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Client: TAMBU OUTDOOR GMBH

Contact Information: Duerener Str.270 50935 Koeln,Germany

**Identification/
Model No(s):** CAR ROOF TENT

Sample obtaining method: Sending by customer

Condition at delivery: Test item complete and undamaged.

Sample Receiving date: 2022-03-23

Testing Period: 2022-03-23 to 2022-03-28

Place of testing: Chemical laboratory Ningbo

Test Specification:	Test result:
Customer's requirement:	
1. Banned azo dyes	PASS
2. REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entry 51 and entry 52 : Phthalates	PASS
3. Total Cadmium Content	PASS
4. REACH Regulation (EC) No. 1907/2006, the last amendment (EU) 2015/628 entry 63 of Annex XVII - Total Lead Content	PASS
5. Organotin compounds content	PASS
6. Polycyclic aromatic hydrocarbons (PAHs) according to GS Specification - AfPS GS 2019:01 PAK	PASS
7. Short Chain Chlorinated Paraffin (SCCP) - according to Regulation (EU) 2019/1021	PASS
8. Dimethyl fumarate Content - According to REACH regulation (EC) No. 1907/2006 Annex XVII Entry 61 and its amendments	PASS
9. Pentachlorophenol (PCP) Content - according to Regulation (EU) 2019/1021 and amendments	PASS

For and on behalf of
TÜV Rheinland/CCIC (Ningbo) Co., Ltd.



2022-03-28

Zhou Zoey / Project Manager

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.
This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.
"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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Material List:

Item: CAR ROOF TENT

Material No.	Material	Color	Location
M001	Textile + coating	brown	17-1105 TPG, PU 1500mm
M002-1	Textile + coating	brown	19-0808, PU 500mm
M002-2	Textile + coating	brown	17-1105 TPG, PU 500mm
M003-1	Textile + coating	brown	19-0808TPG, TPE
M003-2	Textile + coating	brown	17-1105 TPG, TPE
M004	Plastic	grey	TPU
M005	Textile	brown	TC,19-0808
M006	Textile	black	mesh
M007	Plastic	grey	PE
M008-1	Plastic	black	two hole
M008-2	Plastic	black	round
M008-3	Plastic	black	one hole
M009-1	Plastic	black	buckle
M009-2	Plastic	red	buckle
M009-3	Plastic	black	one hole
M010-1	Plastic	black	zipper teeth
M010-2	Textile	black	zipper tape
M011-1	Textile	black	thin tape
M011-2	Textile	black	thick tape
M011-3	Textile	red	tape
M012-1	Textile	black	rope
M012-2	Textile	yellow	tape
M012-3	Textile	black	tape
M013-1	Textile	black	rope outer
M013-2	Plastic	grey	rope inner
M013-3	Plastic + Textile	black	elastic
M014	Plastic + Textile	black	velcro

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1. Banned azo dyes

Test Method: Method 1 - EN ISO 14362-1:2017 (Textiles) (Buffer extraction)
 Method 2 - EN ISO 14362-1:2017 (Textiles) (Xylene extraction)
 Method 3 - ISO 17234-1:2015 (Leather)
 Method 4 - EN ISO 14362-3:2017 (Textile, 4-aminoazobenzene confirmation)
 Method 5 - ISO 17234-2:2011 (Leather, 4-aminoazobenzene confirmation)

Test Results:

ID	Test Parameter	CAS NO	Unit	RL	Regulatory Requirement	Material No.		M001 + M002-1 + M002-2		M003-1 + M003-2	
						Test No.	T001-1	T001-2	T002-1	T002-2	
						Method No.	Method 1	Method 2	Method 1	Method 2	
						A22 Confirmation Method No.	--	--	--	--	
A1	4-Aminobiphenyl	92-67-1	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A2	Benzidine	92-87-5	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A3	4-Chloro-o-toluidine	95-69-2	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A4	2-Naphthylamine	91-59-8	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A5*	o-Aminoazotoluene	97-56-3	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A6*	5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A7	4-Chloroaniline	106-47-8	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A8	4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A9	4,4'-Diaminodiphenylmethane	101-77-9	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A10	3,3'-Dichlorobenzidine	91-94-1	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A11	3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A12	3,3'-Dimethylbenzidine	119-93-7	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A13	4,4'-methylenedi-o-toluidine / 3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A14	p-Cresidine	120-71-8	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A15	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A16	4,4'-Oxydianiline	101-80-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A17	4,4'-Thiodianiline	139-65-1	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A18	o-Toluidine	95-53-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A19	4-methyl-m-phenylenediamine / 2,4-Toluylendiamine	95-80-7	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A20	2,4,5-Trimethylaniline	137-17-7	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A21	O-Anisidine	90-04-0	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A22**	4-Aminoazobenzene	60-09-3	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A23^	2,4-xylidine	95-68-1	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
A24^	2,6-xylidine	87-62-7	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
*1	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
*3	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL
*4	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	< RL	< RL	< RL	< RL	< RL	< RL

