



# 安全技术说明书

## Safety Data Sheet

红色恋人轻负荷发动机冷却液-45℃

Red Engine coolant LEC-45

SDS 编号: 2102381

SDS No. 2102381

版本: 3.0

Version 3.0

### 1. 化学品及企业标识

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

化学产品中文名称: 红色恋人轻负荷发动机冷却液-45℃

**Product Name:** Red Engine coolant LEC-45

使用: 防冻剂及冷却液

**Use:** Antifreeze and coolant

产品代码: 2102381

**Product Code:** 2102381

制造商/供货商: 统一石油化工有限公司

**Manufacturer / Supplier:** Tongyi Petroleum Chemical Co., Ltd.

中国·北京·大兴芦城开发区

Lucheng Development Zone, Daxing, Beijing, China

邮编: 102612

Zip Code: 102612

网址: [www.tongyioil.com](http://www.tongyioil.com)

Website: [www.tongyioil.com](http://www.tongyioil.com)



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紧急号码: 010-612318119 (24h)

Emergency Call: 010- 612318119 (24h)

修订日期: 2015 年 11 月 28 日

Revision Date: November 28,2015

## 2.危险性概述

## 2. HAZARDS IDENTIFICATION

分级分类: 急性毒性——口服: 类别4。

Classification: Acute Toxicity - Oral: Category 4

特定目标器官系统毒性——重复接触: 类别2。

Specific target organ toxicity - repeated exposure: Category 2.



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GHS标签要素 符号:



GHS Label Element Symbol:

警示词: 警告。

Signal Word: Warning

GHS危害说明:

GHS Hazards Statement:

物理危险: 按照GHS标准, 未被归类为有害物质。

**Physical hazards:** Not classified as hazardous in accordance with GHS

健康危险: H302: 吞咽有害。

**Health hazards:** H302: Harmful if swallowed.

H373: 长期或重复接触可能对器官造成伤害。

H373: Prolonged or repeated exposure may cause damage to organs.

环境危险: 按照GHS标准, 未被归类为有害物质。

**Environmental hazards:** Not classified as hazardous in accordance with GHS



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**GHS 预防措施说明:**

**GHS Precautionary Statements:**

**预防措施:** P264: 作业后彻底清洗。

**Preventive measures:** P264: Wash thoroughly after work.

P270: 使用本产品时不得进食、饮水或吸烟。

P270: Eating, drinking or smoking are not allowed during use of this product.

**事故响应:** P301+P312: 如误吞咽: 如感觉不适, 呼叫解毒中心或医生。

**Response:** P301+P312: IF SWALLOWED: If you feel unwell, call a poison center or a doctor.

P330: 漱口。

P330: Rinse mouth.

**安全贮存:** 无预防用语。

**Safe storage:** Not available.

**废弃处置:** P501: 处理产品及其包装容器应该在地方或国家法定的适当废物处理地点进行。

**Disposal:** P501: The product and its packing containers should be handled at a proper waste disposal site according to local or national regulations.



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不影响分类的其它危害:

### Other Hazards Not Affecting the Classification:

未被评为可燃物, 但会燃烧。

Not classified as flammable, but will burn.

蓄意滥用、误用或严重暴露可损害多个器官和（或）致命。

Intentional abuse, misuse or severe exposure can damage multiple organs and (or) be fatal.

### 3.成分 / 组成信息

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

配方说明: 乙二醇单体与抑制剂组合的混合物。

Recipe Description: Mixture of ethylene monomers and inhibitors.

成分按GHS分类:

### Ingredients according to GHS Category:

化学特性	异名	CAS (化学文摘号)	危害分类 (类别)	GHS 危害说明	浓度
-	-	107-21-1	急性毒性: 4	H302	40-75%

Chemical	Alias	CAS	Hazard Classification	GHS	Density
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properties		(CAS number)	(Category)	Hazards Statement	
-	-	107-21-1	Acute toxicity: 4	H302	40-75%

**额外信息：** 不含有任何胺、硝酸盐、磷酸盐、硼酸盐或硅酸盐。

**Additional Information:** Does not contain any amine, nitrate, phosphate, borate or silicate.

关于风险警句和危险警句的完整文本，请参阅第16章。

Please refer to Section 16 for the full text of risk warnings and hazards warnings.

