

Report No. 报告号: 178140915a 001Page 1 of 27
第 1 页, 共 27 页**Client 客户:** MSAFE GLOBAL TRADING LIMITED
陌安国际贸易(上海)有限公司**Contact Information 联系方式:** Room 750, 7th Floor, BRICS Building, No. 333 Lujiazui Ring Road Pudong New District, Shanghai 201200
上海市浦东新区陆家嘴环路 333 号金砖大厦 750**Identification/** MSafe KN95 Respirator
Model No(s) 样品描述/规格: MSafe KN95 呼吸器**Sample obtaining method** Sending by customer
样品获取方式: 客户寄样**Sample Receiving date 收样日期:** 2020-06-04**Testing Period 测试周期:** 2020-06-04 - 2020-06-10**Test specification 测试要求:**

1. Total Lead and Cadmium
总含铅和总含镉量
2. Polybrominated biphenyls (PBB)
多溴联苯
3. Organotin compounds content
有机锡化合物含量
4. NP and NPEO content - according to REACH regulation (EC) No. 1907/2006 Annex XVII Entry 46 and 46a and amendments
壬基酚和壬基酚聚氧乙烯醚含量-根据 REACH 第 1907/2006 号法规 (EC) 附件十七第 46 条和第 46a 条及其修正案
5. Perfluorooctanoic acid (PFOA) and its salts
全氟辛酸及其盐类
6. Phthalates content
邻苯二甲酸酯的含量
7. Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No. 348/2013, (EU) No 895/2014, (EU) No 2017/999 and (EU) No 2020/171 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), according to the EU Court of Justice rules on SVHCs in articles (Guidance on requirements for substances in articles, June 2017)
依据欧盟法院针对物品中高关注物质的判决, 法规(EU)No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No 2017/999及(EU) No 2020/171 (Annex XIV of EC No 1907/2006)之授权清单及欧洲化学品管理局颁布的高度关注物质的筛检 (物品中物质限值指南, 2017年6月)。

Test result 测试结果:

PASS
符合
PASS
符合
PASS
符合
PASS
符合
PASS
符合
Please refer to page 17-18
详情请见第 17-18 页

Other information 其他信息:Lot No./ Batch code: MS305
生产批号: MS305

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For and on behalf of
TÜV Rheinland/CCIC(Qingdao)Co., Ltd.
莱茵技术-商检(青岛)有限公司



2020-06-11

Alex Zhou/Senior Manager

Date 日期

Name/Position 姓名/职位

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.

样品信息由客户提供。测试结果根据所做测试的种类和范围而得出。

本测试报告仅对来样负责。未经本测试中心许可, 测试报告不得部分复制。不能根据此报告在上述产品或类似产品上使用任何安全标志

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第 3 页, 共 27 页**Material List 材料清单:**Item 项目: MSafe KN95 Respirator
MSafe KN95 呼吸器

Material No. 材料号	Material 材质	Color 颜色	Location 位置
A001	Metal 金属	-	Silver metal wire 银色金属丝
A002	Plastic 塑料	-	White plastic strip 白色塑料条
A003	Plastic + Textile 塑料 + 纺织品	-	White elastic cord 白色弹力线
A004	Fabric 纺织品	-	White outside leak proof non-woven fabric 白色外部防漏无纺布
A005	Fabric 纺织品	-	White non-woven fabric (thin) 白色无纺布 (薄)
A006	Fabric 纺织品	-	White non-woven fabric (thick) 白色无纺布 (厚)
A007	Fabric 纺织品	-	White high density filter layer 白色熔喷布层
A008	Fabric 纺织品	-	White direct contact layer 白色直接接触层

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1. Total Lead and Cadmium Content
总含铅量和总含镉量

Test method: Acid digestion, analyzed by ICP-OES

测试方法: 酸消解, 用 ICP-OES 分析

Test Result:
测试结果:

Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	Unit 单位	RL 报告限值	Regulatory requirement 法规要求	Test Result 测试结果	Conclusion 结论
T001	A001	Lead Content 总含铅量	mg/kg	10	500	326	Pass 符合
		Cadmium Content 总含镉量	mg/kg	10	100	< RL 小于报告限值	
T002	A002	Lead Content 总含铅量	mg/kg	10	500	< RL 小于报告限值	Pass 符合
		Cadmium Content 总含镉量	mg/kg	10	100	< RL 小于报告限值	
T003	A003 + A004 + A005	Lead Content 总含铅量	mg/kg	10	500	< RL 小于报告限值	Pass 符合
		Cadmium Content 总含镉量	mg/kg	10	100	< RL 小于报告限值	
T004	A006 + A007 + A008	Lead Content 总含铅量	mg/kg	10	500	< RL 小于报告限值	Pass 符合
		Cadmium Content 总含镉量	mg/kg	10	100	< RL 小于报告限值	

Abbreviation: < = Less than 表示小于

简称 RL = Reporting Limit 表示报告限值

mg/kg = milligram per kilogram 表示毫克每千克

1% = 10000 mg/kg 表示 10000 毫克每千克

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Remark:

备注:

* Regulations on Cadmium:

镉的规定

		Maximum Permissible Limit 最大允许限值				
Country 国家	Legislation 法规	Plastic materials 塑料材料	Paint (wet state) 油漆 (湿态)	Paint on the painted articles 在漆过的物品上涂漆	Paint (high zinc content) 油漆 (高锌含量)	Metal parts of jewellery and imitation jewellery articles and hair accessories 珠宝及仿制珠宝的金属部分物品及毛发评定
EU 欧盟	REACH regulation (EC) No. 1907/2006 Annex XVII Entry 23 and its amendments REACH 第 1907/2006 号法规 (EC) 附件十七第 23 条及其修正案	100mg/kg	100mg/kg	1000mg/kg	1000mg/kg	100mg/kg

		Maximum Permissible Limit 最大允许限值
Country 国家	Legislation 法规	Paint, plastic, plating/ coating of surface treatment 油漆、塑料、电镀/表面处理涂层
Switzerland 瑞士	Switzerland Chemikalien-Risikoreduktions-Verordnung-ChemRRV, 814.81, 18 May 2005 瑞士化学品风险降低条例-ChemRRV,814.81,2005 年 5 月 18 日	100mg/kg

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* Regulations on Lead:

铅的规定

		Maximum Permissible Limit 最大允许限值
Country 国家	Legislation 法规	Substances or mixtures intended to use as paint 用作油漆的物质或混合物
EU 欧盟	Paragraph 1-6 of Entry 63 of Annex XVII, REACH Regulation (EC) No. 1907/2006 REACH 第 1907/2006 号法规 (EC) 附件十七第 63 条第 1-6 款	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) 珠宝、仿制珠宝、发饰、手镯、项链、戒指、穿刺珠宝、手表、腕带、胸针和袖扣及珠宝制造用零件 0.05% (按单个零件的重量)

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2. Polybrominated biphenyls (PBB)

多溴联苯

Test method : Ref. to IEC 62321-6:2015

测试方法 参考 IEC 62321-6:2015

Test Result:
测试结果:

Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	Unit 单位	Regulatory requirement 法规要求	Test Result 测试结果	Conclusion 结论
T001	A003 + A004 + A005	Polybrominated biphenyls (PBBs) 多溴联苯	%	0.1	< RL 小于报告限值	PASS 符合
T002	A006 + A008	Polybrominated biphenyls (PBBs) 多溴联苯	%	0.1	< RL 小于报告限值	PASS 符合

Abbreviation: < = Less than 表示小于
简称 RL = Reporting Limit 表示报告限值
% = percentage 表示百分率

Remark:
备注:

(*) The reporting limit for each individual PBBs are :
每种多溴联苯报告检出限如下:

Reporting Limit (%) 报告检出限(%)		
PBBs	Bromobiphenyl 一溴联苯	0.0005
	Dibromobiphenyl 二溴联苯	0.0005
	Tribromobiphenyl 三溴联苯	0.0005
	Tetrabromobiphenyl 四溴联苯	0.0005
	Pentabromobiphenyl 五溴联苯	0.0005
	Hexabromobiphenyl 六溴联苯	0.0005
	Heptabromobiphenyl 七溴联苯	0.0005
	Octabromobiphenyl 八溴联苯	0.0005
	Nonabromobiphenyl 九溴联苯	0.0005
	Decabromobiphenyl 十溴联苯	0.0005

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3. Organotin compounds content
有机锡化合物含量

Test method: Organic solvent extraction, GCMS
测试方法 Ref. to ISO/TS 16179:2012

溶剂萃取, 使用气相色谱质谱联用仪(GC-MS)分析
参考 ISO/TS 16179:2012

Test No. 测试序号				T001	T002
Material No. 材料编号				A003 + A004 + A005	A006 + A008
Test Parameter 测试参数	Unit 单位	RL 报告限值	Regulatory requirement 法规要求	Result 结果	Result 结果
TBT(Tributyltin) by weight of tin 三丁基锡中锡重量比	%	0.01	--	< RL 小于报告限值	< RL 小于报告限值
TPT(Triphenyltin) by weight of tin 三苯基锡中锡重量比	%	0.01	--	< RL 小于报告限值	< RL 小于报告限值
TOT(Trioctyltin) by weight of tin 三辛基氯化锡中锡重量比	%	0.01	--	< RL 小于报告限值	< RL 小于报告限值
TCyT(Tricyclohexyltin) by weight of tin 三环己基氯化锡中锡重量比	%	0.01	--	< RL 小于报告限值	< RL 小于报告限值
TPrT(Tripolytin) by weight of tin 三丙基锡中锡重量比	%	0.01	--	< RL 小于报告限值	< RL 小于报告限值
Sum of Tin of tri-substituted organotins 三取代有机锡化合物之和	%	NA	0.1	< RL 小于报告限值	< RL 小于报告限值
DBT(Dibutyltin) by weight of tin 二丁基锡中锡重量比	%	0.01	0.1	< RL 小于报告限值	< RL 小于报告限值
DOT(Dioctyltin) by weight of tin 二辛基锡中锡重量比	%	0.01	0.1	< RL 小于报告限值	< RL 小于报告限值
Conclusion 结论	--	--	--	PASS 符合	PASS 符合

Abbreviation: < = Less than 表示小于
简称 RL = Reporting Limit 表示报告限值
% = percentage 表示百分率
NA = Not Applicable 表示不适用

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Remark备注:

- * 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
单个三取代有机锡化合物含量低于0.01%，在计算三取代有机锡化合物总含量时不被考虑。
- ** The assessment for tri-substituted organotins is based on the sum of TBT, TPT, TOT, TCyT and TPrT by weight of tin only.
三取代有机锡化合物的评估基于三丁基锡，三苯基锡，三辛基氯化锡，三环己基氯化锡和三丙基锡中锡的重量比之和。
- *** 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.
根据REACH法规No. 1907/2006附录17第20项及其修订法规No. 276/2010（以前称作2009/425/EC）有机锡化合物禁止被使用或不得被销售：

Type of organostannic compounds 有机锡化合物类型	Maximum Permissible Limit 最高允许限制	Implementation date 生效日期
Tri-substituted organostannic compounds, e.g. tributyltin (TBT) compounds and triphenyltin (TPT) compounds 所有三取代有机锡，如三丁基锡和三苯基锡	0.1 % by weight of tin 锡重量比0.1 %	1 July 2010 2010年7月1日
Dibutyltin (DBT) compounds in mixtures and articles for supply to the general public 所有供公众使用的混合物及物品中的二丁基锡	0.1 % by weight of tin 锡重量比0.1 %	<p>1 January 2012</p> <p>The below products will not be applicable until 1 January 2015:</p> <ul style="list-style-type: none"> - 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 façades <p>2012年1月1日</p> <p>以下产品在2015年1月1日之前不适用：</p> <ul style="list-style-type: none"> -单组份及双组份室温硫化密封剂（RTV-1和RYV-2密封剂）及粘合剂 -使用时含二丁基锡化合物做催化剂的油漆和涂料。 -软性聚氯乙烯（PVC）型材，无论是单独或与硬性PVC共同成型 -拟做户外用途、含二丁基锡化合物做稳定剂的PVC涂层面料 -户外落水管、水槽和管件，以及屋顶和装饰面的覆盖材料

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<p>Diocetyl tin (DOT) compounds</p> <ul style="list-style-type: none">- 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) <p>二烷基锡化合物</p> <ul style="list-style-type: none">-拟与皮肤接触的纺织品-手套-拟与皮肤接触的鞋及其部件-墙面或地面覆盖物-儿童护理产品-女性卫生用品-尿布-双组份室温硫化模具 (RTV-2模具)	<p>0.1 % by weight of tin</p> <p>锡重量比0.1 %</p>	<p>1 January 2012</p> <p>2012年1月1日</p>
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4. Nonylphenol(NP), Nonylphenol ethoxylates(NPEO)

壬基酚, 壬基酚聚氧乙烯醚

Test method: NP:

测试方法 For Plastics- Organic solvent extraction, GCMS
For Textiles- Organic solvent extraction, LC-MS

NPEO:

Organic solvent extraction, LC-MS

壬基酚:

对于塑料产品-有机溶剂萃取, GC-MS 分析

对于纺织产品-有机溶剂萃取, LC-MS 分析

壬基酚聚氧乙烯醚:

有机溶剂萃取, LC-MS 分析

Test Result:

测试结果:

Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	Unit 单位	RL 报告限值	Test Result 测试结果
T001	A003 + A004 + A005	Nonylphenol (NP) 壬基酚	mg/kg	5	< RL 小于报告限值
		Nonylphenolethoxylates (NPEO) 壬基酚聚氧乙烯醚	mg/kg	20	< RL 小于报告限值
T002	A006 + A007 + A008	Nonylphenol (NP) 壬基酚	mg/kg	5	< RL 小于报告限值
		Nonylphenolethoxylates (NPEO) 壬基酚聚氧乙烯醚	mg/kg	20	< RL 小于报告限值

Abbreviation: < = Less than 表示小于

简称 RL = Reporting Limit 表示报告限值

mg/kg = milligram per kilogram 表示毫克每千克

NA = Not Applicable 表示不适用

% = percentage 表示百分率

0.1% = 1000mg/kg 表示 1000 毫克每千克

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第 12 页, 共 27 页**Remark:****备注**