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ID	Test Parameter	Material No.				M005 + M006		M010-2 + M011-1 + M011-2	
		CAS NO	Unit	RL	Regulatory Requirement	T003-1	T003-2	T004-1	T004-2
						Method 1	Method 2	Method 1	Method 2
		A22 Confirmation Method No.				--	--	--	--
A1	4-Aminobiphenyl	92-67-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A2	Benzidine	92-87-5	mg/kg	5	30	< RL	< RL	< RL	< RL
A3	4-Chloro-o-toluidine	95-69-2	mg/kg	5	30	< RL	< RL	< RL	< RL
A4	2-Naphthylamine	91-59-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A5*	o-Aminoazotoluene	97-56-3	mg/kg	5	30	< RL	< RL	< RL	< RL
A6*	5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A7	4-Chloroaniline	106-47-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A8	4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A9	4,4'-Diaminodiphenylmethane	101-77-9	mg/kg	5	30	< RL	< RL	< RL	< RL
A10	3,3'-Dichlorobenzidine	91-94-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A11	3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A12	3,3'-Dimethylbenzidine	119-93-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A13	4,4'-methylenedi-o-toluidine / 3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	mg/kg	5	30	< RL	< RL	< RL	< RL
A14	p-Cresidine	120-71-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A15	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A16	4,4'-Oxydianiline	101-80-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A17	4,4'-Thiodianiline	139-65-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A18	o-Toluidine	95-53-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A19	4-methyl-m-phenylenediamine / 2,4-Toluylendiamine	95-80-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A20	2,4,5-Trimethylaniline	137-17-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A21	O-Anisidine	90-04-0	mg/kg	5	30	< RL	< RL	< RL	< RL
A22**	4-Aminoazobenzene	60-09-3	mg/kg	5	30	< RL	< RL	< RL	< RL
A23^	2,4-xylidine	95-68-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A24^	2,6-xylidine	87-62-7	mg/kg	5	30	< RL	< RL	< RL	< RL
*1	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	< RL	< RL	< RL	< RL
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	< RL	< RL	< RL	< RL
*3	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	mg/kg	5	30	< RL	< RL	< RL	< RL
*4	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	< RL	< RL	< RL	< RL

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ID	Test Parameter	Material No.				M011-3 + M012-1		M012-2 + M012-3 + M013-1	
		CAS NO	Unit	RL	Regulatory Requirement	T005-1	T005-2	T006-1	T006-2
						Method 1	Method 2	Method 1	Method 2
		A22 Confirmation Method No.				--	--	--	--
A1	4-Aminobiphenyl	92-67-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A2	Benzidine	92-87-5	mg/kg	5	30	< RL	< RL	< RL	< RL
A3	4-Chloro-o-toluidine	95-69-2	mg/kg	5	30	< RL	< RL	< RL	< RL
A4	2-Naphthylamine	91-59-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A5*	o-Aminoazotoluene	97-56-3	mg/kg	5	30	< RL	< RL	< RL	< RL
A6*	5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A7	4-Chloroaniline	106-47-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A8	4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A9	4,4'-Diaminodiphenylmethane	101-77-9	mg/kg	5	30	< RL	< RL	< RL	< RL
A10	3,3'-Dichlorobenzidine	91-94-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A11	3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A12	3,3'-Dimethylbenzidine	119-93-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A13	4,4'-methylenedi-o-toluidine / 3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	mg/kg	5	30	< RL	< RL	< RL	< RL
A14	p-Cresidine	120-71-8	mg/kg	5	30	< RL	< RL	< RL	< RL
A15	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A16	4,4'-Oxydianiline	101-80-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A17	4,4'-Thiodianiline	139-65-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A18	o-Toluidine	95-53-4	mg/kg	5	30	< RL	< RL	< RL	< RL
A19	4-methyl-m-phenylenediamine / 2,4-Toluylendiamine	95-80-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A20	2,4,5-Trimethylaniline	137-17-7	mg/kg	5	30	< RL	< RL	< RL	< RL
A21	O-Anisidine	90-04-0	mg/kg	5	30	< RL	< RL	< RL	< RL
A22**	4-Aminoazobenzene	60-09-3	mg/kg	5	30	< RL	< RL	< RL	< RL
A23^	2,4-xylidine	95-68-1	mg/kg	5	30	< RL	< RL	< RL	< RL
A24^	2,6-xylidine	87-62-7	mg/kg	5	30	< RL	< RL	< RL	< RL
*1	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	< RL	< RL	< RL	< RL
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	< RL	< RL	< RL	< RL
*3	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	mg/kg	5	30	< RL	< RL	< RL	< RL
*4	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	< RL	< RL	< RL	< RL

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ID	Test Parameter	Material No.				M013-3		M014		
		CAS NO	Unit	RL	Regulatory Requirement	Test No.	T007-1	T007-2	T008-1	T008-2
						Method No.	Method 1	Method 2	Method 1	Method 2
						A22 Confirmation Method No.	--	--	--	--
A1	4-Aminobiphenyl	92-67-1	mg/kg	5	30	< RL	< RL	< RL	< RL	
A2	Benzidine	92-87-5	mg/kg	5	30	< RL	< RL	< RL	< RL	
A3	4-Chloro-o-toluidine	95-69-2	mg/kg	5	30	< RL	< RL	< RL	< RL	
A4	2-Naphthylamine	91-59-8	mg/kg	5	30	< RL	< RL	< RL	< RL	
A5*	o-Aminoazotoluene	97-56-3	mg/kg	5	30	< RL	< RL	< RL	< RL	
A6*	5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	30	< RL	< RL	< RL	< RL	
A7	4-Chloroaniline	106-47-8	mg/kg	5	30	< RL	< RL	< RL	< RL	
A8	4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
A9	4,4'-Diaminodiphenylmethane	101-77-9	mg/kg	5	30	< RL	< RL	< RL	< RL	
A10	3,3'-Dichlorobenzidine	91-94-1	mg/kg	5	30	< RL	< RL	< RL	< RL	
A11	3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
A12	3,3'-Dimethylbenzidine	119-93-7	mg/kg	5	30	< RL	< RL	< RL	< RL	
A13	4,4'-methylenedi-o-toluidine / 3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	mg/kg	5	30	< RL	< RL	< RL	< RL	
A14	p-Cresidine	120-71-8	mg/kg	5	30	< RL	< RL	< RL	< RL	
A15	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
A16	4,4'-Oxydianiline	101-80-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
A17	4,4'-Thiodianiline	139-65-1	mg/kg	5	30	< RL	< RL	< RL	< RL	
A18	o-Toluidine	95-53-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
A19	4-methyl-m-phenylenediamine / 2,4-Toluylendiamine	95-80-7	mg/kg	5	30	< RL	< RL	< RL	< RL	
A20	2,4,5-Trimethylaniline	137-17-7	mg/kg	5	30	< RL	< RL	< RL	< RL	
A21	O-Anisidine	90-04-0	mg/kg	5	30	< RL	< RL	< RL	< RL	
A22**	4-Aminoazobenzene	60-09-3	mg/kg	5	30	< RL	< RL	< RL	< RL	
A23^	2,4-xylidine	95-68-1	mg/kg	5	30	< RL	< RL	< RL	< RL	
A24^	2,6-xylidine	87-62-7	mg/kg	5	30	< RL	< RL	< RL	< RL	
*1	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	< RL	< RL	< RL	< RL	
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	< RL	< RL	< RL	< RL	
*3	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	mg/kg	5	30	< RL	< RL	< RL	< RL	
*4	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	< RL	< RL	< RL	< RL	

