

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist					控制印：		
文件编号: WI813		发行编号: 1		实施日期:2017/02/10		页数: 1 / 30	
编制	刘四维		审核	区富洋		批准	王娟
发行号	修改内容			编制	审核	批准	实施日期
1	首次发行			刘四维	区富洋	王娟	2017/02/10

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 2 / 30

1. 目的

本化学品和材料黑名单上所列出的的是被禁用的、限制使用的、或以逐步淘汰目标而被减少使用的物质。此外，它确保不应用不良的物质，除非是已对这些物质进行了全面彻底的考量。本文件是公开的。

1. Purpose

The Chemical and Material Blacklist listing substances that are prohibited, restricted or targeted for reduction with the aim of phasing out their use. Furthermore, it ensures that undesirable substances will not be applied unless they have been thoroughly considered. This document is Public.

2. 范围

本化学品和材料黑名单适用于在我们的产品中使用的，用来测试、维护或服务我们的产品的，用于我们的生产和建筑物中的，以及用于顺特电气设备有限公司（以下简称顺特）所有业务单位中的化学品和材料。

本黑名单直接适用于所有的化学品和材料。所有办公室材料都不包括在内。

在顺特，化学品和材料黑名单中的要求被视为最低要求。在化学品和材料评估和审批中，要遵守所有国内和国际法律和法规。

2. Area of Validity

The Chemical and Material Blacklist is applicable for chemicals and materials used in our products, for testing, maintaining or servicing our products, in our production and in our buildings, in all business units of Sunten.

This applies immediately to all chemicals and materials. All office materials are excluded.

The requirements in the Sunten Chemical and Material Blacklist are to be considered as minimum requirements. All relevant national and international laws and regulations are to be observed in the assessment and approval of chemicals and materials.

3. 生效

顺特化学品和材料黑名单第1版自2016年10月1日生效，并适用于所有尚未在顺特使用的、新引进的化学品和材料。

根据第1版被禁用、但在顺特在使用的化学品和材料必须有逐步淘汰的行动计划。该事由各工艺室负责。行动计划必须在2016年12月1日前准备好。2016年12月必须对受限制使用的材料和化学品进行是否可能使用替代产品的评估（参考9.3.2）。评估---若适用的话含行动计划---必须在2016年12月1日前准备好。2016年12月所有行动计划和评估必须发给公司工艺首席工程师。安委会与质量监理室有责任跟进行动计划。

3. Coming into force

This 1st edition of the Sunten Chemical and Material Blacklist is valid from 1. Oct 2016 for all newly introduced chemicals and materials that are not already in use in Sunten.

Chemicals and materials already in use in Sunten, that are prohibited according to the 1st edition must have an Action Plan for phasing out. Each Process Office is responsible for it respectively. This Action Plan must be prepared by 1. Sep 2016.

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 3 / 30

Restricted Materials and Chemicals must be evaluated for the possibility of using an alternative product (see 9.3.2) in December 2016 . Evaluations – and if applicable Action Plans – must be prepared by 1. Dec 2016. All Action Plans and evaluations must be sent to the Chief Process Engineer. The Safety Board and the Quality Supervision Office have the responsibility for following up on Action Plans.

4. 定义和术语

见附录1

4. Definitions and terms

See Annex 1.

5. 岗位职责和责任

总工程师和产品总监、运营支持总监在他们的组织内负责进行化学品管理。

顺特的每个员工都有责任阻止引进或使用在化学品和材料黑名单中被禁止的任何化学品或材料。

对于包含受控化合物的化学品和材料，在采购和使用之前，必须通过顺特对《供应商管理程序》、《采购过程控制程序》的放行程序进行审批并通过。

未能遵守此程序则违背适用法律，并会导致行政处罚和/或法律诉讼。

如果有必要通过此程序引进一种受限制的化学品或材料，关于该受限制化学品的需求情况，该化学品或材料的请求引进人有责任形成记录文件。该文件必须包含全面的HSE（健康、安全和环境）评估，成本效益分析，以及总工程师和首席工艺工程师签名的逐步淘汰计划。

在顺特，供应商管理部要负责以下事项：

- 对于所有要签署的采购协议，添加关于顺特化学品和材料黑名单的要求。
- 只采购满足本化学品和材料黑名单要求的化学品和材料。

首席工艺工程师/安委会与质量监理室有责任进行以下事项：

- 根据明确的审批标准对3E MSDS数据库中的化学品进行审批。
- 就HSE（健康、安全和环境）方面的问题提供支持。

在《危险化学品环境/安全管理程序》中，可以看到关于职责和责任的更详细描述。

5. Accountabilities, responsibilities

The Engineer in Chief, the Director of Product and the Director of Operations are accountable for Chemical Management within their organisation.

Every person in Sunten is responsible for preventing the introduction and application of any chemical or material that is prohibited according to the Sunten Chemical and Material Blacklist.

Chemicals and materials containing regulated compounds must be approved and released before purchase and use via the Sunten release for purchase process, such as <Supplier Management Program> and <Procurement Process Control Program>.

Failure to adhere to this process constitutes a breach of applicable laws and can result in disciplinary and/or legal action.

If it is necessary to introduce a restricted chemical or material via this process, the requester of the chemical or material is responsible for documenting the need for the restricted chemical. This documentation must include a thorough HSE evaluation,

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 4 / 30

a cost-benefit analysis and a phase out plan signed by the responsible the Engineer in chief and the Chief Process Engineer.

at Sunten, Supplier Management Dept. is responsible for:

- Adding requirements about the Sunten Chemical and Material Blacklist to all purchase agreements that are to be signed off.

- Only purchasing chemicals or materials that fulfil the requirements of the Chemical and Material Blacklist.

The Chief Process Engineer /The Safety Board and the Quality Supervision Office are responsible for:

- Approving chemicals in the 3E MSDS database according to defined approval criteria.

- Supporting the organisation in HSE questions.

A more detailed description of the roles and responsibilities can be found in the process <Hazardous Chemical Environment/Safety Management Program>.

