

Material Safety Data Sheet 材料安全数据表

MQP-15-7 Part No.物料号: 10271-070, 20045-070

01. Identification of the substance / preparation and of the company 产品及企业标识

- Product identification 产品名称: MQP-15-7-10271-070 / MQP-15-7-20045-070
- General / Trade names 通用/商品名: NdFeB Crushed Ribbon 钕铁硼快淬磁粉
- Product application 产品的应用: See product information 参见产品信息
- Company 公司: Magnequench (Tianjin) Co., Ltd. 麦格昆磁(天津)有限公司
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02. Composition / Information on ingredients / 成分组成信息

| Substance 物质 | Concentration, Weight %* **重量百分比% | CAS No.美国化学文摘社登记号 | EC No. / 《欧洲商业化学物质名录》编号 | EC Symbol/Risk-Phrases EC 符号/特别风险性质 |
|-----------------|--------------------------------------|-------------------|-------------------------|--|
| Neodymium / 钕 | 23.9 | 7440-00-8 | 231-109-3 | - |
| Boron / 硼 | 1.0 | 7440-42-8 | 231-151-2 | - |
| Cobalt / 钴 | 1.8 | 7440-48-4 | 231-158-0 | Xn, R42/43, R53 |
| Iron / 铁*** | 73.3 | 7439-89-6 | 231-096-4 | - |

In solid form, this material is not hazardous good. 在固体状态下, 此物质不是危险品。

- * Concentrations are typical. Actual concentrations can vary by up to +/-15% depending on product and element.
给出的是典型的重量百分比值, 针对不同类型的产品和不同的元素, 重量百分比值可能在+/-15% 的范围内变化。
- ** Any elements that are not mentioned here have a weight percent <0.1% and are typically impurities.
任何没有提到的元素, 重量百分比都 <0.1%, 一般都为杂质。
- *** Iron is not specified usually other than 'balance' and here a calculated value is shown.
铁通常为平衡物质, 含量没有准确确定, 这里给出的是计算值。

03. Hazards identification / 危害信息

- Emergency Overview / 紧急情况概述: Alloy powder. / 合金粉末。
- Potential Health Impact / 潜在的健康影响:
 - Eye / 眼睛: Contact may cause irritation and redness
眼睛接触会造成眼睛刺激和红肿。
 - Skin / 皮肤: May cause sensitization by skin contact.
皮肤接触可能引起过敏。
 - Inhalation / 吸入: May produce irritation and respiratory tract sensitization with asthma like symptoms, including cough, dyspnea, chest tightness, and wheezing.
吸入可导致呼吸困难, 呼吸道过敏及哮喘症状, 包括咳嗽, 呼吸困难, 胸闷, 喘息等症状。

Ingestion / 摄取: May produce vomiting, diarrhea, loss of appetite, and nausea.
摄取也许导致呕吐, 腹泻, 食欲减弱, 恶心等症状。
Cobalt is listed as a possible human carcinogen by the IARC.
钴金属被 IARC 认为是致癌物质。

- Environmental Hazards / 环境危害: None identified. / 不明确。

04. First aid measures / 急救措施

- Eye contact / 眼睛接触: In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
万一眼睛接触了这种物质, 请用大量的水彻底冲洗眼睛并寻求医生的帮助。
- Skin contact / 皮肤接触: In case of contact with skin wash off with warm water. Consult a doctor if skin irritation persists.
万一皮肤接触了这种物质, 请用温水冲洗。如果有持续的皮肤过敏症状请向医生咨询。
- Inhalation / 吸入: Ensure supply of fresh air. In the event of symptoms refer for medical treatment.
保证提供新鲜的空气。要是症状表现, 咨询药物治疗。
- Ingestion / 摄取: Induce the patient to vomit of his own accord only if fully conscious. Supply with medical care. Rinse out mouth and give plenty of water to drink.
在病人完全清醒的情况下, 劝导他主动地呕吐。提供药物治疗。漱口并大量饮水。
- Advice to doctor / 对医生的建议: Treat symptomatically. / 依据症状治疗。