* The requirement is following REACH regulation (EC) No. 1907/2006 and amendment no. 552/2009 Annex XVII Entry 46:

该要求是根据REACH法规(EC)No.1907/2006及其修订案.552/2009 附录17 第46项

Nonylphenol and nonylphenol ethoxylates shall not be placed on the market, or used, as substances or in mixtures in concentrations equal to or greater than 0,1% by weight for the following purposes:

不允许壬基酚和壬基酚聚氧乙烯醚直接投放市场, 或以质量浓度大于等于0.1%的混合物组分的形式投放市场, 用于下列目的:

- (1) Industrial and institutional cleaning 工业和公共机构清洁;
- (2) Domestic cleaning 家用清洗;
- (3) Textiles and leather processing 纺织品和皮革加工;
- (4) Emulsifier in agricultural teat dips 乳化剂, 农用乳头浸沾消毒液;
- (5) Metal working 金属物品;
- (6) Manufacturing of pulp and paper 纸浆和纸张的制造;
- (7) Cosmetic products 化妆品;
- (8) Other personal care products 其他个人护理用品;
- (9) Co-formulants in pesticides and biocides 杀虫剂和生物农药中的复合赋形剂.

** The requirement is following REACH regulation (EC) No. 1907/2006 and amendment no. 552/2009 and (EU) 2016/26 Annex XVII Entry 46a:

该要求是根据REACH法规(EC)No.1907/2006及其修订No.552/2009 附录17 的第46a项

Nonylphenol ethoxylates shall not be placed on the market after 3 February 2021 in textile articles which can reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0,01 % by weight of that textile article or of each part of the textile article.

2021 年 2 月 3 日以后, 在正常使用的可水洗纺织品或它的每个部分, 若壬基酚聚氧乙烯醚浓度等于或大于 0.01% (按重量计), 此纺织品不可投放市场。

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5. Perfluorooctanoic acid (PFOA) and its salts^

全氟辛酸及其盐类

Test method: In house method, LC-MS-MS / GC-PCIMS analysis

测试方法 内部方法, 液相色谱-质谱联用(LC-MS-MS)/气相色谱-正化学电离-质谱法 (GC-PCIMS) 分析

Test result:
测试结果:

Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	CAS no.	Unit 单位	RL 报告 限值	Regulatory requirement 法规要求	Test Result 测试结果
T001	A003 + A004	Potassiumperfluorooctanoate (K-PFOA)* 全氟辛酸钾	2395-00-8	ppb	10	25	< RL 小于报告限 值
		Perfluorooctane carboxylate (PFOA)* 全氟辛酸	335-67-1	ppb			
		Silverperfluorooctanoate (Ag-PFOA)* 全氟辛酸银	335-93-3	ppb			
		Sodiumperfluorooctanoate (Na-PFOA)* 全氟辛酸钠	335-95-5	ppb			
		Ammonium pentadecafluorooctanoate (APFO)* 十五氟辛酸铵	3825-26-1	ppb			

Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	CAS no.	Unit 单位	RL 报告 限值	Regulatory requirement 法规要求	Test Result 测试结果
T002	A005 + A006	Potassiumperfluorooctanoate (K-PFOA)* 全氟辛酸钾	2395-00-8	ppb	10	25	< RL 小于报告限 值
		Perfluorooctane carboxylate (PFOA)* 全氟辛酸	335-67-1	ppb			
		Silverperfluorooctanoate (Ag-PFOA)* 全氟辛酸银	335-93-3	ppb			
		Sodiumperfluorooctanoate (Na-PFOA)* 全氟辛酸钠	335-95-5	ppb			
		Ammonium pentadecafluorooctanoate (APFO)* 十五氟辛酸铵	3825-26-1	ppb			

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Test No. 测试序号	Material No. 材料编号	Test Parameter 测试参数	CAS no.	Unit 单位	RL 报告限值	Regulatory requirement 法规要求	Test Result 测试结果
T003	A007 + A008	Potassiumperfluorooctanoate (K-PFOA)* 全氟辛酸钾	2395-00-8	ppb	10	25	< RL 小于报告限值
		Perfluorooctane carboxylate (PFOA)* 全氟辛酸	335-67-1	ppb			
		Silverperfluorooctanoate (Ag-PFOA)* 全氟辛酸银	335-93-3	ppb			
		Sodiumperfluorooctanoate (Na-PFOA)* 全氟辛酸钠	335-95-5	ppb			
		Ammonium pentadecafluorooctanoate (APFO)* 十五氟辛酸铵	3825-26-1	ppb			

Abbreviation: < = Less than 表示小于
简称 RL = Reporting Limit 表示报告限值
ppb = Parts per billion 表示十亿分之几

Remark:
备注

- * Tested with the equivalence of pentadecafluorooctanoate.
用十五氟辛酸盐等效测试。
- ** According to REACH regulation (EC) No. 1907/2006 Annex XVII Entry 68 and amendment Commission Regulation (EU) No. 2017/1000. PFOA and its salts shall not be used in a concentration equal to or above 25 ppb or one or a combination of PFOA-related substances shall not be used in a concentration equal to or above 1000ppb in the production of, or placed on the market in another substance, as a constituent; a mixture; an article.
根据 REACH 法规 (EC) No. 1907/2006 附录十七第 68 条及其修订 No. 2017/1000, 全氟辛酸及其盐类浓度大于等于 25 ppb, 或全氟辛酸关联物质的一种或多种组合浓度大于等于 1000 ppb, 不得作为另一种物质、混合物、物品的组分用于生产或投放市场。
- *** Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all above substances were not detected, the result is stated <RL.
单一组分含量小于报告限值不计入总和的计算, 如果未检测到上述物质, 结果显示为< RL。
- ^ Indicates that the item is tested in TÜV Rheinland (Shanghai) Co., Ltd.

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6. Phthalates content

邻苯二甲酸酯的含量

Test Method : Organic solvent extraction, analyzed by GC-MS
测试方法 溶剂萃取, 使用气相色谱质谱联用仪(GC-MS)分析

Test Result:

测试结果

Test No. 测试序号					T001
Material No. 材料编号					A002
Test Parameter 测试参数	CAS No.	Unit 单位	RL 报告限值	Regulatory requirement 法规要求	Result
Diethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己)酯	117-81-7	%	0.005	0.1	< RL 小于报告 限值
Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯	84-74-2	%	0.005	0.1	< RL 小于报告 限值
Benzylbutyl phthalate (BBP) 邻苯二甲酸丁苄酯	85-68-7	%	0.005	0.1	< RL 小于报告 限值
Diisobutyl phthalate (DIBP) 邻苯二甲酸二异丁酯	84-69-5	%	0.005	0.1	< RL 小于报告 限值
Sum (DEHP+DBP+BBP+DIBP) 总含量 (DEHP+DBP+BBP+DIBP)	--	%	0.005	0.1	< RL 小于报告 限值
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entries 51 结论: REACH第1907/2006号法规 (EC) 附件十七第51条及其 修订法规				-	Pass 符合

Abbreviation: < = Less than表示小于
简称 RL = Reporting Limit 表示报告限值
% = percentage 表示百分率

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第 16 页, 共 27 页**Remark:****备注**

- Requirement of REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entries 51:
- REACH 第 1907/2006 号法规 (EC) 附件十七第 51 条及其修订法规的要求