Abbreviation: < = less than
 RL = Reporting Limit
 mg/kg = milligram per kilogram

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Remark:

- * The CAS-number 97-56-3 (A5) and 99-55-8 (A6) are further reduced to CAS-number 95-53-4 (A18) and 95-80-7 (A19).
- ** Azo colorants that are able to form 4-aminoazobenzene (A22) CAS-number 60-09-3, generate under the condition of this method Aniline (CAS-number 62-53-3) and 1,4-phenylenediamine (CAS-number 106-50-3.)
- *** Azo colorants that are able to form 4-aminoazobenzene (A22), is confirmed by EN ISO 14362-3:2017 / ISO 17234-2:2011.
- **** Azo colorants are detected & quantified by GC/MS and confirmed by HPLC/DAD or HPLC/MSMS.
- ^ Additional azo colorants were tested according to customer's requirement.
- *1 The substance is tested and calculated in terms of 4-Chloro-o-toluidinium
- *2 The substance is tested and calculated in terms of 2-Naphthylamine
- *3 The substance is tested and calculated in terms of 4-Methoxy-m-phenylenediamine
- *4 The substance is tested and calculated in terms of 2,4,5-Trimethylaniline

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2. Phthalates content

Test Method: Ref. to CPSC-CH-C1001-09.4

Test Result:

				Test No.	T001	T002	T003
				Material No.	M001 + M002-1 + M002-2	M003-1 + M003-2	M004 + M007
Test Parameter	CAS NO	Unit	RL	Result	Result	Result	
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.005	< RL	< RL	< RL	
Dibutyl phthalate (DBP)	84-74-2	%	0.005	< RL	< RL	< RL	
Benzylbutyl phthalate (BBP)	85-68-7	%	0.005	< RL	< RL	< RL	
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	< RL	< RL	< RL	
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.005	<RL	<RL	<RL	
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.005	< RL	< RL	< RL	
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.005	< RL	< RL	< RL	
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.005	< RL	< RL	< RL	
Sum (DINP+ DIDP+ DNOP)	--	%	0.005	<RL	<RL	<RL	
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass	

				Test No.	T004	T005	T006
				Material No.	M008-1 + M008-2 + M008-3	M009-1 + M009-2 + M009-3	M010-1 + M013-2
Test Parameter	CAS NO	Unit	RL	Result	Result	Result	
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.005	< RL	< RL	< RL	
Dibutyl phthalate (DBP)	84-74-2	%	0.005	< RL	< RL	< RL	
Benzylbutyl phthalate (BBP)	85-68-7	%	0.005	< RL	< RL	< RL	
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	< RL	< RL	< RL	
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.005	<RL	<RL	<RL	
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.005	< RL	< RL	< RL	
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.005	< RL	< RL	< RL	
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.005	< RL	< RL	< RL	
Sum (DINP+ DIDP+ DNOP)	--	%	0.005	<RL	<RL	<RL	
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass	Pass	

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Test Parameter	CAS NO	Test No.		T007	T008
		Unit	Material No.	M013-3	M014
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.005	< RL	< RL
Dibutyl phthalate (DBP)	84-74-2	%	0.005	< RL	< RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.005	< RL	< RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	< RL	< RL
Sum (DEHP+DBP+BBP+DIBP)	-	%	0.005	<RL	<RL
Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	%	0.005	< RL	< RL
Diisodecyl phthalate (DIDP)	26761-40-0, 68515-49-1	%	0.005	< RL	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.005	< RL	< RL
Sum (DINP+ DIDP+ DNOP)	--	%	0.005	<RL	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52				Pass	Pass

Abbreviation: < = less than
 RL = Reporting Limit
 % = percentage

Remark:

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- Requirement of REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51 and 52:

Parameter	Unit	Maximum Permissible Limit
Plasticised materials in toys and childcare articles, or other articles# place on the market;		
Diethylhexyl phthalate (DEHP) Dibutyl phthalate (DBP) Benzylbutyl phthalate (BBP) Diisobutyl phthalate (DIBP)	%	0.1 (individually or sum of the four phthalates) Effective after 7 July 2020.
Plasticised materials in children's toy and childcare articles which can be placed in the mouth by children:		
Di-n-octyl phthalate (DNOP) Diisodecyl phthalate (DIDP) Diisononyl phthalate (DINP)	%	0.1 (sum of the three phthalates)

Denote:

Examples of articles that are excluded from the restriction

- 1) Articles exclusively for industrial / agricultural use / use in open air, provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin (i.e. Continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.)
 - 2) Aircraft and motor vehicles (Directive 2007/46/EC) placed on the market before 7 January 2024, or articles for use exclusively in the maintenance or repair of them
 - 3) Measuring devices for laboratory use;
 - 4) Food contact material and articles within the scope of Regulation (EC) No 1935/2004 or Commission Regulation (EU) No 10/2011
 - 5) Medical devices (Directive 90/385/EEC, 93/42/EEC or 98/79/EC)
 - 6) Electrical and electronic equipment within the scope of Directive 2011/65/EU
 - 7) Immediate packaging of medicinal products (Regulation (EC) No 726/2004, Directive 2001/82/EC or Directive 2001/83/EC)
- Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all phthalates were not detected, the result is stated <RL.