6. 顺特化学品和材料的审批

新的化学品和材料的主张使用人负责申请，其主管负责校核，首席工艺工程师负责审核，总工程师负责审批。

在顺特化学品和材料黑名单中被列为禁用的化学品和材料不可得到顺特的审批通过。被列为受限制使用的化学品和材料仅可以得到有条件的审批通过。

在将化学品和材料引进顺特时，应选择对环境和人员健康影响最少的化学品或材料。

顺特遵循的优先次序如下：

- 选择危害较低的化学品/材料（例如：可以用水基涂料替代溶剂基涂料）
- 评估风险，并优化工作流程与环境，使与化学品/材料相关的风险得以消除或最小化（例如：身体接触，吸入等）
- 规定/使用个人防护设备（PPE），以预防或限制暴露于危险之中。

如果在本组织内，关于是否应审批或不审批某种物质有任何分歧（例如：生产运行需要快速审批），在要求人提出要求的情况下，可以举行所有当事方参加的小范围的特别会议来决定后续步骤，并形成文件。

随后，由安委会、质量监理室牵头组织相关部门经理、各工艺室主管、首席工艺工程师、产品总监及总工程师做出最终决定。

6.1 材料的审批

正如顺特的每位员工都有责任确保被引进顺特的任何化学物不是顺特化学品和材料黑名单上禁用的，此规定同样适用于可能含有潜在地被禁用或受控制化合物作为某种成分的各种采购材料。在这种情况下，应采取预防措施。

这样的材料的例子可能是：

- 含有禁用阻燃剂的塑料或电缆。
- 用受控制的重金属做表面处理的部件（例如：Cr（6））
- 包含石棉的摩擦和绝缘材料
- 包含消耗臭氧层物质的冷却系统
- 包含甲醛等的地板。

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 5 / 30

在有疑问的情况下，应联系化学品批准人以得到关于有疑问材料的建议。

6. Approval of Chemicals and Materials in Sunten

The requester of the new chemicals and materials hands in the application ,the supervisor is responsible of the check, the Chief Process Engineer is responsible of the audit, the Engineer in Chief is responsible of the approval.

Chemicals and materials cannot be approved in Sunten if they are listed in the Sunten Chemical and Material Blacklist as prohibited. If they are listed as restricted they can only be conditionally approved.

When introducing chemicals and materials to Sunten, the chemical or material with the least impact on the environment and personal health and safety shall be selected. The Sunten prioritisation order to be followed is:

- Choose the less hazardous chemical/material (e.g. an alternative to solvent-based paint could be water-based paint)
- Assess risk and optimise the work process and environment to eliminate or minimise risks related to the chemical/material (e.g. physical contact, inhalation)
- Prescribe/use Personal Protective Equipment (PPE) to prevent or limit exposure to risks.

If there are any disagreements within the organisation about whether a substance should be approved or not (e.g. swift approval is needed for production), at the request of the requester a local ad-hoc meeting can be held with all parties involved to decide on and document the next steps. The final decision will then be made by an ad-hoc committee called by The Safety Board and The Quality Supervision Office. The Engineer in Chief, the Director of Product ,the Chief Process Engineer, the relevant Manager and the relevant process supervisor should be present at it.

6.1 Approval of Materials

Just as every person in Sunten is responsible for making sure any chemicals introduced to Sunten are not prohibited according to the Sunten Chemical and Material Blacklist, the same applies for every material purchased that might contain a potentially prohibited or regulated compound as an ingredient. In this case, precautionary measures shall be taken.

Examples for such materials might be:

- Plastic or cables containing prohibited flame retardants
- Components that are surface treated with regulated heavy metals (e.g. Cr (6))
- Brakes, insulating materials containing asbestos
- Cooling systems containing ozone-depleting substances
- Floorings containing formaldehydes etc.

In case of doubt, the Chemical Approval Person⁴) shall be contacted to seek advice on the material in question.

7. 供应商的义务

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 6 / 30

在所有采购协议（PA）中，包括技术采购规范（TPS）中，必须声明以下内容：

“供应商有义务确保，在任何时候为顺特提供的产品或服务中使用的材料和化学品都满足本化学品和材料黑名单中的要求。

被适用法律禁用的或本化学品和材料黑名单中列出的化学品和材料不得出现在提供给顺特的产品或服务中。

本化学品和材料黑名单中受限制的化学品和材料，需依据适当的逐步淘汰计划，才可以出现在提供给顺特的产品或服务中。

在“<http://www.sunten.com.cn/jszx/txgl/>（或 <http://202.104.26.69/>）”网址，可以查看持续更新的化学品和材料黑名单。

向顺特供应的化学品必须带有满足法律要求的并以当地语言书写的材料安全数据表（MSDS）。更新的材料安全数据表在发布后应立即发给顺特。

供应商必须标示并管理那些如果被泄漏到环境中会对工人和社区造成某种危害的化学品和其他材料，并且必须确保对这样的材料进行安全的操作、移动、存储、回收或重复使用、以及处置。供应商应采取措施预防危险物质的意外泄漏，以及对当地社区的不良环境影响。

7. Supplier's obligations

The following must be stated in all purchase agreements (PA), incl. Technical Purchase Specifications (TPS).

“The SUPPLIER is obligated to ensure that materials and chemicals used in products or services delivered to Sunten at any point in time fulfil the requirements stated in the Chemical and Material Blacklist.

Chemicals and materials prohibited by applicable law or set out in the Chemical and Material Blacklist must not be present in products or services sold to Sunten. Chemicals and materials that are restricted in the Chemical and Material Blacklist can only be present in products or services sold to Sunten in accordance with phase out plans in place.

The continuous updated Chemical and Material Blacklist can be found on “<http://www.sunten.com/cn/iszx/txgl>”.

Chemicals supplied to sunten must be delivered with Material Safety Data Sheets (MSDS) fulfilling legal requirements and in the local language. Updates of MSDS must be sent to Sunten immediately after release.

The SUPPLIER must identify and manage chemicals and other materials posing a hazard to workers and the community if released into the environment and must ensure safe handling, movement, storage, recycling or reuse, and disposal of such materials. The SUPPLIER shall work to prevent accidental releases of hazardous materials and adverse environmental impact on the local community.