Parameter 参数	Unit 单位	Maximum Permissible Limit 最大允许限值
Plasticised materials in toys and childcare articles, or other articles# place on the market; 玩具、儿童护理用品或投放市场上其他产品中的塑化材料;		
Diethylhexyl phthalate (DEHP) Dibutyl phthalate (DBP) Benzylbutyl phthalate (BBP) Diisobutyl phthalate (DIBP) 邻苯二甲酸二(2-乙基己)酯 邻苯二甲酸二丁酯 邻苯二甲酸丁苄酯 邻苯二甲酸二异丁酯	%	0.1 (individually or sum of the four phthalates) Effective after 7 July 2020. 0.1 (单独或四种邻苯二甲酸盐之和) 2020 年 7 月 7 日后生效

Denote:**表示:**

Examples of articles that are excluded from the restriction
不受限制的条款示例

- 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.)
专用于工业/农业用途/露天使用的产品, 只要增塑材料不会接触人体粘膜或长时间接触人体皮肤。(如每天持续接触时间超过 10 分钟或间断接触 30 分钟。)
- 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
2024 年 1 月 7 日前投放市场的飞机和机动车辆 (指令 2007/46/EC), 及专用于其维护或维修的物品
- Measuring devices for laboratory use;
实验室用测量装置;
- Food contact material and articles within the scope of Regulation (EC) No 1935/2004 or Commission Regulation (EU) No 10/2011
第 1935/2004 号法规 (EC) 或第 10/2011 号委员会法规 (EU) 范围内的食品接触材料和物品
- Medical devices (Directive 90/385/EEC, 93/42/EEC or 98/79/EC)
医疗器械 (指令 90/385/EEC、93/42/EEC 或 98/79/EC)
- Electrical and electronic equipment within the scope of Directive 2011/65/EU
指令 2011/65/EU 范围内的电气和电子设备

Immediate packaging of medicinal products (Regulation (EC) No 726/2004, Directive 2001/82/EC or Directive 2001/83/EC)

药品的直接包装 (第 726/2004 号法规 (EC)、第 2001/82/EC 号指令或第 2001/83/EC 号指令)

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7. Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No 2017/999 and (EU) No 2020/171 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), according to the EU Court of Justice rules on SVHCs in articles.

依据欧盟法庭针对物品中高关注物质的判决, 法规(EU)No143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No. 2017/999及(EU) No 2020/171 (Annex XIV of EC No 1907/2006)之授权清单及欧洲化学品管理局颁布的高度关注物质的筛检。

Product Classification 产品类别

With reference to Corrigendum to Regulation (EC) no.1907/2006 and ECHA, this product is classified as:
参考欧盟指令 (EC) no.1907/2006 以及欧洲化学品管理局要求, 产品分类如下:

- ☒ Article/物品
- ☐ Article with an integral substance/ mixture/物品及必须的物质/混合物
- ☐ Combinations of an article (functioning as a container or a carrier material) and a substance/ mixture/物品 (功能为容器) 及物质/混合物的组合
- ☐ Substance/ mixture/物质/混合物

Conclusion:

结论

Conclusion 结论			
Product Location 产品部位	Acc. to authorisation list (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013 and (EU) No 895/2014 and (EU) No 2017/999 and (EU) No 2020/171 (Annex XIV of EC No 1907/2006) and candidate list by ECHA, and the EU Court of Justice rules on SVHCs in articles, the detected SVHC concentration in components level is/ 依据欧盟法庭针对物品中高关注物质的判决的授权清单和候选清单所检测出的高度关注物质含量如下	Obligation of Importer(*) (For article) 进口商义务	Detected Substance (if any)
A001	< 0.1%	Not necessary/必须	--
A002	< 0.1%	Not necessary/必须	--
A003 + A004 + A005 + A006 + A007 + A008	< 0.1%	Not necessary/必须	--

(For article/物品)

(*) To communicate information down the supply chain according to article. 33 of REACH. **OR** 依照 REACH 法规第 33 条需要向供应链告知或者:

- Notification to ECHA, if the quantities of SVHC in the produced/imported articles are above 1 ton in total per year per company. /如果一家公司生产/进口的产品中检出的高度关注物质超过每年一吨, 需要向ECHA通报。
- Provide sufficient information to ensure safe use of the article and, as a minimum, include the name of the substance, to their customers and on request to consumers within 45 days of the receipt of this request. /如果消费者有要求, 有义务在45天内向消费者提供充分的信息以确保该产品的使用安全, 信息至少需包含物质的名称。

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第 18 页, 共 27 页**Test result****测试结果**

Screening of substances of very high concern (SVHC) subject to authorisation, according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No 2017/999 and (EU) No 2020/171 (Annex XIV of EC No 1907/2006) and candidate list by European Chemical Agency (ECHA), according to the EU Court of Justice rules on SVHCs in articles.

依据欧盟法庭针对物品中高关注物质的判决, 法规(EU)No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No 2017/999及 (EU) No 2020/171 (Annex XIV of EC No 1907/2006)之授权清单及欧洲化学品管理局颁布的高度关注物质的筛检。

Test Method: 1) Test portion is digested with acid and assisted with microwave, the elements are analysed by ICP-OES.
测试方法: 2) Test portion is extracted by organic solvent, semi-quantitative analysis by GC-MS / UV-Vis.
3) Test portion is extracted by organic solvent, the extraction solution is analyzed by Headspace-GC/MS / LC-DAD-MS / LC-MS/MS.

- 1) 测试部分用酸及微波消解, 电感耦合等离子体发射光谱法分析
2) 测试部分用有机溶剂萃取, 气相质谱连用仪扫描法/紫外可见吸收光谱法分析
3) 测试部分用有机溶剂溶解, 顶空-气相质谱连用仪扫描法/液相色谱-二极管阵列-串联质谱法/液相串联质谱法分析

Test No.: 测试编号	T001	T002	T003
Material No.: 材料编号	A001	A002	A003 + A004 + A005 + A006 + A007 + A008
Result (%): 测试结果	< RL 小于报告限值	< RL 小于报告限值	< RL 小于报告限值

Abbreviation: < = Less than表示小于
简称 RL = Reporting Limit 表示报告限值
% = percentage 表示百分率

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Remark
备注:

(*1) The reporting limit for each individual SVHC subject to authorisation according to (EU) No 143/2011, (EU) No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No. 2017/999 and (EU) No 2020/171 (Annex XIV of EC No 1907/2006):
依据欧洲化学品管理局颁布的授权清单(EU) No 143/2011, (EU)No 125/2012, (EU) No 348/2013, (EU) No 895/2014, (EU) No 2017/999, 及(EU) No 2020/171 (Annex XIV of EC No 1907/2006) 中每个高度关注物质的报告检出限如下:

	Substances	CAS No.	Reporting Limit
1	4,4'- Diaminodiphenylmethane (MDA) / 4,4'-二氨基二苯甲烷	101-77-9	0.01%
2	Benzyl butyl phthalate (BBP) / 邻苯二甲酸丁酯苯甲酯	85-68-7	0.01%
3	Bis (2-ethylhexyl)phthalate (DEHP)/ 邻苯二甲酸二 (2-乙基己基) 酯	117-81-7	0.01%
4	Dibutyl phthalate (DBP) / 邻苯二甲酸二丁酯	84-74-2	0.01%
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane / 六溴环十二烷	25637-99-4 / 3194-55-6 / 134237-50-6 / 134237-51-7 / 134237-52-8	0.01%
6	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene) / 二甲苯麝香	81-15-2	0.01%
7	2,4-Dinitrotoluene (2,4-DNT) / 2,4-二硝基甲苯	121-14-2	0.01%
8	Diisobutyl phthalate (DIBP) / 邻苯二甲酸二异丁酯	84-69-5	0.01%
9	Tris(2-chloroethyl)phosphate / 三 (2-氯乙基) 磷酸酯	115-96-8	0.01%
10	Diarsenic pentaoxide (*3) / 五氧化二砷	1303-28-2	0.01%
11	Diarsenic trioxide (*3) / 三氧化二砷	1327-53-3	0.01%
12	Lead chromate (*3)(*4) / 铬酸铅	7758-97-6	0.01%
13	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (*3)(*4) / 颜料红 104	12656-85-8	0.01%
14	Lead sulfochromate yellow (C.I. Pigment Yellow 34) (*3) / 颜料黄 34	1344-37-2	0.01%
15	Trichloroethylene / 三氯乙烯	79-01-6	0.01%
16	Chromium trioxide (*4) / 三氧化铬	1333-82-0	0.01%
17	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: / 氧化铬及其聚合物形成的酸 Chromic acid / 铬酸 Dichromic acid / 重铬酸 Oligomers of chromic acid and dichromic acid (*4) / 重铬酸聚合物	7738-94-5 / 13530-68-2	0.01%
18	Sodium dichromate (*3) / 重铬酸钠水合物	7789-12-0 / 10588-01-9	0.01%
19	Potassium dichromate (*4) / 重铬酸钾	7778-50-9	0.01%
20	Ammonium dichromate (*4) / 重铬酸铵	7789-09-5	0.01%
21	Potassium chromate (*4) / 铬酸钾	7789-00-6	0.01%
22	Sodium chromate (*4) / 铬酸钠	7775-11-3	0.01%
23	Formaldehyde, oligomeric reaction products with aniline (technical MDA) (*11) / 甲醛苯胺聚合物	25214-70-4	0.01%
24	1,2-Dichloroethane / 1,2-二氯乙烷	107-06-2	0.01%
25	Bis(2-methoxyethyl) ether / 二乙二醇二甲醚	111-96-6	0.01%
26	Arsenic acid (*3) / 砷酸	7778-39-4	0.01%
27	2,2'-dichloro-4,4'-methylenedianiline (MOCA) / 4,4'-二氨基-3,3'-二氯二苯甲烷	101-14-4	0.01%
28	Dichromium tris(chromate) (*4) / 铬酸铬	24613-89-6	0.01%
29	Strontium chromate (*4) / 铬酸锶	7789-06-2	0.01%
30	Potassium hydroxyoctaoxodizincatedichromate (*4) / 氢氧化铬酸锌钾	11103-86-9	0.01%
31	Pentazinc chromate octahydroxide (*4) / 锌黄	49663-84-5	0.01%

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	Substances	CAS No.	Reporting Limit
32	1-bromopropane (n-propyl bromide) / 正丙基溴	106-94-5	0.01%
33	Diisopentylphthalate / 邻苯二甲酸二异戊酯	605-50-5	0.01%
34	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) / 邻苯二甲酸二(C6-8 支链与直链)烷基酯, 富 C7	71888-89-6	0.01%
35	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) / 1,2-苯二甲酸二(C7-11 支链与直链)烷基(醇)酯	68515-42-4	0.01%
36	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear / 支链和直链 1,2-苯二甲酸二戊酯	84777-06-0	0.01%
37	Bis(2-methoxyethyl) phthalate / 邻苯二甲酸二甲氧乙酯	117-82-8	0.01%
38	Dipentyl phthalate (DPP) / 邻苯二甲酸二戊酯	131-18-0	0.01%
39	N-pentyl-isopentylphthalate / 邻苯二甲酸正戊基异戊基酯	776297-69-9	0.01%
40	Anthracene oil (*7) / 蒽油	90640-80-5	0.01%
41	Pitch, coal tar, high temperature (*7) / 沥青, 煤焦油, 高温	65996-93-2	0.01%
42	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO) [covering well-defined substances and UVCB substances, polymers and homologues] / 4-(1,1,3,3-四甲基丁基)苯酚, 乙氧基 - 以及所有被定义的物质, 未知成分或可变成成分的物质, 聚合物和同系物	-	0.01%
43	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] / 分支或线性的壬基酚, 包括含有9个碳烷基链的所有独立的同分异构体和所有含有线性或分支9个碳烷基链的UVCB物质	-	0.01%
44	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear / 邻苯二甲酸二己酯	68515-50-4	0.01%
45	Dihexyl phthalate / 邻苯二甲酸二己酯	84-75-3	0.01%
46	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5) / 1,2-苯二甲酸二C6-10 烷基酯; 1,2-苯二甲酸混合癸、己、辛二酯, 包含 ≥ 0.3%的邻苯二甲酸二己酯(EC No. 201-559-5)	68515-51-5 / 68648-93-1	0.01%
47	Trixylyl phosphate / 磷酸三(二甲苯)酯	25155-23-1	0.01%
48	Sodium perborate, perboric acid, sodium salt (*3) (*6) / 水合高硼酸钠盐类	-	0.01%
49	Sodium peroxometaborate (*3) (*6) / 过硼酸钠	7632-04-4	0.01%
50	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof] / [1] 5-二叔丁基-2-(2,4-二甲苯环己-3-烯-1-基)-5-甲基-1,3-二噁烷, [2] 5-二叔丁基-2-(4,6-二甲苯环己-3-烯-1-基)-5-甲基-1,3-二噁烷包含以下[1]与[2]之所有单独立体异构物与其组成。	-	0.01%
51	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) / 2-(2'-羟基-3',5'-二特戊基苯基)苯并三唑	25973-55-1	0.01%
52	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) / 2,4-二叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚(UV-327)	3864-99-1	0.01%
53	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) / 2-(2'-羟基-3'-叔丁基-5'-叔丁基苯基)苯并三唑(UV-350)	36437-37-3	0.01%
54	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) / 2-(2'-羟基-3',5'-二叔丁基苯基)苯并三唑	3846-71-7	0.01%

(*2) The reporting limit for each individual SVHC in Candidate List by ECHA:
每个高度关注物质的报告检出限根据欧洲化学品管理局颁布的候选清单如下:

	Substances	CAS No.	Reporting Limit
55	Anthracene / 蒽	120-12-7	0.01%
56	Bis(tributyltin) oxide (TBTO) (*3) (*5) / 氧化双三丁基锡	56-35-9	0.01%
57	Triethyl arsenate (*3) / 三乙基砷酸盐	15606-95-8	0.01%