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3.Total Cadmium Content

Test Method: For plastic: EN 1122:2001 (method B)
For metal and other material: Acid digestion, analyzed by AAS/ ICP-OES

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001 + M002-1 + M002-2	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T002	M003-1 + M003-2	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T003	M004 + M007	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T004	M008-1 + M008-2 + M008-3	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T005	M009-1 + M009-2 + M009-3	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T006	M010-1 + M013-2	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T007	M013-3	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL
T008	M014	Trial 1	mg/kg	10	100	< RL
		Trial 2	mg/kg	10	100	< RL
		Average	mg/kg	10	100	< RL

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

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Remark:

*Regulations on Cadmium

		Maximum Permissible Limit				
EU	Legislation	Plastic materials	Paint (wet state)	Paint on the painted articles	Paint (high zinc content)	Metal parts of jewellery and imitation jewellery articles and hair accessories
EC	REACH regulation (EC) No. 1907/2006 Annex XVII Item 23 and its amendments (EC) No. 552/2009, (EU) No. 494/2011, (EU) No. 835/2012 and (EU) No. 217/2016.	100mg/kg	100mg/kg	1000mg/kg	1000mg/kg	100mg/kg

		Maximum Permissible Limit
Country	Legislation	Paint, plastic, plating/ coating of surface treatment
Switzerland	Switzerland Chemikalien-Risikoreduktions-Verordnung-ChemRRV, 814.81, 18 May 2005	100mg/kg

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4.Total Lead

Test Method: CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3 and CPSC-CH-E1003-09.1 (Microwave method)

Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001 + M002-1 + M002-2	Lead Content	%	0.001	0.05	< RL
T002	M003-1 + M003-2	Lead Content	%	0.001	0.05	< RL
T003	M004	Lead Content	%	0.001	0.05	< RL
T004	M005 + M006	Lead Content	%	0.001	0.05	< RL
T005	M007 + M008-1 + M008-2	Lead Content	%	0.001	0.05	< RL
T006	M008-3 + M009-1 + M009-2	Lead Content	%	0.001	0.05	< RL
T007	M009-3 + M010-1 + M013-2	Lead Content	%	0.001	0.05	< RL
T008	M010-2 + M011-1 + M011-2	Lead Content	%	0.001	0.05	< RL
T009	M011-3 + M012-1	Lead Content	%	0.001	0.05	< RL
T010	M012-2 + M012-3 + M013-1	Lead Content	%	0.001	0.05	< RL
T011	M013-3	Lead Content	%	0.001	0.05	< RL
T012	M014	Lead Content	%	0.001	0.05	< RL

Abbreviation: < = less than
 RL = Reporting Limit
 % = percentage

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Remark:

* Regulation on Lead:

Country	Legislation	<u>Maximum Permissible Limit</u>
EU	Paragraph 1-6 of Entry 63 of Annex XVII, REACH Regulation (EC) No. 1907/2006	For Jewellery, imitation jewellery, hair accessories, bracelets, necklaces , rings, piercing jewellery, wrist watches, wrist-wear, brooches and cufflinks and parts used for jewellery-making 0.05% (by weight of the individual part)
EU	Paragraph 7-10 of Entry 63 of Annex XVII, REACH Regulation (EC) No. 1907/2006	Articles supplied to the general public during normal or reasonably foreseeable conditions of use, be placed in the mouth by children 0.05% (by weight of the individual part) The limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed 0,05 µg/cm ² per hour (equivalent to 0,05 µg/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.

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5.Organotin compounds content

 Test Method: Organic solvent extraction, GCMS
 Ref. to ISO/TS 16179:2012

Test No.				T001	T002	T003
Material No.				M001 + M002-1 + M002-2	M003-1 + M003-2	M004
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
TBT(Tributyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPT(Triphenyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TOT(Trioctyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPrT(Tripropyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
Sum of Tin of tri-substituted organotins	%	NA	0.1	<RL	<RL	<RL
DBT(Dibutyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL
DOT(Dioctyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL

Test No.				T004	T005	T006
Material No.				M005 + M006	M007 + M008-1 + M008-2	M008-3 + M009-1 + M009-2
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
TBT(Tributyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPT(Triphenyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TOT(Trioctyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPrT(Tripropyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
Sum of Tin of tri-substituted organotins	%	NA	0.1	<RL	<RL	<RL
DBT(Dibutyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL
DOT(Dioctyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL

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Test No.				T007	T008	T009
Material No.				M009-3 + M010-1 + M013-2	M010-2 + M011-1 + M011-2	M011-3 + M012-1
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
TBT(Tributyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPT(Triphenyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TOT(Trioctyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPrT(Tripropyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
Sum of Tin of tri-substituted organotins	%	NA	0.1	<RL	<RL	<RL
DBT(Dibutyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL
DOT(Dioctyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL

Test No.				T010	T011	T012
Material No.				M012-2 + M012-3 + M013-1	M013-3	M014
Test Parameter	Unit	RL	Regulatory Requirement	Result	Result	Result
TBT(Tributyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPT(Triphenyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TOT(Trioctyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
TPrT(Tripropyltin) by weight of tin	%	0.01	--	< RL	< RL	< RL
Sum of Tin of tri-substituted organotins	%	NA	0.1	<RL	<RL	<RL
DBT(Dibutyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL
DOT(Dioctyltin) by weight of tin	%	0.01	0.1	< RL	< RL	< RL

Abbreviation: < = less than
 RL = Reporting Limit
 % = percentage
 NA = Not Applicable

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Remark:

- * Single components with an amount of <0.01% were not considered in the calculation of the sum. In the case of all five tri-substituted organotins were not detected, the result is stated < RL
- ** The assessment for tri-substituted organotins is based on the sum of TBT, TPT, TOT, TCyT and TPrT by weight of tin only.
- *** According to REACH Regulation (EC) No. 1907/2006 Annex XVII Entry 20 and amendment Commission Regulation (EU) No. 276/2010 (formerly known as 2009/425/EC), organostannic compounds shall not be used or be placed on the market.

