmart
Mats and Floors

NEW LIFE

TOP RECYCLED PRODUCT

REGUPOL BSW GmbH

is hereby certified that its

Gym Flooring

may carry the **"Top Recycled Product" label** provided by the **NEW LIFE** initiative. Only products with a recycled material content of more than 80% are eligible for this award.

With **NEW LIFE**, we promote environmentally sustainable products and encourage conscious consumer behavior. Products with this label stand for a sustainable conservation of resources through the use of secondary raw materials and reduced CO_2 emissions making an important contribution to climate protection.

Frankfurt, January 20, 2020

NEW LIFE 2020

Stephan Rau (wdk)

GreenCircle Certification System

GreenCircle Certified, LLC certifies
that an independent, third-party evaluation has been conducted for:

Regupol America

Regupol Aktiv - Core Series

Lebanon, PA

This product meets all the necessary qualifications
to be certified for the following claims:

82% Recycled Content

Minimum 0% Pre-Consumer Content
Minimum 82% Post-Consumer Content

Certification Period: April 1, 2019 - March 31, 2020
Certification Number: 19-0071

Referenced Standards: ISO14021 and FTC Green Guides

Tad Radzinski

Tad Radzinski, PE, LEED AP, SFP
Certification Officer

GreenCircle CERTIFIED LLC
155 Railroad Plaza, Royersford PA 19468

Certificate

Standard **ISO 14001:2015**

Certificate Registr. No. **01 104 069712**

Certificate Holder:

REGUPOL

REGUPOL BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
Germany

including the locations according to annex

Scope: Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement

Proof has been furnished by means of an audit that the requirements of ISO 14001:2015 are met.

Validity: The certificate is valid from 2018-11-11 until 2021-11-10.
First certification 2006

2019-10-21 Change

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

www.tuv.com

IAF

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Deutsche Akkreditierungsstelle
D-ZM-16031-01-00

TÜVRheinland®
Precisely Right.

Annex to certificate

Standard **ISO 14001:2015**

Certificate Registr. No. **01 104 069712**

No.	Location	Scope
/01	**REGUPOL BSW GmbH** Am Hilgenacker 24 57319 Bad Berleburg Germany	Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement
/02	**REGUPOL BSW GmbH** Industriestr. 6 57319 Bad Berleburg Germany	Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement
/03	**REGUPOL BSW GmbH** Sählingstr. 16 57319 Bad Berleburg Germany	Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement
/04	**REGUPOL BSW GmbH** Limburgstr. 34 57319 Bad Berleburg Germany	Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement

2019-10-21 Change

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 061291**

Certificate Holder:

REGUPOL

REGUPOL BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
Germany

including the locations according to annex

Scope: Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity: The certificate is valid from 2018-11-11 until 2021-11-10.
First certification 2006

2019-10-21 change

TÜV Rheinland Cert GmbH
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Annex to certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 061291**

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2019-10-21 change

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

Certificate

Standard **BS OHSAS 18001:2007**

Certificate Registr. No. **01 113 060037**

Certificate Holder:

REGUPOL

REGUPOL BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
Germany

including the locations according to annex

Scope: Development and manufacturing of Regupol® products made of rubber and foam raw materials as well as polyurethane for sports flooring and playground applications, for construction, industrial and commercial applications, for vibration isolation as well as for load securement

Proof has been furnished by means of an audit that the requirements of BS OHSAS 18001:2007 are met.

Validity: The certificate is valid from 2018-11-11 until 2021-03-11.
First certification 2006

2019-10-21 Change

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

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Annex to certificate

Standard **BS OHSAS 18001:2007**

Certificate Registr. No. **01 113 060037**

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2019-10-21 Change

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

FLOOR SLIP RESISTANCE TESTING CERTIFICATE

Testing Certificate Ref No:
-

AW/FS/1804001

Client	**Jaymart**
Location	**++Sample++**
Date Tested	**07th April 2018**
Pendulum Equipment Used	**KSS Pendulum**
Pendulum Serial No	**ST13**
Pendulum Calibrated	**20th November 2017**
Slider Type Used (Delete as Required)	**96 slider/55 slider**
Slider Ser No(s) - Batch	**96#70 / 55#68**
Slider Date Expiry	**06th July 2018**

The Pendulum was used in accordance with the United Kingdom Slip Resistance Group (UKSRG) guidelines for testing floors to ascertain the slip resistance to BS EN 14231. The tests were carried out under: -

- Wet Conditions (Using potable water to cover the whole test area and refreshed between tests).
- Dry & sunny conditions

Eight measurements were taken at each condition and in three different horizontal planes (0, 45 and 90 degrees) at each position. The first three measurements were discarded to allow checks for slider stabilisation. The median (average) of the remaining results were then calculated, as advocated by the UKSRG/Health & Safety Executive (HSE). The results for the floors tested are indicated in the table below:

The HSE / UKRSG has determined a minimum Pendulum Test Value reading of 36 must be obtained in all conditions (Dry, Wet, or Contaminated) and on a level surface for a floor to pass the test

Ref	Area / Room	Surface Type	Ambient Temp (deg C)	Mean (Average) Reading	Pass / Fail
1	Sample	Blade Runner rubber crumb			
		#96 slider	20c	**DRY 92**	
				WET 40	**PASS**
2	Sample	Blade Runner rubber crumb			
		#55 slider	20c	**DRY 78**	
				WET 55	**PASS**

Signed on behalf of FloorSlip Ltd:	A. I. Wylie	Name:	Andrew Wylie	Date:	07/04/18	Valid Until Date:	N/A

This test certificate is not valid or original if the embossed company stamp is not present

FloorSlip Ltd -. www.floorslip.co.uk
e:mail - info@floorslip.co.uk
Tel: 08719 152535 / 08713 155789

Registered Office - The Meridien, 4 Copthall House, Coventry, CV1 2FL Company number: 07757686
Please do NOT reply to this address as it is an unmonitored Address

FLOOR SLIP RESISTANCE TESTING CERTIFICATE

Testing Certificate Ref No: -

Continuation Sheet - ONE

Ref	Area / Room	Floor Type	Ambient Temp (deg C)	Mean (Average) Reading	Pass / Fail

Continuation sheet – sheet 2 of 2 – Note – Use a New Floor Test Certificate Number where there are greater than 50 positions tested

Jaymart

Jaymart Rubber & Plastics Limited

Roman Way, Crusader Park,

Warminster

BA12 8SP

Tel 01985 218994

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