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	Substances	CAS No.	Reporting Limit
58	Lead hydrogen arsenate (*3) / 砷酸氢铅	7784-40-9	0.01%
59	Cobalt(II) dichloride (*3) / 二氯化钴	7646-79-9	0.01%
60	Acrylamide / 丙烯酰胺	79-06-1	0.01%
61	Anthracene oil, anthracene paste, distn. lights (*7) / 蒽油, 蒽糊, 轻油	91995-17-4	0.01%(*8)
62	Anthracene oil, anthracene paste, anthracene fraction (*7) / 蒽油, 蒽糊, 蒽馏分离液	91995-15-2	
63	Anthracene oil, anthracene-low (*7) / 蒽油, 含蒽量少	90640-82-7	
64	Anthracene oil, anthracene paste (*7) / 蒽油, 蒽糊	90640-81-6	
65	Boric acid (*3) (*6) / 硼酸	10043-35-3 / 11113-50-1	0.01%
66	Disodium tetraborate, anhydrous (*3) (*6) / 无水四硼酸钠	1303-96-4 / 1330-43-4 / 12179-04-3	0.01%
67	Tetraboron disodium heptaoxide, hydrate (*3) (*6) / 水合七氧四硼酸钠	12267-73-1	0.01%
68	2-Methoxyethanol / 2-乙二醇甲醚	109-86-4	0.01%
69	2-Ethoxyethanol / 2-乙氧基乙醇	110-80-5	0.01%
70	Cobalt(II) sulphate (*3) / 硫酸钴(II)	10124-43-3	0.01%
71	Cobalt(II) dinitrate (*3) / 硝酸钴(II)	10141-05-6	0.01%
72	Cobalt(II) carbonate (*3) / 碳酸钴(II)	513-79-1	0.01%
73	Cobalt(II) diacetate (*3) / 醋酸钴(II)	71-48-7	0.01%
74	Alkanes C10-C13, chloro (Short Chain Chlorinated Paraffins) (SCCP) / 短链氯化石蜡	85535-84-8	0.01%
75	2-Ethoxyethyl acetate / 2-乙氧基乙酸乙酯	111-15-9	0.01%
76	Hydrazine / 肼	302-01-2 / 7803-57-8	0.01%
77	1-Methyl-2-pyrrolidone (NMP) / 1-甲基-2-吡咯烷酮	872-50-4	0.01%
78	1,2,3-Trichloropropane / 1,2,3-三氯丙烷	96-18-4	0.01%
79	Aluminosilicate Refractory Ceramic Fibres (RCF) (*9) / 硅酸铝, 耐火陶瓷纤维	-	0.01%
80	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) (*9) / (Zr-RCF) 氧化锆硅酸铝, 耐火陶瓷纤维	-	0.01%
81	2-Methoxyaniline, o-Anisidine / 邻甲氧基苯胺	90-04-0	0.01%
82	4-(1,1,3,3-tetramethylbutyl)phenol / 对特辛基苯酚	140-66-9	0.01%
83	Calcium arsenate (*3) / 砷酸钙	7778-44-1	0.01%
84	Trilead diarsenate (*3) / 砷酸铅	3687-31-8	0.01%
85	N,N-dimethylacetamide (DMAC) / 二甲基乙酰胺	127-19-5	0.01%
86	Phenolphthalein / 酚酞	77-09-8	0.01%
87	Lead dipicrate (*3) / 苦味酸铅	6477-64-1	0.01%
88	Lead diazide, Lead azide (*3) / 叠氮化铅	13424-46-9	0.01%
89	Lead styphnate (*3) / 收敛酸铅	15245-44-0	0.01%
90	1,2-bis(2-methoxyethoxy)ethane (TEGDME, triglyme) / 1,2-二(2-甲氧基乙氧基)乙烷 (三甘醇二甲醚)	112-49-2	0.01%
91	1,2-dimethoxyethane, ethylene glycol dimethyl ether (EGDME) / 1,2-二甲氧基乙烷 (乙二醇二甲醚)	110-71-4	0.01%
92	Diboron trioxide (*3) (*6) / 三氧化二硼	1303-86-2	0.01%
93	Formamide / 甲酰胺	75-12-7	0.01%
94	Lead(II) bis(methanesulfonate) (*3) / 甲基磺酸铅	17570-76-2	0.01%
95	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC) / 异氰尿酸三缩水甘油酯	2451-62-9	0.01%
96	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	

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	Substances	CAS No.	Reporting Limit
	/ 1,3,5-三(环氧乙烷基甲基)-1,3,5-三嗪-2,4,6-(1H,3H,5H)-三酮立体异构体		
97	4,4'-bis(dimethylamino)benzophenone (Michler's ketone), MK / 4,4'-二(N,N-二甲氨基)二苯甲酮(四甲基米氏酮)	90-94-8	0.01%
98	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base), RMK / N,N,N',N'-四甲基-4,4'-二氨基二苯甲烷(四乙基米氏酮)	101-61-1	0.01%
99	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10) / 碱性蓝 26	2580-56-5	0.01%
100	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10) / 结晶紫 [4-(双(P-(二甲氨基)苯基)亚甲基)-2,5-环己烯基-1-基铵]	548-62-9	
101	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10) / 4,4'-二[(二甲氨基)苯基]-4-甲基基苯甲醇	561-41-1	
102	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*10) / α, α -二[4-(二甲氨基)苯基]-4-苯基氨基-1-萘甲醇(*11)	6786-83-0	
103	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE) / 十溴联苯醚	1163-19-5	0.01%
104	Pentacosafuorotridecanoic acid / 全氟十三酸	72629-94-8	0.01%
105	Tricosafuorododecanoic acid / 全氟十二酸	307-55-1	0.01%
106	Henicosafuoroundecanoic acid / 全氟十一酸	2058-94-8	0.01%
107	Heptacosafuorotetradecanoic acid / 全氟十四酸	376-06-7	0.01%
108	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA) (*12) / 偶氮二甲酰胺	123-77-3	0.05%
109	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry] / 六氢苯二甲酸酐	85-42-7 / 13149-00-3 / 14166-21-3	0.01%
110	Hexahydromethylphthalic anhydride (MHHPA) [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry] / 甲基六氢苯酐	25550-51-0 / 19438-60-9 / 48122-14-1 / 57110-29-9	0.01%
111	N,N-dimethylformamide / N,N-二甲基甲酰胺	68-12-2	0.01%
112	1,2-Diethoxyethane / 乙二醇二乙醚	629-14-1	0.01%
113	Diethyl sulphate / 硫酸二乙酯	64-67-5	0.01%
114	Methoxyacetic acid (MAA) / 甲氧基乙酸	625-45-6	0.01%
115	Dimethyl sulphate / 硫酸二甲酯	77-78-1	0.01%
116	N-methylacetamide / N-甲基乙酰胺	79-16-3	0.01%
117	Furan / 呋喃	110-00-9	0.01%
118	Methyloxirane (Propylene oxide) / 环氧丙烷	75-56-9	0.01%
119	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine / 3-乙基-2-甲基-2-(3-甲基丁基)-1,3-恶唑烷	143860-04-2	0.01%
120	Dibutyltin dichloride (DBTC) (*3) / 二氯二丁基锡	683-18-1	0.01%
121	Dinoseb (6-sec-butyl-2,4-dinitrophenol) / 2-(1-甲基丙基)-4,6-二硝基苯酚	88-85-7	0.01%
122	4,4'-methylenedi-o-toluidine / 4,4'-二氨基-3,3'-二甲基联苯基甲烷	838-88-0	0.01%
123	4,4'-oxydianiline and its salts / 4,4'-二氨基二苯醚	101-80-4	0.01%