Type of organostannic compounds	Maximum Permissible Limit	Implementation date
Tri-substituted organostannic compounds, e.g. tributyltin (TBT) compounds and triphenyltin (TPT) compounds	0.1 % by weight of tin	1 July 2010
Dibutyltin (DBT) compounds in mixtures and articles for supply to the general public	0.1 % by weight of tin	1 January 2012 The below products will not be applicable until 1 January 2015: - one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives, - paints and coatings containing DBT compounds as catalysts when applied on articles, - soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC, - fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications, - outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and facades
Diocetyl tin (DOT) compounds - textile articles intended to come into contact with the skin, - gloves, - footwear or part of footwear intended to come into contact with the skin, - wall and floor coverings - childcare articles, - female hygiene products, - nappies, - two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits)	0.1 % by weight of tin	1 January 2012

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6. Polycyclic aromatic hydrocarbons (PAHs) according to GS Specification - AfPS GS 2019:01 PAK

Test Method: AfPS GS 2019:01 PAK

Test Result:

Test No.				T001	T002	T003
Material No.				M001 + M002-1	M002-2 + M003-1	M003-2
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Anthracene	120-12-7	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]anthracene	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	< RL	< RL	< RL
Fluoranthene	206-44-0	mg/kg	0.2	< RL	< RL	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2	< RL	< RL	< RL
Naphthalene	91-20-3	mg/kg	0.2	< RL	< RL	< RL
Phenanthrene	85-01-8	mg/kg	0.2	< RL	< RL	< RL
Pyrene	129-00-0	mg/kg	0.2	< RL	< RL	< RL
Sum of, Anthracene, Fluoranthene, Phenanthrene, Pyrene	-	mg/kg	0.2	<RL	<RL	<RL
Sum of 15 PAHs	-	mg/kg	0.2	<RL	<RL	<RL
Category*	-	--	-	2b	2b	2b
Conclusion				PASS	PASS	PASS

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Test No.				T004	T005	T006
Material No.				M004 + M007	M008-1 + M008-2 + M008-3	M009-1 + M009-2 + M009-3
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Anthracene	120-12-7	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]anthracene	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	< RL	< RL	< RL
Fluoranthene	206-44-0	mg/kg	0.2	< RL	< RL	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2	< RL	< RL	< RL
Naphthalene	91-20-3	mg/kg	0.2	< RL	< RL	< RL
Phenanthrene	85-01-8	mg/kg	0.2	< RL	< RL	< RL
Pyrene	129-00-0	mg/kg	0.2	< RL	< RL	< RL
Sum of, Anthracene, Fluoranthene, Phenanthrene, Pyrene	-	mg/kg	0.2	<RL	<RL	<RL
Sum of 15 PAHs	-	mg/kg	0.2	<RL	<RL	<RL
Category*	-	--	-	3b	3b	3b
Conclusion				PASS	PASS	PASS

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Test No.				T007	T008	T009
Material No.				M010-1 + M013-2	M013-3	M014
Test Parameter	CAS NO	Unit	RL	Result	Result	Result
Anthracene	120-12-7	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]anthracene	56-55-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	< RL	< RL	< RL
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	< RL	< RL	< RL
Benzo[j]fluoranthene	205-82-3	mg/kg	0.2	< RL	< RL	< RL
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2	< RL	< RL	< RL
Benzo[e]pyrene	192-97-2	mg/kg	0.2	< RL	< RL	< RL
Chrysene	218-01-9	mg/kg	0.2	< RL	< RL	< RL
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	< RL	< RL	< RL
Fluoranthene	206-44-0	mg/kg	0.2	< RL	< RL	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2	< RL	< RL	< RL
Naphthalene	91-20-3	mg/kg	0.2	< RL	< RL	< RL
Phenanthrene	85-01-8	mg/kg	0.2	< RL	< RL	< RL
Pyrene	129-00-0	mg/kg	0.2	0.8	< RL	< RL
Sum of, Anthracene, Fluoranthene, Phenanthrene, Pyrene	-	mg/kg	0.2	0.8	<RL	<RL
Sum of 15 PAHs	-	mg/kg	0.2	0.8	<RL	<RL
Category*	-	--	-	3b	3b	3b
Conclusion				PASS	PASS	PASS

Abbreviation: < = less than
 RL = Reporting Limit
 NA = Not Applicable
 mg/kg = milligram per kilogram

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Remark:

- * PAH maximum permissible limits requirement from the GS-Mark Approval published by the German Federal Institute for Occupational Safety and Health (BAuA)

Parameter	Unit	Category 1	Category 2		Category 3	
		Materials intended to be placed into the mouth, or Materials in toys or articles for children up to 3 years of age with intended long-term skin contact (more than 30 s)	Materials that do not fall into Category 1 with intended or foreseeable long-term skin contact (more than 30 s) or repeated short-term skin contact	Cat. 2a Use by children	Cat. 2b Other consumer products	Cat. 3a Use by children
		-				
Benzo[a]pyrene(BaP)	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,h,i]perylene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Naphthalene	mg/kg	<1	<2	<2	<10	<10
Sum of Anthracene Fluoranthene Phenanthrene Pyrene	mg/kg	<1	<5	<10	<20	<50
Sum of 15 PAHs	mg/kg	<1	<5	<10	<20	<50

Limit: Specific evaluation required according to type of foreseeable use.

The definition of "child" means persons before the age of 14 years. "Use by children" includes both active and passive direct contact by children.

** Single components with an amount of <0.2 mg/kg were not considered by the calculation of the sum. In the case of all 15 PAHs were not detected, the result is stated < RL

*** The definition of "child" means persons before the age of 14 years. "Use by children" includes both active and passive direct contact by children.