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 7 / 30

8. 用于遵守顺特化学品和材料黑名单要求的文件

用于化学品审批的文件（批准日期、批准人姓名、批准表单和物料安全数据表（MSDS））将在文件系统中归档。

对于不要求MSDS，但顺特需要关于所涉及化合物完全说明的材料，顺特将要求供应商提供关于材料组成的完整说明。将部件/组件引入顺特的人有责任遵守顺特化学品和材料黑名单的规定。

如果供应商不能交付一份完整的材料声明，供应商必须签署一份执行顺特化学品和材料黑名单的协议。我们将不定期对供应商进行审查，如果供应商不符合我们的标准，会导致供应商失去其已通过审批的资格。

8. Documentation for compliance with Sunten Chemical and Material Blacklist

Documentation for the approval of chemicals (date for approval, name of approver, approval form and MSDS) will be filed in the documentation system.

For materials where a MSDS is not required but Sunten needs full clarification on the compounds involved, Sunten will seek a full declaration of the material content from the supplier. The person who introduces the part/component into Sunten is responsible for compliance with the sunten Chemical and Material Blacklist.

If the Supplier is not able to deliver a full material declaration, the supplier must sign an agreement of fulfilment to the Sunten Chemical and Material Blacklist. Suppliers will occasionally be audited and noncompliance to our standards can lead to a loss of their approval status.

9. 顺特化学品和材料的黑名单

顺特化学品和材料黑名单被分入四个表格，详见附录2:

9.1 图表1、2和3

这些表格列出被分类为致癌的、致突变的、有毒的或对生殖有害的物质或材料，或被分类为对身体或环境有害的物质或材料。这些禁用或限制基于整个产品的分类，而不是基于物质中某单一成分。

在这些表格中使用的分类依据CLP（物质和混合物的分类、标签和包装）的有效版本，而CLP基于联合国全球协调制度（UN GHS）、ACGIH（美国政府工业卫生学家会议）、IARC（国际癌症研究机构）、以及世界卫生组织的癌症研究机构的研究结果。

9.2 表4

因当前的法律要求或正起草的法律要求，因显示严重健康和安全风险的分类或因被维斯塔斯管理层认定而被禁用的或限制的化学品和材料。

在“参考文献”章节中列出了顺特化学品和材料黑名单所依据的法律要求或协定。

在可用的情况下，按照CAS号（化学文摘登记号）指定成分。

包含表4中所列成分的产品或者被禁用或者受限制的使用。禁用/限制的应用如参考的法律要求中所述。

9.3 被禁用的或受限制的化学品/材料

9.3.1 被禁用的

在黑名单中，被禁止的化学品和成分用a1标识。由于分类而被禁止的化学品或包含一种被禁止成分的化学品不得在顺特使用，并且不得出现在为顺特提供的产品中。

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 8 / 30

9.3.2 限制使用

在黑名单中,受限制的材料、化学品和成分用a2标识。可以使用受限制的材料和化学品,但是在进行了全面的评估之后才能得到有条件的审批通过。

评估必须包含以下内容,并以文件形式进行记录:

- 任何替代产品的评估。评估必须基于HSE评估、环境可行性和应用该材料/化学品需要的技术特征,以及市场上的适用性。如果无法得到更适当的替代品,要对该原因进行描述,并且在三年之内必须进行新的评估。如果有合适的替代品,该文件必须包含替代的时间表。

- 健康和安全风险评估:必须评估所有可能的暴露情况。具有事先和事后的可能的保护措施,例如:

工作场所和个人防护设备的安排。

- 环境风险评估:必须评估所有可能的环境影响。

公司**工艺室**将审查该评估,评估必须由**工艺首席工程师和总工程师**签字,并交至公司**工艺室**存档。

9. Sunten Chemical and Material Blacklist

The Sunten Chemical and Material Blacklist is divided into the 4 tables which can be found in Annex 2:

9.1 Tables 1, 2 and 3

These tables list substances or materials classified as carcinogenic, mutagenic, toxic or toxic to reproduction, or are classified as physical or environmental hazards. The prohibition or restriction is based on the classification of the products as a whole - and not on the classification of the single ingredients in the substance. The classification used in these tables is according to valid versions of CLP (Classification, Labelling and Packaging of substances and mixtures) which are based on the United Nations Globally Harmonised System (UN GHS) as well as ACGIH (American Conference on Governmental Industrial Hygienists) and IARC (International Agency for Research on Cancer), WHO' s cancer research institute.

9.2 Table 4

Chemicals and materials are prohibited or restricted due to present or draft legal requirements, due to classifications that indicate severe health and safety risks or because it is decided by Management in Sunten.

A list of the legal requirements or agreements that creates the basis for the Sunten Chemical and Material Blacklist is set out in the chapter "References".

The ingredient is specified by CAS-No. where available.

Products containing ingredients listed in table 4 are either prohibited (1) or restricted (2). Prohibition/restriction applies as described in the referenced legal requirement.

9.3 Prohibited or restricted chemicals/materials

9.3.1 Prohibited

Prohibited chemicals and ingredients are marked with a 1 in the Blacklist. Chemicals that are prohibited due to classification or because they contain a

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：		
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 9 / 30

prohibited ingredient are not to be used in Sunten and are not to be present in products delivered to Sunten.

9.3.2 Restricted

Restricted materials, chemicals and ingredients are marked with a 2 in the Blacklist. Restricted Materials and Chemicals can be used, but will be conditionally approved after a thorough evaluation has been conducted.

This evaluation must contain and document:

- Assessment of any alternative products. The evaluation must be based on a HSE assessment, economic viability and technical features needed to apply the material/chemical, as well as availability on the market. If no better suitable alternatives are available, the reason for this is described and a new evaluation must be conducted within a 3 year period. If an alternative is available, a timeline for the substitution must be part of the documentation.

- Health- and Safety Risk assessment: All possible exposures must be evaluated. Before and after possible protective measures are in place such as arrangement of the workplace and PPE.

- Environmental Risk assessment: All possible impacts on the environment must be evaluated.

The evaluation will be reviewed by **Company Process**, must then be signed by the Engineer in chief and the **Chief Process Engineer** and sent to **Company Process** for documentation.