05. Fire-fighting measures / 消防措施

- Suitable extinguishing media / 适当的灭火介质: Dry Sand, NA-X, LITH-X, or approved material for Class D fires.
干砂, (NA-X, LITH-X) 或者 D 类专用灭火材料。
- Unsuitable Extinguishing Media: Do not use water, CO2, or halogens if material is ignited.
不能使用的灭火介质: 不能使用水, 二氧化碳和卤代烷灭火器。
- Flash Point / 闪点: NA. / 不适用
- Explosive limits in air / 在空气中的爆炸限: Upper / 上限: No data. / 没有资料。
Lower / 下限: No data. / 没有资料。
- Special Exposure Hazards in Fires: None.
有害的燃烧产物: 没有。
- Required special protective equipment for fire fighters: Full protective clothing and self contained breathing apparatus.
消防人员必须的特殊保护装置: 完整的防护服以及完备的呼吸装置。
- Additional information / 附加信息: Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
火后残渣以及用来灭火的被污染的水, 必须按照当地的有关制度妥善处理。

06. Accidental release measures / 泄露应急处理

- Personal precautions / 个人预防: Ensure adequate ventilation. Avoid dust formation.
保证足够的通风, 避免灰尘形成。
- Environmental precautions / 环境预防: Do not discharge into drains/ surface waters.
不要把此产品卸入下水道、地表水里。
- Procedures for Spill/Leak Clean-up: Avoid raising dust. Protect from water. Transfer to containers for disposal. Use clean non-sparking tools to collect the material.
散落/泄露清洁程序: 避免激起粉尘, 防止与水接触, 转移到容器中等待处理。
使用不产生火花的工具收集。

Refer to Section 8 for additional personal protection information. / 参阅第 8 部分获得更多的个人防护措施信息。

Refer to Section 13 for disposal considerations. / 参阅第 13 部分获得处置方面需要考虑的事项。

07. Handling and storage / 操作和储存

- Advice on safe handling / 安全操作建议: Avoid the formation and deposition of dust. No air extraction if dust raised.
避免形成和沉积粉尘。如果引起了粉尘避免使用抽气的方法。
- Advice on protection against fire and explosion 避免火灾及爆炸的建议: Keep away from sources of ignition. Do not smoke.
Avoid production of dust. Dust can form an explosive mixture with air. Take precautionary measures against static discharges.
远离火源、禁止吸烟。避免产生粉尘, 粉尘与空气能形成爆炸混合物。采取预防静电放电的措施。
- Requirements for storage: Store powder in unopened original container.
对保存空间和容器的要求: 使用没有开封过的新容器保存磁粉。
- Advice on storage compatibility: Do not store with combustible materials. Do not store together with oxidizing agents. Keep away from water.
保存时的兼容性: 不要与易燃物、氧化剂保存在一起, 与水隔离。
- Further information on storage conditions: Store in a dry place. Protect from heat/overheating. Keep in a cool place.
关于保存条件的进一步信息: 防止加热/过热, 保存在一个干燥、凉快的地方。

Refer to Section 6 for clean-up of spillages. / 参阅第 6 部分获得散落清理措施信息。

Refer to Section 13 for disposal considerations. / 参阅第 13 部分获得处置方面需要考虑的事项。

08. Exposure controls / personal protection / 接触控制和个人防护措施

- Additional advice on system design: Ensure adequate ventilation on workstation.
体系设计时的补充建议: 工作场所保证足够的通风。

Ingredients with occupational exposure limits to be monitored / 需要监控的成分及职业接触限值:

| Substance 物质 | CAS No. 美国化学文摘社登记号 | PEC-TWA [mg/m3] 时间加权平均容许浓度[mg/m3] | PEC-STEL[mg/m3] 短时接触容许浓度[mg/m3] | General remarks 注释 |
|-----------------|--------------------|-----------------------------------|---------------------------------|-----------------------|
| Cobalt | 7440-48-4 | 0.05 | 0.1 | as Co |