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7.Short Chain Chlorinated Paraffin (SCCP)

Test Method: Leather Materials: ISO 18219:2015
Non-Leather Materials: CADS method

Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Result
T001	M001 + M002-1 + M002-2	SCCP	%	0.01	0.15	< RL
T002	M003-1 + M003-2	SCCP	%	0.01	0.15	< RL
T003	M004 + M008-1 + M008-2	SCCP	%	0.01	0.15	< RL
T004	M008-3 + M009-1 + M009-2	SCCP	%	0.01	0.15	< RL
T005	M009-3 + M010-1 + M013-2	SCCP	%	0.01	0.15	< RL
T006	M013-3	SCCP	%	0.01	0.15	< RL
T007	M014	SCCP	%	0.01	0.15	< RL
T008	M007	SCCP	%	0.01	0.15	< RL

Abbreviation: < = less than
 RL = Reporting Limit
 SCCP = Short Chain Chlorinated Paraffin C₁₀-C₁₃
 % = Percentage

Remark:

* According to Regulation (EU) 2019/1021 as regards Annex I:

Alkanes C ₁₀ -C ₁₃ , chloro (short-chain chlorinated paraffins) (SCCPs)	Maximum Permissible Limit
The production , placing on the market and use of articles containing SCCPs	< 0.15% by weight
The production , placing on the market and use of substances or preparations containing SCCPs	< 1% by weight

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8. Dimethyl fumarate (CAS No. 624-49-7)

Test Method: Organic solvent extraction, GCMS analysis

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001 + M002-1 + M002-2	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T002	M003-1 + M003-2	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T003	M005 + M006	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T004	M010-2 + M011-1 + M011-2	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T005	M011-3 + M012-1	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T006	M012-2 + M012-3 + M013-1	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T007	M013-3	Dimethyl fumarate	mg/kg	0.025	0.1	< RL
T008	M014	Dimethyl fumarate	mg/kg	0.025	0.1	< RL

Abbreviation: < = less than
 RL = Reporting Limit
 mg/kg = milligram per kilogram

Remark:

- * According to REACH Regulation (EC) No. 1907/2006 Annex XVII Item 61 and amendment Commission Regulation (EU) No. 412/2012 (formerly known as 2012/48/EU), dimethylfumarate (DMF) shall not be used in articles or any parts thereof in concentrations greater than 0.1 mg/kg. Articles or any parts thereof containing DMF in concentrations greater than 0.1 mg/kg shall not be placed on the market.

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9.Pentachlorophenol (PCP) Content

Test Method: Ref. to 64 LFGB B82.02-8:2001

Test result

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001 + M002-1 + M002-2	Pentachlorophenol (PCP)	mg/kg	0.1	5	< RL
T002	M003-1 + M003-2	Pentachlorophenol (PCP)	mg/kg	0.1	5	< RL
T003	M005 + M006	Pentachlorophenol (PCP)	mg/kg	0.1	5	< RL
T004	M010-2 + M011-1 + M011-2	Pentachlorophenol (PCP)	mg/kg	0.1	5	0.1
T005	M011-3 + M012-1	Pentachlorophenol (PCP)	mg/kg	0.1	5	0.1
T006	M012-2 + M012-3 + M013-1	Pentachlorophenol (PCP)	mg/kg	0.1	5	0.1
T007	M013-3	Pentachlorophenol (PCP)	mg/kg	0.1	5	0.2
T008	M014	Pentachlorophenol (PCP)	mg/kg	0.1	5	< RL

Abbreviation: < = less than
 RL = Reporting Limit
 mg/kg = milligram per kilogram

Remark:

- * According to Article 3 and Annex I of Regulation (EU) 2019/1021, the manufacturing, placing on the market and use of Pentachlorophenol and its salts and esters, whether on their own, in mixtures or in articles, shall be prohibited. The threshold value is not well defined. Indeed, it is known that untreated wood shows concentrations of PCP below 5 mg/kg. This was also defined as limit value for treated articles in the national regulations of several European countries (e.g. Austria, Denmark, Germany, Netherlands).

Sample Photos



M001



M002



M003



M004



M005



M006

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Sample Photos



M007



M008



M009



M010



M011



M012

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Sample Photos



M013



M014

- END -

General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. **Scope**
 - 1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTBC") is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China hereof refers to Mainland China, Hong Kong and Taiwan. The client hereof includes:
 - (i) a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;
 - (ii) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.
 - 1.2 The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.
 - 1.3 Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.
 - 1.4 In the context of an ongoing business relationship with the client, this GTBC shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.
2. **Quotations**