#### 4.急救措施

#### 4. FIRST AID MEASURES

**一般信息：** 切勿延迟处理。保持受害人冷静。立即求医。

**General Information:** Do not delay handling. Keep the victim calm and seek medical attention immediately.

**吸入：** 将受害者迁移到空气清新的地方。如受害者没有在短时间内复原，应将其送到最近的医疗机构进一步治疗。

**Inhalation:** Move the victim to fresh air. If the victim does not recover in a short time, he/she should be sent to the nearest medical facility for further treatment.



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**接触皮肤:** 脱去污染衣物。用水冲洗暴露的部位, 并用肥皂进行清洗。

**Skin Contact:** Remove contaminated clothing. Flush exposed area with water and soap for cleaning.

如刺激持续, 请求医。

Get medical assistance if irritation persists.

**接触眼睛:** 用大量的水冲洗眼睛。如刺激持续, 求医。

**Eye Contact:** Flush eyes with plenty of water. Get medical aid if irritation persists.

**吞食:** 切勿延迟处理。如果发生吞咽, 不要让其呕吐, 转移到最近的医疗机构, 进行进一步治疗, 如果发生自发性呕吐, 让头低于臂部以下, 以防止其抽吸。

**Ingestion:** Do not delay handling. If swallowed, do not induce vomiting and transfer the victim to the nearest medical facility for further treatment; if vomiting occurs spontaneously, lower the head under arms to prevent aspiration.

**最重要的症状/作用（急性和慢性）:**

**Most Important Symptoms / Effects (acute and chronic):**

尿中血或尿流增加或减少是肾毒性的症状。其它症状包括恶心、呕吐、剧烈腹痛、腹泻、吸入不久发生的腰椎痛, 甚至昏迷及死亡。高浓度可能引致中枢神经系统衰竭, 从而引起头痛、眩晕及恶心; 持续接触



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Blood in urine or urinary increase or decrease is the symptoms of renal toxicity. Other symptoms include nausea, vomiting, severe abdominal pain, diarrhea, lumbar pain occurring shortly after inhalation, and even coma and death. High concentrations may cause central nervous system failure, resulting in headaches, dizziness and nausea; sustained exposure may result in unconsciousness and / or death.

**立即治疗/特殊看护:** 即时接受治疗至关重要!最佳治疗是即时送至医疗机构及采取适当的疗法, 包括可能注射活性炭、洗胃及/或胃抽吸术。若无法立即实施上述措施, 且预计治疗时间可能会拖延一小时以上时, 可考虑吐根糖浆进行催吐(如果有任何中枢神经系统抑制表现, 则禁忌使用)。应遵循专家建议, 对每个事件作单独考虑和处理。其它特殊处理措施可包括乙醇替代治疗, 甲吡唑治疗, 处理酸中毒, 及血液透析处理。应尽量寻求专业人员建议。

**Immediate treatment / Special care:** Immediate treatment is essential! Best treatment is to immediately send the victim to a medical institution and take appropriate therapy, including the possible injection of activated charcoal, gastric lavage and / or gastric aspiration. If these measures cannot be implemented immediately and the time for treatment may be above an hour, consider inducing vomiting with syrup of ipecac (if there are any manifestations of central nervous system depression, it is contraindicated). Expert advice should be followed; each event should be considered and handled separately. Other special treatment measures may





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include ethanol replacement therapy, A pyrazole therapy and treatment of acidosis and hemodialysis treatment. Try to seek professional advice.

## 5. 消防措施

### 5. FIRE FIGHTING MEASURES

使所有非急救人员撤离火区。

Evacuate all non-emergency personnel from the fire area.

**特定的危害:** 危险燃烧物品可能包括:

**Specific hazards:** Hazardous combustion substance may include:

气载固体与液体微粒及气体（烟）的复杂混合物。

Airborne solid and liquid particulates and a complex mixture of gases (smoke).

一氧化碳。未被识别的有机、无机化合物。

Carbon monoxide. Unidentified organic and inorganic compounds.