- General protective measures / 一般防护办法: Do not inhale dust. Avoid contact with eyes and skin.
不要吸入粉尘, 避免与眼睛和皮肤接触。
- Respiratory protection / 呼吸系统防护: Breathing apparatus in the event of high concentrations.
Short term: filter apparatus, P100 (NIOSH 42CFR84) or

| | |
|----------------------------|--|
| | FFP2 (EN149). |
| | 在高浓度的情况下使用呼吸面罩。 |
| | 短间接接触:使用满足 P100 (NIOSH 42CFR84) 或 FFP2 (EN149) 标准的防尘口罩。 |
| ● Hand protection / 手防护: | Butyl rubber, >120 min (EN 374) 丁基橡胶手套, |
| ● Eye protection / 眼睛防护: | Safety glasses. / 安全眼镜。 |
| ● Skin protection / 皮肤防护: | Light protective clothing. / 轻薄的防护服。 |
| ● Hygiene measures / 卫生措施: | Wash hands before breaks and after work. Use skin barrier cream. |
| | 在休息之前和下班以后请洗手。使用肌肤隔离霜。 |

09. Physical and chemical properties / 理化特性

| | |
|--|---|
| ● Form / 形状: | Powder. / 粉末。 |
| ● Color / 颜色: | Silver-grey. / 银灰色。 |
| ● Density / 密度[g/cm ³]: | 7.63 ± 0.20。 |
| ● Odor / 气味: | Odorless / 没有气味的。 |
| ● Combustible properties / 易燃性: | No. / 不易燃。 |
| ● Melting point / 熔点[°F]: | 3000. |
| ● Particle size distribution / 粒度分布: | >40 mesh (420µ m) < 0.1 wt% . >40 目(420 微米) < 0.1% (重量比)。 > 60 mesh (250µ m) < 25 wt% . >60 目(250 微米) < 25% (重量比)。 < 270 mesh (53µ m) < 12 wt% . < 270 目(53 微米) < 12% (重量比)。 |
| ● Apparent density / 表面密度[g/cm ³]: | ~2.7. |
| ● Solubility in water / 在水中的溶解度: | Not determined. / 没有确定。 |
| ● Decomposition temperature / 分解温度: | Not applicable. / 不适用。 |

10. Stability and reactivity / 稳定性和反应活性

| | |
|---|--|
| ● Stability / 稳定性: | Stable under normal operational conditions. 在正常操作情况下是稳定的。 |
| ● Conditions to avoid / 需要避免的情况: | Do not expose to extreme heat or flame. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. 不要暴露特别热或有火花的地方。在与空气混合的情况下, 细粉尘的积聚可能引发粉尘爆炸。 |
| ● Materials to avoid / 需要避免的物质: | Strong oxidizing agents, strong acids, and bases. Salt water, water and liquids containing chlorine, and some fluorine containing compounds. In general avoid halogen containing solvents or compounds. 强氧化介质、强酸、强碱、盐水, 液体包括:水, 一些含有氯和氟化物的溶液。通常避免接触含卤溶剂和化合物。 |
| ● Hazardous decomposition products: 危险的分解产物: | No hazardous decomposition products known. 已知的情况, 没有危险分解产物。 |
| ● Hazardous Polymerization / 聚合危害: | Should not occur. / 不会发生。 |

11. Toxicological information / 毒理学信息

- OECD 406 Sensitization / 过敏作用*: Sensitizing. / 过敏。

General remarks / 总注释: No toxicological data are available. / 没有可利用的毒理学数据。

12. Ecological information / 生态学信息

- General Information 一般信息: No data on ecological toxicity or biodegradability is available at this time.
目前没有生态毒性或生物降解方面可利用的数据。