10. 参考顺特电气内部程序和资料

1. 在ISO电子文档系统中对于采购程序的化学品放行, QG/SEC. 12、QG/SEC. 13(注)其余程序资料待补充

10. Reference to Sunten Internal Procedures and Documents

1. **Chemical release for purchase processes in ISO Electronic Documents System, QG/SEC. 12、QG/SEC. 13.**

附录1 定义

化学品	某种化学元素或它的化合物
有危害物质	可能进入人体, 导致任何潜在有毒的、有害的、刺激性的、腐蚀的或窒息性的, 或在正常预期用途使用中对环境有害的物质或混合物, 包括化学品整个类别, 例如: 皂类、油类、酸等。
材料	一种纯化学品或数种化学品的均质混合物。在此语境下, 材料指包含某种可能被禁止或受控制的化合物的所有材料。
成分	是某种混合物一部分的某种化学品。
CAS号	标识某种特定化学品的明确编号。化学文摘社是美国化学学会的一部分, 它维护了一个化合物和序列的数据库。CAS 数据库目前包含5千5百多万的各种有机和无机化合物。每个CAS条目都用CAS注册号或CAS缩写编号标识。

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印： 		
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 10 / 30

MSDS	材料安全数据表（MSDS）是一份书面文件，它概括了各种成分和分类信息，以及以安全的方式处理和使用的程序。MSDS必须根据适用的法律、法规来概述。
技术数据表（TDS）	来自供应商的、关于化学产品正确使用信息。
HSE 评估	评定健康、安全和环境风险的评估
分类	标识化学品危害性的系统。化学品和材料黑名单中的表1、2和3基于与联合国全球协调系统（GHS）一致的分类规则。
危险品	若在MSDS中第14部分提到适用的运输规定，化学品和材料将作为危险物品运输。例如： ADR（公路运输） RID（铁路运输） IMDG（海运） ICAO-TI（空运）
审批标准	当在顺特审批化学品时，要遵守一套全球认可的规则 - 链接至SPP中的审批流程。
化学品审批表格	在审批前，要由化学品要求人和当地HSE/可持续性发展部填写的表格。该表格-链接至VPP中的审批流程。
组织	整个顺特电气设备有限公司
运营	顺特的一部分，例如：一个业务单位（BU），或一个更小的实体，例如：生产现场、服务现场等。
化学品的审批者	在本组织的一个特定部门，被指定负责审批化学品的人。
基本用户	顺特的每个员工

Annex 1

Definitions

Chemical	A chemical element or its compounds
Hazardous Substance	Any potentially toxic, harmful, irritating, corrosive or asphyxiant substance or a mixture thereof which can enter the human body or be harmful to the environment during its normal intended use, including the entire spectrum of chemicals, e.g. soaps, oils, acids, etc.
Material	A pure chemical or a homogenous mixture of chemicals. Material in this context refers to all materials containing a potentially prohibited or regulated compound as an ingredient
Ingredient	A chemical that is part of a mixture
CAS No.	Unambiguous number that identifies a particular chemical. The Chemical Abstract Service is part of the American Chemical Society and maintains a database of chemical compounds and sequences. The CAS database currently contains over 55 million different organic and inorganic chemical compounds. Each CAS entry is identified by

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
文件编号: WI813	发行编号: 1
实施日期:2017/02/10	页数: 11 / 30

	its CAS Registry Number, or CAS Number for short
MSDS	The Material Safety Data Sheet is a written document that outlines ingredients and classification information and procedures for handling and working with chemicals in a safe way. The MSDS must be outlined according to applicable legislation
Technical Data Sheet (TDS)	Information from the supplier on the proper use of the chemical product
HSE Assessment	Assessment that evaluates Health, Safety and Environmental risks
Classification	Systems that identify the hazards of a chemical. Tables 1, 2 and 3 in the Chemical and Material Blacklist are based on classification rules according to the UN Globally Harmonised System (GHS)
Dangerous Goods	Chemicals or materials are to be transported as Dangerous Goods if section 14 in the MSDS refers to any applicable transport regulation, e. g. ADR (Transport by Road) RID (Transport by Railway) IMDG (Transport by Sea) ICAO-TI (Transport by Air)
Approval Criteria	Globally agreed set of rules to be followed when approving chemicals in Sunten - linked to the Approval Process in VPP
Chemical Approval Form	Form to be filled out by chemical requester and local HSE/sustainability department before approval. The form is linked to the approval process in VPP
Organisation	Entire Sunten Wind Systems A/S Corporation
Operation	Part of the Sunten Wind Systems A/S Corporation, e. g. a Business Unit (BU), or a smaller entity such as a Production Site, Service Site etc.
Chemical Approver	Person appointed to be responsible for approving chemicals in a specific part of the organization.
Basic User	Every person in Sunten.

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 12 / 30

附录2

顺特化学物 and 材料黑名单

表1: 被归类为致癌的、致突变的、有毒的或对生殖有害的产品/材料

按照指引 67/548/ECC, Ref. 8进行的分类	ACGIH 美国政府 工业卫生 学者会议	IARC 国际癌症 研究 机构	危险说明 GHS-CLP, ref. 9	危险等级 和 种类	1=禁用 2=限制使用
突变:					
Muta. Cat. 1; R46			H340	Muta. 1A	2
Muta. Cat. 2; R46			H340	Muta. 1B	2
Muta. Cat. 3; R68			H341	Muta. 2	2
致癌物:					
Carc. Cat. 1; R45 Carc. Cat. 1; R49 Carc. Cat. 2; R45 Carc. Cat. 2; R49	A1和A2	1、2A和2B 组	H350 H350i	Carc. 1A Car c. 1B	2
Carc. Cat. 3; R40			H351	Carc. 2	2
对生殖有害					
Repr. Cat. 1; R60 Repr. Cat. 2; R60 Repr. Cat. 1; R61 Repr. Cat. 2; R61			H360 F H360 D H360 FD H360 Fd H360 Df	Repr. 1A Repr. 1B	2
Repr. Cat. 3; R62 Repr. Cat. 3; R63			H361 f H361 fc H361 fd	Repr. 2	2
R64			H362	可能导致 伤害母乳 喂 养的婴幼儿	2
有毒的:					
T+; R27 T+; R26			H310 H330 (蒸 气)	急性中毒1	2
T+; R28 T+; R26 T; R23			H300 H330 (气体/灰	急性中毒2	2