**适当的灭火介质:** 泡沫, 洒水或喷雾。

**Appropriate Extinguishing Media:** Foam, sprinkled or atomized water.

干化学灭火粉、二氧化碳、沙或泥土仅宜用于小规模火灾。



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Dry chemical powder, carbon dioxide, sand or earth may be used for small fires.

不适用的灭火物: 切勿喷水。

**N.A. Extinguishing Media:** Never spray water.

消防人员保护设备: 合适的保护装置:

**Protection of Fire Fighters:** Proper protective equipment:

包括在密封空间内接近起火点时必需配戴的呼吸装置。

Including necessary breathing apparatus for approaching the fire point in a confined space

## 6. 泄漏应急处理

## 6. ACCIDENTAL RELEASE MEASURES

避免接触溢出或释放出来的材料。关于个人防护设备的选择指南, 见安全技术说明书的第8章。关于处置信息, 请参阅第13章。请遵从所有适用的地方及国际法规。

Avoid contact with spilled or released material. Please refer to Section 8 of the SDS for instructions of personal protective equipment selection. Please refer to Section 13 for the disposal information. Please abide by all applicable local and international regulations.

个人防范: 避免沾及皮肤及眼睛。

**Personal Precautions:** Avoid contact with skin and eyes.



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**环保防范:** 使用合适的防扩散措施, 以免污染环境。

**Environmental Precautions:** Use appropriate containment to avoid environmental pollution.

用沙、泥土或其它适合的障碍物来防止扩散或

进入排水道、阴沟或河流。

Prevent it from spreading or entering drains, ditches or rivers with sand, earth or other appropriate barriers.

**清理方法:** 对于较多的液体溢出, 通过机械方式例如真空卡车转移到救援罐中进行回收或安全处理。不得用水来冲洗残渣。应当作污染废物进行保留。

**Methods for Clearing:** For large liquid spills, transfer it by mechanical means, such as a vacuum truck, to a rescue tank for recovery or safe disposal. Do not wash the residues with water. It should be retained as contaminated waste.

让残渣蒸发或用适当的吸收性材料吸收残渣, 并进行安全处理。清除受污染的泥土并进行安全处理。

Let residues evaporate or absorb them with a suitable absorbent material and dispose them safely. Remove contaminated soil and dispose it safely.

对于较少的液体溢出(小于1鼓桶), 通过机械方式例如真空卡车转移到有标签和可密封的容器内进行产品回收或安全处理。让残渣蒸发或用适当的吸收性材料吸收残渣并进行安全处理。清除污染的泥土并进行安全处理。



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For small liquid spills (less than 1 drum), transfer it by mechanical means, such as a vacuum truck, to a labeled, sealable container for product recovery or safe disposal. Let residues evaporate or absorb them with a suitable absorbent material and dispose them safely. Remove contaminated soil and dispose it safely.

**额外建议:** 应将无法处理的严重溢漏事件通知地方当局。

**Additional Recommendations:** Report significant spills that cannot be handled to the local authorities.

### 7.操作处置与储存

### 7. HANDLING AND STORAGE

**一般预防措施:** 若存在吸入蒸汽、喷雾或烟雾的危险，请使用局部排气通风系统。

**General Precautions:** If there is a risk of inhalation of vapors, mists or fumes, use local exhaust and ventilation system.

为防起火，应适当地处置任何受其污染的拭抹布料或清洗材料。

Properly dispose any contaminated rags or cleaning materials to prevent fire.

将本资料单所含的信息包括进本地情况风险评估中，

将有助于为本品的搬运、储存及弃置制订有效的控制系统。



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It will contribute to the development of an effective control system for the safe handling, storage and disposal of this product to include information of this SDS into the local circumstances risk assessment.

**安全操作防范措施:** 避免长期或持续与皮肤接触。

**Precautions for Safe Handling:** Avoid prolonged or repeated contact with skin.

避开吸入其蒸汽和（或）烟雾。

Avoid inhaling its vapor and (or) fumes.

装卸桶装产品时，应穿保护鞋，并使用恰当的装卸工具。

Wear safety footwear and use proper handling tools when handling the product in drums.

**安全存储条件:** 密闭容器，放在凉爽、通风良好的地方。

**Conditions for Safe Storage:** Store in airtight containers in a cool and well-ventilated place.

使用适当加注标签及可封闭的容器。

Use properly labeled and closeable containers.