13. Disposal considerations / 废弃处理

- Waste code (EWC): 060499
废物代码 (欧洲废物目录)*: 060499
- Waste disposal method / Product: For recycling, consult manufacturer or DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE/PROVINCIAL AND LOCAL REGULATIONS.
废弃处置办法 / 产品: 回收处理, 咨询生产厂家或按照国家、省和当地的法律制度处置。
Do not dispose of via drains or into the immediate environment.
向生产厂家咨询, 回收处理或者按照国家、省和当地的法律制度处置。
不要通过倒入下水道或直接倒入环境中处置。
- Waste disposal method / Packaging: Uncontaminated packaging may be taken for recycling. Packaging that cannot be recycled should be disposed of as for product.
废弃处置办法 / 包装: 未被污染的包装物可以考虑循环利用。不能被循环利用的包装物可以参照产品的处置办法处理。

14. Transport information / 运输信息

- Classification according to ADR / 按照《公路危险货物运输欧洲协定》分类:
ADR-Class / 《公路危险货物运输欧洲协定》- 等级: Non Hazardous and Non Regulated. 非危险品, 不受国际危规限制。
- Classification according to IMDG: 按照《国际危险货物海运法规》分类:
IMDG-Code-Class / 《国际危险货物海运法规》危险品等级: Non Hazardous and Non Regulated. 非危险品, 不受国际危规限制。
- Classification according to IATA: 按照国际航空运输协会分类:
IATA-DGR-Class:
国际航运协会-危险货物法规分类: Non Hazardous and Non Regulated. 非危险品, 不受国际危规限制。

15. Regulatory information / 法规信息

- U.S. Federal Regulations / 美国联邦法规:

CERCLA 103 Reporting Requirements / 综合环境响应、补偿和责任法案 第 103 节 报告要求: None / 没有;

EPCRA/SARA Title III / 紧急状态计划和公共权利意识法案 / 超级基金修改与再授权法 第三章:

Section 302 Extremely Hazardous Substances / 第 302 节 极端有害物质: None / 没有;

Section 311/312 Hazard Category / 第 311 / 312 节 危险类别: Fire Hazard / 火灾;

Section 313 Toxic Chemicals / 第 313 节 有毒化学物质: None / 没有;

TSCA / 毒品控制法案: All of the components of this product are listed on the TSCA inventory. / 该产品所有成分均在 TSCA 目录上。

Because this material contains cobalt, it is classified as Xn, Harmful. However, this material in its solid form is not required to be labeled.

因为这种材料中包含钴，而钴被划分为 Xn 有害物质。然而由于钴在本材料中是以固体的形式存在的，所以没有必要贴 Xn 标签。

16. Other informations / 其他信息

- **R phrases(Information on ingredients - 02): / 特别风险性质(在第 2 部分，成分里的信息)**

R 42/43: May cause sensitization by inhalation and skin contact. / 吸入和皮肤接触可能引起过敏。

R53: May cause long-term adverse effects in the aquatic environment.
可能在水生环境中造成长期不利影响。

- **EC Symbols / 欧洲联盟危险符号: Xn: Harmful. / 有害物品。**

- **Sources of documentation / 文件来源:**

EEC / 欧洲经济共同体决议文件:

1967/548/EEC (2004/73); 1999/45 /EC (2001/60); 2001/58/EC.

Transport information / 运输相关文件:

ADR (2003); IMDG-Code (31.Amdt.); IATA-DGR (2004)

- **Explanation of abbreviation / 缩写词:**

OECD: Organization for Economic Co-operation and Development. / 经济合作与发展组织。

EWC: European Waste Catalogue / 欧洲废物目录。

ADR: European Agreement concerning the international carriage of Dangerous goods by Road.
国际危险获取公路运输欧洲协定

IMDG code: International Maritime Dangerous Goods Code. / 国际危险货物海运编码

IATA-DGR: International Air Transport Association-Dangerous Goods Regulations.
国际航空运输协会-危险货物法规。

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