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 13 / 30
--------------------	----------------	------------------------	--------------------

			尘/薄雾) H330 (蒸 汽)		
T; R25 T; R24 T; R23			H301 H311 H331	急性中毒3	2
T; R48/23 T; R48/24 T; R48/25			H372	STOT RE 1/ RE 2	2
过敏					
R42			H334	呼吸过敏1	2

Annex 2

Sunten Chemical and Material Blacklist

Table 1; Products/Materials classified as Carcinogenic, Mutagenic, Toxic or Toxic to Reproduction

Classification under directive 67/548/ECC, ref. 8	ACGIH American Conference of Governmental Industrial Hygienists	IARC International Agency for Research on Cancer	Hazard statement GHS-CLP, ref. 9	Hazard Class and Category	1=Prohibited 2=Restricted
Mutagenic:					
Muta. Cat. 1; R46			H340	Muta. 1A	2
Muta. Cat. 2; R46			H340	Muta. 1B	2
Muta. Cat. 3; R68			H341	Muta. 2	2
Carcinogenic:					
Carc. Cat. 1; R45 Carc. Cat. 1; R49 Carc. Cat. 2; R45 Carc. Cat. 2; R49	A1 and A2	Group 1, 2A and 2B	H350 H350i	Carc. 1A Carc. 1B	2
Carc. Cat. 3; R40			H351	Carc. 2	2

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 14 / 30
--------------------	----------------	------------------------	--------------------

Toxic to reproduction:					
Repr. Cat. 1; R60 Repr. Cat. 2; R60 Repr. Cat. 1; R61 Repr. Cat. 2; R61			H360 F H360 D H360 FD H360 Fd H360 Df	Repr. 1A Repr. 1B	2
Repr. Cat. 3; R62 Repr. Cat. 3; R63			H361 f H361 fc H361 fd	Repr. 2	2
R64			H362	May cause harm to breastfed children	2
Toxic:					
T+; R28 T+; R26 T; R23			H300 H330 (gas/dust/m ist)H330 (vapour)	Acute Tox. 2	2
T; R25 T; R24 T; R23			H301 H311 H331	Acute Tox. 3	2
T; R39/23 T; R39/24 T; R39/25 T+; R39/26 T+; R39/27 T+; R39/28			H370	STOT SE 1/SE 2	2
T; R48/23 T; R48/24T; R48/25			H372	STOT RE 1/ RE 2	2
Sensitising:					
R42			H334	Resp. Sens. 1	2

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：		
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 15 / 30

表2: 被归类为身体危害的产品/物质

按照指引67/548/ECC, ref. 8进行分类	危险说明GHS-CLP, 参见9	危害等级和分类	1=禁用 2=限制使用
身体危害			
R1, R6, R9, R19, R2, R3, R4, R5, R16, R18		爆炸品	2

表3: 被归类为环境危害的产品/材料

按照指引67/548/ECC, ref. 8进行分类	危险说明GHS-CLP, 参见9	危害等级和分类	1=禁用 2=限制使用
环境危害			
R50	H400	水生生物急性1	2
R50/53	H410	水生生物慢性1	2
R59	EUH059	臭氧层	2

Table 2; Products/materials classified as physical hazards

Classification under directive 67/548/ECC, ref. 8	Hazard statement GHS-CLP, ref. 9	Hazard Class and Category	1=Prohibited 2=Restricted
Physical hazards			
R1, R6, R9, R19, R2, R3, R4, R5, R16, R18		Explosives	2

Table 3; Products/materials classified as environmental hazards

Classification under directive 67/548/ECC, ref. 8	Hazard statement GHS-CLP, ref. 9	Hazard Class and Category	1=Prohibited 2=Restricted
Environmental hazards			
R50	H400	Aquatic Acute 1	2
R50/53	H410	Aquatic Chronic1	2
R59	EUH059	Ozone layer	2

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 16 / 30

表4: 被禁止使用或限制使用的化合物/成分

类别	物质	CAS号	1= 禁用 2= 限制	可能存 在于	参考文 献
REACH 候选列 表	http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp		1		[参考文件 2]
多氯代 三苯 联苯 多氯代 三苯三 苯基	PCB (二苯) 如果浓度大于0.005 w/w% PCT (三苯) 如果浓度大于0.005 w/w%	1336-36-3 61788-33-8 12642-23-8	1	冷凝 剂, 变 压器和 涂料, 密封和 塑料中 的物质	[参考文件 2/3/4]
含氯化 合物	三氯甲烷	67-66-3	1	溶剂	[参考文 件 2]
	四氯甲烷	56-23-5	1	溶剂	[参考文件 2/5]
	1, 1, 1-三氯乙烷	71-55-6	1	溶剂	[参考文件 2/5]
	1, 1, 2-三氯乙烷	79-00-5	1	溶剂	[参考文 件 2]
	1, 1, 1, 2-四氯乙烷	630-20-6	1	溶剂	[参考文 件 2]
	1, 1, 2, 2-四氯乙烷	79-34-5	1	溶剂	[参考文 件 2]
	五氯乙烷	76-01-7	1	溶剂	[参考文 件 2]
	1, 1-二氯乙烯	75, -35-三 氯乙	1	溶剂	[参考文 件 2]
六氯乙烷	67-72-1	1	用于从 熔融金 属去除 杂质,	[参考文 件 2]	

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 17 / 30
-------------	---------	-----------------	-------------

				从矿石或熔炼产物还原金属，以及改善各种金属和合金质量的溶剂。	
	链烷类, C10-C13, 氯代(短链氯化石蜡) (SCCP), 用于金属的加工。	85535-84-8	1	金属的加工, 例如: 润滑油和添加剂	[参考文件 2]
	一甲基四氯-三苯基-甲烷	76253-60-6	1	在电容器、变压器的液体电介质和液压油中	[参考文件 2]
	一甲基二氯-二苯甲烷	编号CAS 编号 (EC. 编号: 400-140-6)	1	在电容器、变压器的液体电介质和液压油中	[参考文件 2]
	一甲基-二溴-联苯甲烷 (DBBT)	99688-47-8	1	在电容器、变压器的液体电介质和液压油中	[[参考文件 2]
	灭蚁灵 (氯化烃类杀虫剂)	2385-85-5	1	阻燃材料	[参考文件