储存温度：长期储存（3个月以上）-15~50℃；短期储存-20~60℃。

Storage temperature: -15 ~ 50 °C for long-term storage (more than 3 months); -20 ~ 60 °C for short-term storage.

**推荐使用材料:** 对于容器或容器内衬，应使用软钢或高密度聚乙烯。



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**Recommended Materials:** Mild steel or high density polyethylene should be used for containers or container linings.

**不适用的物质:** 锌。避免与电镀材料接触。

**Unsuitable Material:** Zinc. Avoid contact with plating materials.

**其它建议:** 聚乙烯容器不应置于高温下, 因为可能造成扭曲变形。

**Other Recommendations:** Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

### 8.接触控制和个体防护

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

如果美国政府卫生家协会 (ACGIH) 数据已提供在此文件中, 仅作为信息提供。

If the ACGIH data is provided herein, it is for information only.

职业暴露极限					
化学产品	来源	类型	ppm	mg/m <sup>3</sup>	标记
乙二醇	ACGIH	Ceiling (气溶胶)		100 mg/m <sup>3</sup>	
	CN OEL	TWA		20 mg/m <sup>3</sup>	
	CN OEL	STEL		40 mg/m <sup>3</sup>	

Occupational Exposure Limits



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Chemical Product	Source	Type	ppm	mg/m <sup>3</sup>	Mark
Glycol	ACGIH	Ceiling (aerosol)		100 mg/m <sup>3</sup>	
	CN OEL	TWA		20 mg/m <sup>3</sup>	
	CN OEL	STEL		40 mg/m <sup>3</sup>	

化学产品	来源	危险标志
乙二醇	ACGIH	不补归类为人类致癌物质

Chemical Product	Source	Hazard sign
Glycol	ACGIH	Not classified as a human carcinogen.

生物暴露指数 (BEI) - 详细信息请参阅参考文件

Biological Exposure Index (BEI) - See reference documents for details.

无数据可供参考。

No data available for reference.

适当的工程控制: 必需的保护级别和控制措施类型依潜在的接触条件而有所不同。

**Appropriate Engineering Controls:** The required level of protection and types of control measures vary depending on potential exposure conditions.



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根据对当地状况的风险评估来选择控制措施。

Select control measures on the basis of a risk assessment of local circumstances.

适当的措施包括: 通风充足, 足以控制气体浓度。

Appropriate measures include: Adequate ventilation to control airborne concentrations.

本品在加热、喷洒或成雾后更有可能集结在空气中。

Airborne concentrations may occur if heated, sprayed or atomized.

**个体防护措施:** 个人保护设备 (PPE) 应符合建设的国家标准。请查询PPE供货商。

**Personal Protective Measures:** Personal protective equipment (PPE) should conform to the national standards of construction. Check with PPE suppliers.

**呼吸系统防护:** 在正常使用条件下, 一般不需戴呼吸保护用具。

**Respiratory protection:** Respiratory protective equipment is generally not needed under normal conditions of use.

良好的工业卫生惯例说明应采取能防止吸入本品的措施。

Good Industrial Hygiene Practice indicates that precautions should be taken to avoid inhalation of this product.

如果工程控制设施未把空气浓度保持在足以保护人员健康的水平, 选择适合使用条件及符合有关法律要求的呼吸保护设备。





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If airborne concentrations fail to be controlled to a level adequate to protect workers' health by engineering control measures, please select the respiratory protective equipment suitable for the conditions of use and conforming to the relevant laws and regulations.

请呼吸保护装备供应商核实。

Please check with respiratory protective equipment suppliers.

如需戴安全过滤面罩时，请选择合适的面罩与过滤器组合。

Please select the appropriate combination of mask and filter if necessary.

选择一种适用于颗粒/有机气体及蒸气（沸点>65℃，即149°F）的混合物的过滤器。

Select a filter suitable for the mixture of particulate / organic gases and vapors (boiling point > 65 °C, i.e. 149 °F).