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.
3. **Coming into effect and duration of contracts**
 - 3.1 The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice regarding electronic transmission) or by commencing work on the contract.
 - 3.2 The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.
 - 3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a six-week notice prior to the end of the contractual term.
4. **Scope of services**
 - 4.1 The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed services provided by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided.
 - 4.2 The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.
 - 4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.
 - 4.4 On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organizations, use and application by the client being regulated by the applicable laws and regulations. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations, unless otherwise expressly agreed by the client.
 - 4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.
 - 4.6 If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.
 - 4.7 The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreed services. This also applies if the client passes on work results - in full or in extracts - to third parties in accordance with clause 11.4.
5. **Performance periods/dates**
 - 5.1 The contractually agreed periods/dates of performance are based on estimates of the work involved and are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.
 - 5.2 If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.
 - 5.3 Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland.
 - 5.4 TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.
 - 5.5 If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds, at least to the duration of the hindrance plus any time period which may be required to resume performance.
6. **The client's obligation to cooperate**
 - 6.1 The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.
 - 6.2 Design documents, supplies, auxiliary staff, etc., necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that:
 - a) it has required statutory qualifications;
 - b) the product, service or management system to be certified complies with applicable laws and regulations; and
 - c) it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to i) immediately terminate the contract/order without prior notice; and ii) withdraw the issued testing certificates if any.
 - 6.3 The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.
7. **Prices**
 - 7.1 If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.
 - 7.2 Unless otherwise agreed, work shall be invoiced according to the progress of the work.
 - 7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.
8. **Payment terms**
 - 8.1 All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts and rebates shall be granted.
 - 8.2 Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.
 - 8.3 In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.
 - 8.4 Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to return the contract.
 - 8.5 The provisions set forth in article 8.4 shall also apply in cases involving retained cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.
 - 8.6 Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.
 - 8.7 TÜV Rheinland shall be entitled to demand appropriate advance payments.
 - 8.8 TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notice shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.
 - 8.9 Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.
 - 8.10 TÜV Rheinland shall have the right at all times to set off any amount due or payable by the client, including but not limited to set off against any fees paid by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland.
9. **Acceptance of work**
 - 9.1 Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.
 - 9.2 If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this period stating at least one fundamental breach of contract by TÜV Rheinland.
 - 9.3 The client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.
 - 9.4 If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.
 - 9.5 During the Follow-Audit stage, if the client was unable to make use of the time windows provided for within the scope of a certification procedure for auditing/performance by TÜV Rheinland and the certificate is therefore withheld (e.g. as a result of surveillance or re-auditing), TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for expenses. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above lump sum.
 - 9.6 Insofar as the client has undertaken in the contract to accept services, TÜV Rheinland shall also be entitled to charge lump-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.
10. **Confidentiality**
 - 10.1 For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, documents, images, drawings, expertise, information, data, test results, reports, samples, project documents, pricing and financial information, customer and supplier information, and marketing techniques and materials, tangible or intangible, that are supplied, transferred or otherwise disclosed to the Party (the "disclosing party") by the other Party (the "receiving party"), in writing or orally, in printed or electronic form. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal and not proprietary to the client) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and analysing the provision of services. The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed of the confidentiality and the disclosure of this information in writing of the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information. The client shall avoid using any third party platform and/or system (e.g. Wechat, Dingding, etc.). Unauthorized by TÜV Rheinland to send any confidential information to TÜV Rheinland. Instead, the client shall send any confidential information to company address of TÜV Rheinland employees through its confidential information disclosure in written form or damages due to any theft or leakages to be caused by the adoption of any unauthorized confidential information sharing methods mentioned above, TÜV Rheinland shall be waived for any compensation liabilities.
 - 10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland:
 - a) may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party;
 - b) may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial authorities, accreditation bodies or third parties that are involved in the contract;
 - c) must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protect its own confidential information, but never with a lesser level of confidentiality than that which is reasonably required.
 - 10.4 The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to obligate these employees to observe the same level of secrecy as set forth in this confidentiality clause.
 - 10.5 Information for which the receiving party can furnish proof that:
 - a) it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or
 - b) it was disclosed to the receiving party by a third party entitled to disclose this information; or
 - c) the receiving party already possessed this information prior to disclosure by the disclosing party; or
 - d) the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.
 - 10.6 All confidential information shall remain the property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and to ensure the destruction of this confidential information to the disclosing party in writing, at any time if so requested by the disclosing party but at the latest and without special request after termination or expiry of the contract. This does not extend to duplicate reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract which shall remain with the client. However, TÜV Rheinland is entitled to make file copies of reports, certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.
 - 10.7 From the start of the contract and for a period of three years after termination or expiry of the contract the receiving party shall maintain strict confidentiality of all confidential information and shall not disclose this information to any third parties or use it for itself.
11. **Copyrights and rights of use, publications**
 - 11.1 TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, calculations, presentations etc., prepared by TÜV Rheinland, unless otherwise agreed in writing in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use ("right of use")
 - 11.2 The client receives a simple, unlimited, non-transferable, non-sublicensable right of use to the contents of the work results produced within the scope of the contract, unless otherwise agreed by the parties in a separate agreement. The client may only use such reports, expert reports/opinions, test reports/results, results, calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.
 - 11.3 The transfer of right of use of the generated work results regulated in clause 11.2. of the GTBC is subject to full payment of the remuneration agreed in favour of TÜV Rheinland.
 - 11.4 The client may use work results only complete and unshortened. The client may only pass on the work results in full unless TÜV Rheinland has given its prior written consent to the partial passing on of work results.
 - 11.5 Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope regulated in clause 11.2. needs the prior written approval of TÜV Rheinland in each individual case.
 - 11.6 TÜV Rheinland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw publications.
 - 11.7 The consent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification mark of TÜV Rheinland.
12. **Liability of TÜV Rheinland**
 - 12.1 Irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annual recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.
 - 12.2 The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.
 - 12.3 In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseen as a possible consequence of such breach of contract at the time of the breach (reasonably foreseen) and unless any other amount is expressly agreed in writing in a separate agreement.
 - 12.4 TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.
 - 12.5 Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client.
 - 12.6 The limitation periods for claims for damages shall be based on statutory provisions.
 - 12.7 None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.
13. **Export control**
 - 13.1 When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.
 - 13.2 The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign trade legislations or embargoes and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incurred thereof by TÜV Rheinland.
14. **Data protection notice**