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
--	-------------

文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 18 / 30
-------------	---------	------------------	-------------

					2/3/4]
--	--	--	--	--	--------

Table 4; Chemical compounds/ingredients whose use is prohibited or restricted

Group	Substance	CAS No.	1=Prohibited 2=Restricted	Can be found in	Reference
REACH Candidate list	http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp		1		[Ref 2]
Polychlorinated Biphenyl Polychlorinated triphenyl	PCB if concentration is greater than 0.005 w/w% PCT if concentration is greater than 0.005 w/w%	1336-36-3 61788-33-8 12642-23-8	1	Condensates, transformer, substances in paint, sealing and plastic	[Ref 2/3/4]
Chlorinated compounds	Chloroform	67-66-3	1	Solvent	[Ref 2]
	Tetrachloromethane	56-23-5	1	Solvent	[Ref 2/5]
	1, 1, 1-trichloroethane	71-55-6	1	Solvent	[Ref 2/5]
	1, 1, 1, 2-tetrachloroethane	630-20-6	1	Solvent	[Ref 2]
	1, 1, 2-trichloroethane	79-00-5	1	Solvent	[Ref 2]
	1, 1, 2, 2-tetrachloroethane	79-34-5	1	Solvent	[Ref 2]
	Pentachloroethane	76-01-7	1	Solvent	[Ref 2]
	1, 1-dichloroethylene	75-35-4	1	Solvent	[Ref 2]
	Hexachlorethan	67-72-1	1	Solvent for removing impurities from molten metals, recovering metals from ores or	[Ref 2]

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
---	-------------

文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 19 / 30
-------------	---------	------------------	-------------

				smelting products and improving the quality of various metals and alloys	
	Alkanes, C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs) for processing of metals	85535-84-8	1	Processing of metals i.e. lubricants and additives	[Ref 2]
	Monomethyltetrachlorodiphenylmethane	76253-60-6	1	Dielectric fluid in capacitors, transformers and hydraulic fuel	[Ref 2]
	Monomethyldichlorodiphenylmethane	No CAS No. (EC. No: 400-140-6)	1	Dielectric fluid in capacitors, transformers and hydraulic fuel	[Ref 2]
	Monomethyl-dibromodiphenyl Methane (DBBT)	99688-47-8	1	Dielectric fluid in capacitors, transformers and hydraulic fuel	[Ref 2]
	Mirex	2385-85-5	1	Flame retardant material	[Ref 2/3/4]

表4 续

类别	物质	CAS号	1=禁用 2=限制	可能存在于	参考文献
有机化合物	产品中的苯, 浓度在0.1 % w/w以上。该禁止不适用于汽油	71-43-2	1	在燃料、涂料、溶剂、润滑油中的成分	[参考文件2]

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 20 / 30
--------------------	----------------	------------------------	--------------------

	壬基酚-该禁止不用于用于旧涡轮机维护和再制造的环氧树脂材料。壬基酚苯基蒽-聚丙烯酸酯	25154-52-3 9016-45-9	1	金属加工	[参考文件2]
	2, 4, 6-3-叔丁基苯酚	732-26-3	1	燃料的添加物以及	[参考文件4]
消耗臭氧层物质 i. e. CFCs, Hal-ons, HBFC, HCFC, etc. HC FCs	三氯氟甲烷 (CFC-11)	75-69-4	1	冷却剂, 氟利昂	[参考文件5]
	二氯二氟甲烷(CFC-12)	75-71-8	1	冷却剂, 氟利昂	[参考文件5]
	三氯三氟乙烷 (CFC-113)	76-13-1	1	冷却剂, 氟利昂	[参考文件5]
	二氯四氟乙烷 (CFC-114)	76-14-2	1	冷却剂, 氟利昂	[参考文件5]
	一氯五氟乙烷 (CFC-115)	76-15-3	1	冷却剂, 氟利昂	[参考文件5]
	溴氯二氟甲烷 (卤代烷-1211)	353-59-3	1	阻燃材料	[参考文件5]
	三氟溴甲烷 (卤代烷-1301)	75-63-8	1	阻燃材料	[参考文件5]
	二溴四氟乙烷(卤代烷-2402)	124-73-2	1	阻燃材料	[参考文件5]
	溴氟碳氢化合物 (HBFC)	几个选项	1		[参考文件5]
	溴氯甲烷	74-97-5	1		[参考文件5]
	溴甲烷	74-83-9	1	阻燃材料	[参考文件5]
	二氟一氯甲烷 (HCFC-22)	75-45-6	1	冷却剂	[参考文件5]
	二氯三氟乙烷 (HCFC-123)	306-83-2	1	冷却剂	[参考文件5]
	二氯一氟乙烷 (HCFC-141)	1717-00-6	1	冷却剂	[参考文件5]
	氯二氟乙烷 (HCFC-142b)	75-68-3		冷却剂	[参考文件5]
温室气体	SF6 (六氟化硫)	2551-62-42	2	开关装置的绝缘物	[参考文件6]
二苯醚, 多溴衍生物	二苯醚, 五溴衍生物和八溴衍生物	32534-81-9 32536-52-0	1	塑料、橡胶和电器商品的阻燃	[参考文件4]

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
--	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 21 / 30
--------------------	----------------	------------------------	--------------------