### 手防护:

在手可能接触产品的情况下，为得到适当的化学保护，

应使用符合有关标准（如欧洲：EN374，美国：F739）

并用以下材料制成的手套：聚氯乙烯、氯丁或丁腈橡胶手套。

**Hand protection:** In order to obtain suitable chemical protection where hands may contact the product, gloves conforming to the relevant standards (Europe: EN374; US: F739) and made of PVC, neoprene or NBR should be used.



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手套的合适性和耐用性取决于如何使用，例如接触的频率和时间、长度，手套材料的耐化学性，手套的厚度及灵巧性。

Suitability and durability of gloves depend on how to use them, such as frequency and time period of exposure, chemical resistance, thickness and dexterity.

应始终向手套供应商寻求建议。应更换受污染的手套。

Always seek advice from glove suppliers. Contaminated gloves should be replaced.

个人卫生是有效护理手部的主要方法。

Personal hygiene is the main method of effective hand care.

必须仅在双手洗干净后，才能戴手套。

Gloves can be put on only after hands are washed.

使用手套后，必须彻底清洗及烘干双手。建议使用非香型保湿霜。

After using gloves, hands should be thoroughly washed and dried. It is recommended to use non-aromatic moisturizing cream.

**眼睛防护:** 如可能发生溅泼，请戴安全护镜或全脸面罩。

**Eye protection:** If splashes are likely to occur, wear safety goggles or full face masks.

**身体防护:** 一般而言，除了普通的工作服之外不需特殊的皮肤保护措施。



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Red Engine coolant LEC-45

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SDS No. 2102381

版本: 3.0

Version 3.0

**Body protection:** In general, special skin protection measures are not needed in addition to the ordinary work clothing.

**热危害:** 不适用的。

**Thermal Hazards:** Not applicable.

**监测方法:** 需要对工人的呼吸区域或一般工作场所的各种物质的浓度进行监测，以确认是否符合OEL及接触控制的适当性。

**Monitoring Methods:** Monitor the concentration of substances in worker's breathing area or the general workplace, in order to confirm compliance with OEL and adequacy of exposure controls.

对于某些物质，也可以采用生物监测。

Biological monitoring may also be used for some substances.

**环境暴露风险控制:** 减少对环境的排放。

**Environmental Exposure Controls:** Reduce environmental emissions.

必须进行环境评估以确保符合当地的环境法规。

Environmental assessment must be carried out to ensure compliance with local environmental regulations.

## 9.理化特性

## 9. PHYSICAL AND CHEMICAL PROPERTIES



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**外观:** 红色。室温下液体。  
**Appearance:** Red; liquid at room temperature.