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	Substances	CAS No.	Reporting Limit
124	4-Aminoazobenzene / 4,4'-二氨基二苯醚	60-09-3	0.01%
125	4-methyl-m-phenylenediamine (toluene-2,4-diamine) / 2,4-二氨基甲苯	95-80-7	0.01%
126	6-methoxy-m-toluidine (p-cresidine) / 3-甲基-6-甲氧基苯胺	120-71-8	0.01%
127	Biphenyl-4-ylamine / 4-胺基联苯	92-67-1	0.01%
128	o-aminoazotoluene / 邻氨基偶氮甲苯	97-56-3	0.01%
129	o-Toluidine / 邻甲苯胺	95-53-4	0.01%
130	Acetic acid, lead salt, basic (*3) / 碱式醋酸铅	51404-69-4	0.01%
131	Trilead bis(carbonate) dihydroxide (*3) / 碱式碳酸铅	1319-46-6	0.01%
132	Lead oxide sulfate (*3) / 碱式硫酸铅	12036-76-9	0.01%
133	[Phthalato(2-)]dioxotrilead (*3) / (1,2-苯二羧酸根合)二氧化三铅	69011-06-9	0.01%
134	Dioxobis(stearato)trilead (*3) / 双(十八烷基)二氧代三铅	12578-12-0	0.01%
135	Fatty acids, C16-18, lead salts (*3) / C16-18-脂肪酸铅盐	91031-62-8	0.01%
136	Lead bis(tetrafluoroborate) (*3) / 四氟硼酸铅(II)	13814-96-5	0.01%
137	Lead cyanamidate (*3) / 氨基氰铅盐	20837-86-9	0.01%
138	Lead dinitrate (*3) / 硝酸铅	10099-74-8	0.01%
139	Lead monoxide (lead oxide) (*3) / 氧化铅	1317-36-8	0.01%
140	Orange lead (lead tetroxide) (*3) / 四氧化铅	1314-41-6	0.01%
141	Lead titanium trioxide (*3) / 钛酸铅	12060-00-3	0.01%
142	Lead titanium zirconium oxide (*3) / 钛酸铅锆	12626-81-2	0.01%
143	Pyrochlore, antimony lead yellow (*3) / C.I. 颜料黄 41	8012-00-8	0.01%
144	Pentalead tetraoxide sulphate (*3) / 氧化铅与硫酸铅的复合物	12065-90-6	0.01%
145	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD), the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] (*3) / 含铅的矽酸钡	68784-75-8	0.01%
146	Silicic acid, lead salt (*3) / 矽酸铅	11120-22-2	0.01%
147	Sulfurous acid, lead salt, dibasic (*3) / 亚硫酸铅 (II)	62229-08-7	0.01%
148	Tetraethyllead (*3) / 四乙基铅	78-00-2	0.01%
149	Tetralead trioxide sulphate (*3) / 三碱式硫酸铅	12202-17-4	0.01%
150	Trilead dioxide phosphonate (*3) / 磷酸氧化铅	12141-20-7	0.01%
151	Ammonium pentadecafluorooctanoate (APFO) (*13) / 全氟辛酸铵	3825-26-1	0.01%
152	Pentadecafluorooctanoic acid (PFOA) / 全氟辛酸	335-67-1	0.01%
153	Cadmium (*3) / 镉	7440-43-9	0.01%
154	Cadmium oxide (*3) / 氧化镉	1306-19-0	0.01%
155	4-Nonylphenol, branched and linear, ethoxylated (NPEO) [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof] / 分支或线性的乙氧化壬基酚 [包括含有9个碳烷基链的所有独立的同分异构体和所有含有线性或分支9个碳烷基链的UVCB物质]	-	0.01%
156	Imidazolidine-2-thione; (2-imidazoline-2-thiol) / 伸乙硫脲(咪唑啉-2-硫酮)	96-45-7	0.01%
157	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)(C.I. Direct Red 28) / 直接红 28	573-58-0	0.01%
158	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo]][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38) / 直接黑 38	1937-37-7	0.01%
159	Lead di(acetate) (*3) / 醋酸铅	301-04-2	0.01%
160	Cadmium sulphide (*3) / 硫化镉	1306-23-6	0.01%

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	Substances	CAS No.	Reporting Limit
161	Cadmium chloride (*3) / 氯化镉	10108-64-2	0.01%
162	Cadmium fluoride (*3) / 氟化镉	7790-79-6	0.01%
163	Cadmium sulphate (*3) / 硫酸镉	10124-36-4 / 31119-53-6	0.01%
164	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) (*14) / 二正辛基-双(巯乙酸 2-乙基己酯)锡 (DOTE)	15571-58-1	0.01%
165	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) (*15) / 二正辛基-双(巯乙酸 2-乙基己酯)锡与甲基锡三(巯基乙酸异辛酯)的反应物 (DOTE 和 MOTE 反应物)	-	0.01%
166	1,3-propanesultone/ 1,3-丙烷磺酸内酯	1120-71-4	0.01%
167	Nitrobenzene / 硝基苯	98-95-3	0.01%
168	Perfluorononan-1-oic acid and its sodium and ammonium salts/全氟壬酸及其钠和铵盐	375-95-1 21049-39-8 4149-60-4	0.01%
169	Benzo[def]chrysene (Benzo[a]pyrene) / 苯并[def]蒽 (苯并[a]芘)	50-32-8	0.01%
170	4,4'-isopropylidenediphenol (bisphenol A) / 双酚 A	80-05-7	0.01%
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts / 全氟癸酸 (PFDA) 及其钠盐和铵盐	335-76-2 3830-45-3 3108-42-7	0.01%
172	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] / 支链与直链的 4-庚基酚	-	0.01%
173	p-(1,1-dimethylpropyl)phenol / 4-叔戊基苯酚	80-46-6	0.01%
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS) / 全氟己基磺酸及其盐类	-	0.01%
175	Chrysene / 屈	218-01-9	0.01%
176	Benzo[a]anthracene / 苯并[a]蒽	56-55-3	0.01%
177	Cadmium nitrate(*3) / 硝酸镉	10325-94-7	0.01%
178	Cadmium hydroxide(*3) / 氢氧化镉	21041-95-2	0.01%
179	Cadmium carbonate(*3) / 碳酸镉	513-78-0	0.01%
180	1,6,7,8,9,14,15,16,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof] / 德克隆[包括所有反式和顺式异构体及其组合]	-	0.01%
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear] / 1,3,4-噻二唑烷-2,5-二硫酮, 甲醛和 4-庚基苯酚的支链和直链的反应物(4-庚基苯酚, 支链和直链含量≥0.1% w/w)	-	0.01%
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride, TMA) / 1,2,4-苯三酸酐(偏苯三酸酐) (TMA)	552-30-7	0.01%
183	Dicyclohexyl phthalate (DCHP) / 邻苯二甲酸二环己酯(DCHP)	84-61-7	0.01%
184	Terphenyl, hydrogenated / 氢化三联苯	61788-32-7	0.01%
185	Octamethylcyclotetrasiloxane (D4) / 八甲基环四硅氧烷(D4)	556-67-2	0.01%