TÜV Rheinland processes personal data of the client for the purpose of fulfilling this contract. In addition, TÜV Rheinland also processes the data for other legal purposes in accordance with the relevant legal basis. The personal data of the client will only be disclosed to other natural or legal persons if the legal requirements are met. This also applies to transfers to third countries. The personal data will be deleted immediately as soon as the corresponding reason for processing has ceased. The client may exercise the following rights: right of information, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. In addition, persons concerned by the data processing have the right to request the deletion or restriction of their data at any time with effect for the future, as well as the right to file a complaint with the competent data protection supervisory authority. For further details on the processing of personal data by the client as the person responsible or contract processor, please refer to the relevant data protection policy of the client. You can contact our Data Protection Officer of TÜV Rheinland by e-mail at datenschutz@tuv.com or by post at the following address: TÜV Rheinland AG, c/o Group Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.
15. **Test materials/samples: transport risk and storage**
 - 15.1 The risk and costs for freight and transport of documents or test materials/samples to and from TÜV Rheinland as well as the costs of necessary disposal measures shall be borne by the client. TÜV Rheinland will be only liable for the direct loss of test materials/samples in the laboratories or warehouses of TÜV Rheinland only in case of gross negligence.
 - 15.2 Any destroyed and otherwise worthless test materials/samples will be disposed of by TÜV Rheinland for the client at the expense of the client, unless otherwise agreed.
 - 15.3 Undamaged test materials/samples shall be stored by TÜV Rheinland for four (4) weeks after completion of the test. If a longer storage period is desired, TÜV Rheinland charges an appropriate storage fee.
 - 15.4 After the expiry of the four weeks or any longer period agreed upon, the test materials/samples will be disposed of by TÜV Rheinland for the client for a fee in accordance with clause 15.2.
 - 15.5 If test materials/samples or documents are given to the client to be placed in storage at their premises, the test materials/samples or documents must be made available to TÜV Rheinland upon request promptly and free of charge. If the client's response to such a request is incapable of making available the test materials/samples and/or documentation, any liability claims for material and pecuniary damage resulting from the respective testing and certification that is brought forward by the client against TÜV Rheinland shall be voided.
16. **Termination of the contract**
 - 16.1 Notwithstanding clause 3.3 of the GTBC, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or in the case of services combined in one contract, each of the combined parts of the contract individually and independently of the continuation of the remaining services with six (6) months' notice to the end of the contractually agreed term. The notice period shall be shortened to six (6) weeks in case TÜV Rheinland is prevented from performing the services due to a loss or a suspension of its accreditation or notification.
 - 16.2 For good cause, TÜV Rheinland may consider giving a written notice to the client to terminate the contract which includes but not limited to the following:
 - a) the client does not immediately notify TÜV Rheinland of changes in the conditions within the company which are relevant for certification or signs of such changes;
 - b) the client misses the certificate or certification mark or uses it in violation of the contract;
 - c) in the event of several consecutive delays in payment (at least three times);
 - d) a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contractual relationship;
 - e) in the event of any serious misrepresentation, be it by intentional fraud or grossly negligent behavior of the managers, employees or agents of the client;
 - f) if TÜV Rheinland, for reasons beyond its control, is temporarily or finally not able or unable to continue or finalize the performance of the services, e.g. in case of force majeure, government interference, sanctions, loss of accreditation or notification, or other.
 - 16.3 In the event of termination with written notice by TÜV Rheinland for good cause, TÜV Rheinland shall be entitled to a lump-sum claim for damages against the client if the conditions of a claim for damages exist. In this case, the client shall pay 50% of the remuneration to be paid until the end of the fixed contract term as lump-sum compensation. The client reserves the right to prove that there is no damage or a considerably lower damage. TÜV Rheinland reserves the right to prove a considerably higher damage in individual cases.
 - 16.4 TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to make use of the time windows for auditing /service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.
17. **Force Majeure**
 - 17.1 "Force Majeure" means the occurrence of an event or circumstance that prevents or impedes a Party from performing one or more of its contractual obligations under the contract, if and to the extent that that Party proves that the event or circumstance is beyond its control, and that it could not reasonably have been foreseen at the time of the conclusion of the contract; and (c) that the effects of the impediment could not reasonably have been avoided or overcome by the affected Party.
 - 17.2 In the absence of proof to the contrary, the following events affecting a Party shall be presumed to fulfill conditions (a) and (b) under paragraph 1 of this Clause: (i) war (whether declared or not), hostilities, invasion, act of foreign enemies, extensive military mobilization; (ii) civil war, riot, rebellion and revolution, military or usurped power, insurrection, act of terrorism, sabotage or piracy; (iii) currency and trade restrictions, embargoes, trade sanctions, international system or energy; (iv) general labor disturbance such as governmental order, expropriation, seizure of works, requisition, nationalization; (v) plague, epidemic, natural or extreme natural event; (vi) explosion, fire, destruction of equipment, prolonged breakdown of transport, telecommunication, information system or energy; (vii) general labor disturbance such as boycott, strike and lock-out, go-slow, occupation of factories and premises.
 - 17.3 The Party successfully invoking this Clause is relieved from its duty to perform its obligations under the contract and from any liability in damages or from any other contractual remedy for breach of contract, from the time at which the impediment causes inability to perform, provided that the notice thereof is given without delay. If notice thereof is not given without delay, the relief is effective from the time at which notice thereof reaches the other Party. Where the effect of the impediment or event invoked is temporary, the above consequences shall apply only so long as the impediment invoked impedes performance by the affected Party. Where the duration of the impediment invoked has the effect of substantially depriving the contracting Parties of what they were reasonably entitled to expect under the contract, either Party has the right to terminate the contract by notification within a reasonable period to the other Party. Unless otherwise agreed, the Parties expressly agree that the contract may be terminated by either Party if the duration of the impediment exceeds 120 days.
18. **Hardship**
 - 18.1 The Parties are bound to perform their contractual duties even if events have rendered performance more onerous than could reasonably be foreseen anticipated at the time of the conclusion of the contract.
 - 18.2 Notwithstanding paragraph 1 of this Clause, where a Party proves that:
 - (a) the continued performance of its contractual duties has become excessively onerous due to an event beyond its reasonable control which it could not reasonably have been expected to have taken into account at the time of the conclusion of the contract; and that
 - (b) it could not reasonably have avoided or overcome the event or its consequences, the Parties are bound, within a reasonable time of the invocation of this Clause, to negotiate alternative contractual terms which reasonably allow it to overcome the consequences of the event.
 - 18.3 Where Clause 18.2 applies, but where the Parties have been unable to agree alternative contractual terms as provided in that paragraph, the Party invoking this Clause is entitled to terminate the contract, but cannot request adaptation by the judge or arbitrator without the agreement of the other Party.
19. **Partial invalidity, written form, place of jurisdiction and dispute resolution**
 - 19.1 All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.
 - 19.2 Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.
 - 19.3 Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:
 - a) if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China;
 - b) if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan;
 - c) if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.
 - 19.4 Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations. Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:
 - a) in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China to the International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party;
 - b) in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association, Taipei to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei;
 - c) in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.