**气味:** 特性。  
**Odor:** Properties.

**恶臭极限值:** 无数据可供参考。  
**Odor Threshold:** No data available for reference.

**pH值:** 典型8.2（不适用的）。  
**PH:** Typically 8.2 (not applicable).

**初沸点及沸程:** >100℃/212°F（估计值）。  
**Initial Boiling Point and Boiling Range:** > 100℃/ 212°F (estimated value).

**凝固点:** 典型-45℃/-49°F。  
**Freezing Point:** Typically -45℃/-49°F.

**闪点:** 无数据可供参考。  
**Flash Point:** No data available for reference.

**可燃性或爆炸上限:** 3~15%(V)（基于矿物油）。  
**Upper Flammable or Explosive Limit:** 3 ~ 15% (V) (based on mineral oil).



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自燃温度: > 200℃/392°F。

**Autoignition Temperature:** > 200 °C / 392 °F.

蒸气压力: 无数据可供参考。

**Vapor Pressure:** No data available for reference.

相对密度: 典型1.0802g/cm<sup>3</sup>于20℃/68°F。

**Relative Density:** Typically 1.0802g/cm<sup>3</sup> at 20 °C / 68 °F.

密度: 典型1.0802g/cm<sup>3</sup>于20℃/68°F。

**Density:** Typically 1.0802g/cm<sup>3</sup> at 20 °C / 68 °F.

水溶性: 完全可溶的。

**Water Solubility:** Completely soluble.

溶解性: 无数据可供参考（在其它溶剂中）。

**Solubility:** No data available (in other solvents).

分配系数: 无数据可供参考。

**Partition Coefficient:** No data available for reference.

动态粘度: 无数据可供参考。

**Dynamic Viscosity:** No data available for reference.

运动粘度: 无数据可供参考。

**Kinematic Viscosity:** No data available for reference.



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**蒸气密度:** 无数据可供参考（空气=1）。

**Vapor Density:** No data available for reference (air=1).

**蒸发率:** 无数据可供参考(nBuAc=1)。

**Evaporation Rate:** No data available for reference (nBuAc=1).

**分解温度:** 无数据可供参考。

**Decomposition Temperature:** No data available for reference.

**可燃性:** 无数据可供参考。

**Flammability:** No data available for reference.

## 10.稳定性和反应性

### 10. STABILITY AND REACTIVITY

**化学稳定性:** 稳定。

**Chemical Stability:** Stable

**可能的危险反应:** 无数据可供参考。

**Possible Hazardous Reactions:** No data available for reference.

**应避免的条件:** 极端温度及阳光直晒。

**Conditions to Avoid:** Extreme temperatures and direct sunlight.



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**不兼容物质:** 强氧化剂。

**Materials to Avoid:** Strong oxidants.

**危险分解产物:** 在正常存储情况下, 不会形成危险的分解物。

**Hazardous Decomposition Products:** No hazardous decomposition products will be produced under normal storage conditions.

## 11. 毒理学信息

## 11. TOXICOLOGICAL INFORMATION

### 毒理病理学测试效果资料

### Data of Toxicological Pathology Test Results

**评鉴基础:** 所提供的信息以类似产品的组份及毒性数据为基础。

**Basis for Assessment:** The information provided is based on components and the toxicology data of similar products.

**可能的接触途径:** 暴露途径包括吸入、吞服、皮肤吸收、皮肤或眼睛接触, 以及意外摄入。

**Likely Routes of Exposure:** Routes of exposure include inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.



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**急性毒性:**

**Acute Toxicity:**

**经口急性毒性:** 误吞对人体有害。LD50 > 300 ~ <= 2000 mg/kg, 鼠。

**Acute oral toxicity:** Harmful if swallowed. LD50> 300 ~ <= 2000 mg / kg, rat.

鼠齿类动物和人类的急性口服毒性有显著不同, 人类更加容易受到伤害。人类的死亡剂量是100毫升(1/2杯)。

The acute oral toxicity varies significantly for rodent and humans, and humans are more vulnerable.

The lethal dose for humans is 100 ml (1/2 cup).

此物料也曾显示对猫和狗有进食毒性及潜在致死能力。

This material was also shown to have eating toxicity and potentially lethal capabilities.

吞服会使人头晕和昏昏欲睡。

It makes people dizzy and drowsy if swallowed.

**经皮肤急性毒性:** 预期毒性低: LD50 > 5000 mg/kg。

**Acute dermal toxicity:** Low expected toxicity: LD50> 5000 mg / kg.

**吸入急性毒性:** 吸入的低毒性。

**Acute inhalation toxicity:** Low inhalation toxicity.

**皮肤腐蚀/刺激:** 可能引起中量皮肤刺激反应(但严重性不足以对其进行分类)。





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**Skin Corrosion/Irritation:** May cause medium irritation to skin (but it is not serious enough for classification).

**眼睛严重损伤/刺激:** 对眼睛有中度刺激（但严重性不足以对其进行分类）。

**Serious Eye Damage / Irritation:** Cause medium irritation to eyes (but it is not serious enough for classification).

**呼吸刺激物:** 吸入蒸气或粉雾可能会引起刺激。

**Respiratory Irritation:** Inhalation of vapors or mists may cause irritation.

**呼吸或皮肤过敏:** 预期不是皮肤致敏物。

**Respiratory or Skin Sensitization:** Not expected to be a skin allergen.

**吸入性危害:** 不被视为吸入性危害物质。

**Inhalation Hazard:** Not considered as inhalation hazardous.

**生殖细胞突变:** 认为没有诱变危险。

**Germ Cell Mutagenicity:** Not considered a mutagenic hazard.

**致癌性:** 成份是否具有致癌性，尚不可知。

**Carcinogenicity:** It is unknown whether the components are carcinogenic.

**生殖/发育毒性:** 对动物有胎儿毒性，补视为母体毒性的副效应。

**Reproductive / Developmental Toxicity:** Fetal toxicity in animals; not considered as a side-effect of maternal toxicity.