				剂	
--	--	--	--	---	--

Table 4 continued

Group	Substance	CAS No.	1=Prohibited 2=Restricted	Can be found in	Reference
Organic compounds	Benzene in products with concentrations above 0.1 % w/w. The ban does not apply to gasoline	71-43-2	1	Ingredient in fuel, paint, solvents, lubricants	[Ref 2]
	Nonylphenol - The ban does not apply to epoxy materials used for maintenance or reproduction of old turbines. Nonylphenol ethoxylate	25154-52-3 9016-45-9	1	Processing of metals	[Ref 2]
	2,4,6-tri-tertbutylphenol	732-26-3	1	Additive to fuel and	[Ref 4]
Ozone depleting substances i.e. CFCs, Hal-ons, HBFC, HCFC, etc. HCFCs	Trichlorofluormethane (CFC-11)	75-69-4	1	Coolant, Freon	[Ref 5]
	Dichlorodifluormethane (CF C-12)	75-71-8	1	Coolant, Freon	[Ref 5]
	Trichlorotrifluor-ethane (CFC-113)	76-13-1	1	Coolant, Freon	[Ref 5]
	Dichlorotetrafluoroethane (CFC-114)	76-14-2	1	Coolant, Freon	[Ref 5]
	Chloropentafluoroethane (CFC-115)	76-15-3	1	Coolant, Freon	[Ref 5]
	Bromochlorodifluoromethane (halon-1211)	353-59-3	1	Flame retardant material	[Ref 5]
	Trifluorobromomethane (halon-1301)	75-63-8	1	Flame retardant material	[Ref 5]
Dibromotetrafluoroethane (halon-2402)	124-73-2	1	Flame retardant	[Ref 5]	

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 22 / 30

				material	
	Hydrobromofluorocarbon (HBFC)	Several options	1		[Ref 5]
	Bromochloro-methane	74-97-5	1		[Ref 5]
	Methyl bromide	74-83-9	1	Flame retardant material	[Ref 5]
	Chlorodifluoro-methane (HCFC-22)	75-45-6	1	Coolant 1	[Ref 5]
	Dichlorotrifluoroethane (HCFC-123)	306-83-2	1	Coolant	[Ref 5]
	Dichlorofluoroethane (HCFC-141)	1717-00-6	1	Coolant	[Ref 5]
	Chlorodifluoroethane (HCFC-142b)	75-68-3		Coolant	[Ref 5]
Greenhouse gas	SF6 (Sulphur hexafluoride)	2551-62-4	2	Insulator in switch gear	[Ref 5/6]
Diphenyl ether, Polybromo derivative	Diphenyl ether, Pentabromo derivative and octabromo derivative	32534-81-9 32536-52-0	1	Fire retardant in plastics, rubber and electrical goods.	[Ref 2/4]

表4 续

组	物质	CAS号	1=禁用 2=限制	存在于	参考文献
多溴联苯	多溴联苯 (PBB)	[参考文件 -65/-1]	1	在塑料中使用的阻燃化学品	[参考文件2/4]
	在电气设备中高于0.1%的多溴化联苯 (PBB)		2	电路板	[参考文件 1]
	多溴联苯醚 (PBDE)	不适用	1	在塑料中使用的阻燃化学品	[参考文件2/4]
	在电气设备中高于		2	电路板	[参考文件 1]

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 23 / 30
--------------------	----------------	------------------------	--------------------

	0.1%的多 溴化二苯基醚 (PBED)				
石棉纤维	石棉	12001-28-4 12001-29-5 12172-73-5 132207-32-0 1332-21-4 77536-66-4 77536-67-5 77536-68-6	1	制动器、绝 缘材料和水 泥	[参考文件2/ 4]
有机锡 化合物	有机锡化合物-该禁 止适用于作为涂料中 以及工业用水处理中 的杀菌剂的应用。描 述见参考3。	几个选项	1	用于预防水 下装置和设 备被微生物、植物或 动物附着的 化合物。	[参考文件 2]
	三取代有机锡化合物 (TBT和TPT)，二丁 基-锡 (DBT) 和二辛 基锡 (DOT) 在浓度超 过0.1w/w %中禁止。 作为锡计算该禁止按 照法律要求中的描述 应用。	几个CAS号	1	单或双双组 份硫化密封 剂和粘合 剂，软聚氯 乙烯型材。 在聚氨酯系 统中的加速 剂 (涂料、 粘合剂，填 充剂)	[参考文件 9]

Table 4 continued

Group	Substance	CAS No.	1=Prohi- bited 2=Re- stricted	Can be found in	Reference
Polybromi nated biphenyls	Polybrominated biphenyls (PBB)	59536-65-1	1	Flame retardant chemical used in plastics	[Ref 2/4]

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist	控制印:
--	-------------

文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 24 / 30
-------------	---------	------------------	-------------

	Polybrominated biphenyls (PBB) above 0.1% in electrical equipment		2	Circuit board	[Ref 1]
	Polybrominated diphenyl ethers (PBDE)	Not available	1	Flame retardant chemical used in plastics	[Ref 2/4]
	Polybrominated diphenyl ethers (PBDE) above 0.1% in electrical equipment		2	Circuit board	[Ref 1]
Asbestos fibres	Asbestos	12001-28-4 12001-29-5 12172-73-5 132207-32-0 1332-21-4 77536-66-4 77536-67-5 77536-68-6	1	Brakes, insulating material, cement	[Ref 2/4]
Organostannic compounds	Organostannic compounds - the ban is for use as a biocide in paint and in the treatment of industrial water as described in Ref. 3	Several options	1	Compounds for preventing fouling by microorganisms, plants or animals of submerged appliances and equipment	[Ref 2]
	Tri-substituted organostannic compounds (TBT and TPT), Dibutyltin	Several CAS No.	1	One- or two component vulcanisation	[Ref 9]

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 25 / 30
-------------	---------	-----------------	-------------

	(DBT) and Dioctyltin (DOT). Prohibited in concentrations greater than 0.1w/w %. Calculated as Sn. The ban applies as described in the legal requirement			sealants and adhesives, soft PVC profiles. Accelerators in polyurethane system (paints, adhesives, fillers)
--	---	--	--	---

表4 续

组	物质	CAS号	1=禁用 2=限制	存在于	参考文献
苯乙烯和聚酯(单体的)	此禁止不适用于旧涡轮机维护和修理用的材料。	几个选项	2	苯乙烯单体用于制造一些玻璃纤维增强的零部件以及生产含苯乙烯的聚合物中。 (例如: 特定的橡胶零件、真空形成的ABS)。然而, 在制成品中, 单体苯乙烯被转化为聚苯乙烯, 则最终产品不受该限制。	
重金属	铅。该禁止不适用于电气设备	几个选项	1	制动衬片、塑料管、润滑剂、涂料	[参考文件 1]
	铅在电气设备中超过0.1%	几个选项 2	2	蓄电池	[参考文件 1]