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	Substances	CAS No.	Reporting Limit
186	Decamethylcyclopentasiloxane (D5) / 十甲基环五硅氧烷(D5)	541-02-6	0.01%
187	Dodecamethylcyclohexasiloxane (D6) / 十二甲基环六硅氧烷(D6)	540-97-6	0.01%
188	Ethylenediamine (EDA) / 乙二胺 (EDA)	107-15-3	0.01%
189	Lead / 铅	7439-92-1	0.01%
190	Disodium octaborate (*3) / 氧化硼钠	12008-41-2	0.01%
191	Benzo[ghi]perylene / 苯并(g,h,i)芘	191-24-2	0.01%
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane / 2,2-二(4-羟基苯基)-4-甲基戊烷	6807-17-6	0.01%
193	Benzo[k]fluoranthene / 苯并(k)荧蒽	207-08-9	0.01%
194	Fluoranthene / 荧蒽	206-44-0	0.01%
195	Phenanthrene / 菲	85-01-8	0.01%
196	Pyrene / 芘	129-00-0	0.01%
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan- 2-one / 1,7,7-三甲基-3-(苯基亚甲基)双环[2.2.1]庚烷-2-酮	15087-24-8	0.01%
198	2-methoxyethyl acetate/ 2-甲氧基乙基乙酸酯	110-49-6	0.01%
199	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) / 三(4-壬基苯基, 支链和直链)亚磷酸酯 (TNPP), 含有≥0.1% w / w 的 4-壬基苯基, 支链和直链 (4-NP)	-	0.01%
200	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof) / 2,3,3,3-四氟-2-(七氟丙氧基)丙酸, 及其盐类和酰基卤化物 (包括它们各自的同分异构体及其组合)	-	0.01%
201	4-tert-butylphenol/ 4-叔丁基苯酚	98-54-4	0.01%
202	Diisohexyl phthalate (DiHexP) / 邻苯二甲酸二异己酯	71850-09-4	0.01%
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone/2-苄基-2-二甲氨基-1-(4-吗啉苯基)丁酮	119313-12-1	0.01%
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one/2-甲基-1-(4-甲硫基苯基)-2-吗啉基-1-丙酮	71868-10-5	0.01%
205	Perfluorobutane sulfonic acid (PFBS) and its salts/全氟丁烷磺酸 (PFBS)及其盐	-	0.01%

- (*3) The substances are tested and calculated in terms of its respective elements and to the worst-case scenario. And the elements may come from the compounds other than SVHCs.
这些物质按照其各自元素测定并按照最坏的情况进行计算。这些对应的元素可能来自SVHCs以外的化合物。
- (*4) The substances are tested and calculated in terms of Cr (VI).
测试其代表性元素六价铬。
- (*5) The substance is tested and calculated in terms of Tributyl tin.
测试三丁基锡并以之做计算。
- (*6) The substances are confirmed and tested in terms of borate. Boric acid, Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate and Diboron trioxide, Sodium perborate, perboric acid, sodium salt, Sodium peroxometaborate are detected as sum of boric acid. And the borate may come from the compounds other than SVHCs.
这些物质通过硼酸盐来测定并确认。硼酸, 无水四硼酸二钠, 水合七氧四硼酸二钠, 三氧化二硼, 水合高硼酸钠盐类, 过硼酸钠通过硼酸总量测定。硼酸盐可能来自SVHCs以外的化合物。

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- (*7) The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents.
该物质为未知或多种混合物, 交错反应物质或生物材料, 以其主要组成物质分析之。
- (*8) Individual concentrations to the constituent of UVCB with an amount of < 0.01% were not considered by the calculation of the sum.
个别UVCB物质若含量小于0.01%, 则不列入总和计算。
- (*9) The test results are based on microscopic and chemical evaluation.
测试结果依据显微镜和化学评估。
- (*10) The substances are quantified in terms of Michler's ketone and Michler's base by LC-MS, as Michler's ketone or Michler's base was found exceeds 0.01%.
当米希勒酮或米希勒碱含量超过0.01%.时, 用LC-MS以米希勒酮和米希勒碱做确认分析。
- (*11) The content oligomer is determined by Py-GC/MS.
低聚合物的含量以Py-GC/MS分析。
- (*12) The content of diazene-1,2-dicarboxamide is analyzed in terms of its breakdown product.
含量以其分裂物质分析。
- (*13) The substance is tested in terms of pentadecafluorooctanoate.
测试其代表性物质pentadecafluorooctanoate
- (*14) The substance is tested and calculated in terms of Dioctyl tin.
测试二辛基锡并以之做计算。
- (*15) The substance is tested and calculated in terms of Monoctyl tin and Dioctyl tin.
测试单辛基锡和二辛基锡并以之做计算。

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Sample Photo

样品照片



-END 结束-

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 ("GTCB") 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 GTCB 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 sent via electronic means) or by performing the requested services.
- 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 service scope of TÜV Rheinland 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, organisations, use and application in accordance with regulations, nor of the systems on which the installation is based. 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 these questions are expressly covered by the contract.
- 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 which 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 report/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 continue performance of the contract.
- 8.5 The provisions set forth in article 8.4 shall also apply in cases involving returned 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 notification 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.

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 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 to be withdrawn (e.g. performance of surveillance audits), 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 information, documents, images, drawings, know-how, data, samples and project documentation which one party (the "disclosing party") hands over, transfers or otherwise discloses to the other party (the "receiving party"), and the confidential information created during performance of work by TÜV Rheinland, including product testing data, defects, conformity to the technical standard and related reports. Confidential information also includes paper copies and electronic copies of such information. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal) within the scope of the provision of services by TÜV Rheinland.
- 10.2 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 in advance and the disclosing party shall confirm in writing 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.
- 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 court, accreditation bodies or third parties that are involved in the performance of 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 oblige 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 confirm 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 upon request without special request after termination or expiry of the contract. This does not extend to include 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 such 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 secrecy 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 by the parties 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 GTCB 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 annually 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 foreseeable damages), unless any of the circumstances described in article 12.2 applies.
- 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 period 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 embargos 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 therewith 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 a corresponding reason for deletion arises. Data subjects 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 revoke their consent 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 TÜV Rheinland as the person responsible or contract processor, please refer to the respective data protection information. You can contact the Group Data Protection Officer of TÜV Rheinland by e-mail at datenschutz@de.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 material: transport risk and storage

- 15.1 The risk and costs for freight and transport of documents or test material to and from TÜV Rheinland as well as the costs of necessary disposal measures shall be borne by the client.
- 15.2 Any destroyed and otherwise worthless test material will be disposed of by TÜV Rheinland for the client at the expense of the client, unless otherwise agreed.
- 15.3 Undamaged test material 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 4 weeks or any longer period agreed upon, the test material will be disposed of by TÜV Rheinland for the client for a fee in accordance with clause 15.2.

16. Termination of the contract

- 16.1 Notwithstanding clause 3.3 of the GTCB, 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.
- 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 misuses 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.
- 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 owe 15% 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. Partial invalidity, written form, place of jurisdiction and dispute resolution

- 17.1 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.
- 17.2 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.
- 17.3 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.
- 17.4 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 China 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 Branch 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.