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 26 / 30
-------------	---------	------------------	-------------

	汞化合物	几个选项	1	用于防止微生物、植物或动物附着在水下装置和设备上的化合物。	[参考文件 2]
	在电气设备中汞化合物超过0.1%	几个选项	1		[参考文件 1]
	砷化合物	几个选项	1	用于防止微生物、植物或动物附着在水下装置和设备上的化合物。	[参考文件 2]

Table 4 continued

Group	Substance	CAS No.	1=Prohibited 2=Restricted	Can be found in	Reference
Styrene and polyester (monomeric)	The ban does not apply to materials used for maintenance and repair of old turbines	Several options	2	Monomeric Styrene is used for manufacturing some glass fiber reinforced parts and in the production of styrene containing polymers (e.g. certain rubber parts, vacuum formed ABS).	

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期: 2017/02/10	页数: 27 / 30
-------------	---------	------------------	-------------

				However, in the Manufactur-ed product, monomeric styrene is converted to polymeric styrene and the finished products are not subject to the restrict-tion	
Heavy metals	Lead. The ban does not apply to electrical equipment	Several options	1	Brake lining, plastic tubes, lubricant, paint	[Ref 1]
	Lead in electric equipment above 0.1%	Several options	2	Batteries	[Ref 1]
	Mercury compounds	Several options	1	Compounds for preventing fouling by microorgan-isms, plants or animals of submerged appliances and equipment	[Ref 2]

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 28 / 30
--------------------	----------------	------------------------	--------------------

	Mercury compounds above 0.1% in electrical equipment	Several options	1		[Ref 1]
	Arsenic compounds	Several options	1	Compounds for preventing fouling by microorganisms, plants or animals of submerged appliances and equipment	[Ref 2]

表4 续

组	物质	CAS号	1=禁用 2=限制	存在于	参考文献
重金属	镉化合物。该禁止不适用于电池	几个选项	1	电气设备、 电池、成品 塑料产品和 涂料的颜料	[参考文件 2]
	镉在电池中超过 0.01%	几个选项	2		[参考文件 1]
	铬VI： 在水泥和含水泥的预 制品，浓度超过水泥 总干重的0.0002%。该 禁止不适用于表面处 理和电气设备。	几个选项	1	在水泥和含 水泥预制品 热镀锌	[参考文件 2]
	在表面处理中使用的 铬VI	几个选项	2		
	在电气设备中，使用 的铬VI超过0.1%	几个选项	2		[参考文件 1]

Table 4 continued

Group	Substance	CAS No.	1=Prohi- bited 2=Re- stricted	Can be found in	Reference
-------	-----------	---------	--	--------------------	-----------

顺特电气设备有限公司

工作指示： 化学品和材料黑名单 chemical and material blacklist	控制印：
---	-------------

文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 29 / 30
--------------------	----------------	------------------------	--------------------

Heavy metals	Cadmium compounds. The ban does not apply to batteries	Several options	1	Electrical equipment, batteries, colours of finished plastic products and paints	[Ref 2]
	Cadmium above 0.01%in batteries	Several options	2		[Ref 1]
	Chrome VI: in cement and cementcontaining preparations in concentrations above 0.0002% of the total dry weight of the cement. The ban does not apply to surface treatment and to electrical equipment	Several options	1	Cement and cementcon- taining prepara- tions Hot galvanisa- tion	[Ref 2]
	Chrome VI Used in surface treatment	Several options	2		
	Chrome VI used above0.1% in electrical equipment	Several options	2		[Ref 1]

References:

参考文献:

1. The European Parliament and Council regulation 2008/0240 (COD) dated 27. May 2011 on the limitation of the use of certain harmful substances in electrical and electronic equipment) RoHS Directive
 欧洲议会和理事会法规2008/0240 (COD) ，日期：2011年5月27日，关于在电气和电子设备中禁止特定有害物质的使用危害性物质限制指令。
2. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18. December 2006 concerning the Registration, Evaluation, Authorisation and

顺特电气设备有限公司

工作指示: 化学品和材料黑名单 chemical and material blacklist			控制印:
文件编号: WI813	发行编号: 1	实施日期:2017/02/10	页数: 30 / 30

Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

欧洲议会和理事会2006年12月18日的法规 (EC), 编号1907/2006, 关于化学品的登记、评估、批准和限制 (REACH), 成立了一个欧洲化学品管理局, 修订1999/45/EC 指令, 并废除编号793/93的理事会条例 (EEC)、编号1488/94 的委员会条例 (EC)、以及理事会指令 76/769/EEC 和委员会指令91/155/EEC、93/67/EEC、93/105/EC 和2000/21/EC。

3. STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS (POPs) 22. May 2001 (4th meeting held in Geneva, 4-8. May 2009)
关于持久性有机污染物 (POPs) 的斯德哥尔摩公约, 2001年5月22日 (在日内瓦举行的第四次会议, 4-8. 2009年5月4日至8日)
4. ROTTERDAM CONVENTION, PIC CIRCULAR XXV - June 2007
鹿特丹公约, PIC (事先知情同意) 通告XXV - 2007年6月
5. The Montreal Protocol on Substances that Deplete the Ozone Layer
蒙特利尔协定, 关于消耗臭氧层的物质
6. Kyoto
京都
7. European Parliament and Council regulation 67/548/EEC Classification, packaging and labelling of hazardous substances.
欧洲议会和理事会法规67/548/EEC, 有害物质的分类、包装和标签。
8. European Parliament and Council regulation 1272/2008, CLP Classification
欧洲议会和理事会法规1272/2008, CLP分类
10. Council Directive 76/769/EEC regarding restrictions on the marketing and use of organostannic compounds for the purpose of adapting its Annex I to technical progress
理事会指令76/769/EEC, 关于限制有机锡化合物的销售和使用, 目的在于改编其附录I以适应技术进步。