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特定目标器官系统毒性:

**Specific Target Organ Systematic Toxicity:**

单次接触: 无预期危害。

**Single exposure:** No expected hazards.

重复接触: 肾脏: 可损害肾脏。

**Repeated exposure:** Renal: Renal damage may occur.

## 12.生态学信息

## 12. ECOLOGICAL INFORMATION

评鉴基础: 并无专门确定本产品的生态毒理学数据。

**Basis for Assessment:** There is no specific ecotoxicological data to determine this product.

上述资料基于对类似产品的成分及生态毒理学的了解而提供。

The above information is provided on the basis of components and ecotoxicology of similar products.

急性毒性: 预期实际无毒: LC/EC/IC50 >100 mg/l (针对水生生物)

**Acute Toxicity:** Expected to be practically non-toxic: LC/EC/IC50 >100 mg/l (for aquatic organisms)

微生物: 无数据可供参考。



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**Microorganisms:** No data available for reference.

**流动性:** 在水中会溶解。如本品侵入土壤, 因为其流动性甚高, 所以可能会污染地下水。

**Liquidity:** This product may contaminate groundwater due to its high mobility if it intrudes into soil.

**持久性/降解性:** 容易生物降解。

**Persistence / Degradability:** Readily biodegradable.

**潜在的生物积累性:** 预期没有显著的生物累积作用。

**Bioaccumulative Potential:** Expected to have no significant bioaccumulation effect.

**其它不良反应:** 预期不存在臭氧耗减、光化学臭氧形成或全球变暖的可能性。

**Other Adverse Reactions:** Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

## 13. 废弃处置

## 13. DISPOSAL CONSIDERATIONS

**化学产品处置:** 应尽可能回收或循环使用。

**Chemical Disposal:** It should be recycled or reused as much as possible.



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鉴定所产生的物料的毒性和物理特性,以便制定符合有关条例的适当的废物分类及废物处置方法,是废物产生者的责任。

It is the responsibility of waste producers to identify the toxicity and physical properties of the substances produced in order to develop appropriate waste classification and disposal methods in line with the relevant regulations.

切勿弃置于环境、排水沟或水道之内。

Do not dispose into the environment, drains or water courses.

**容器的处置:** 依照目前在施行的条例的规定,并尽可能应该由获认可的废物收集商或承包商予以处置。

**Container Disposal:** In accordance with the current regulations in force, it should be preferably disposed by a recognized waste collector or contractor.

**地方法例:** 弃置方法应符合适用的地区、国家及本地的法律和条例。

**Local Legislation:** Disposal method should conform to applicable regional, national and local laws and regulations.

## 14.部分运输信息

## 14. PART OF TRANSPORT INFORMATION



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**领域（根据ADR分类）：不受管制**

**Areas (as per ADR classification): Not regulated**

在ADR条例之下，本品未被评为危险物品。

Not classified as hazardous under ADR regulations.

**国际海事污染品（IMDG）**

**IMDG**

在IMDG条例之下，本品未被评为危险物品。

Not classified as hazardous under IMDG regulations.

**国际航空运输协会（不同国家的具体规定稍有不同）**

**IATA (Specific provisions in different countries are slightly different.)**

在IATA条例之下，本品未被评为危险物品。

Not classified as hazardous under IATA regulations.

## 15.法规信息

### 15. REGULATORY INFORMATION

**化学品名录：**所有化学物质都已列入中国现有化学物质名录中。

**Chemical Inventory:** All chemical substances have been included in the Inventory of Existing Chemical Substances in China.



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### 16.其他信息

### 16. OTHER INFORMATION

**危害说明:** 吞咽有害。

**Hazard description:** Harmful if swallowed.

**SDS版本号:** 3.0

**SDS Version:** 3.0

**SDS生效日期:** 2015年11月28日

**SDS Effective Date:** November 28,2015

**SDS修订:** 左页边的竖线(|)表示此处是在上一版本的基础上进行的修订。

**SDS Revision:** Vertical bar (|) at the left margin indicates revisions on the basis of the previous version.

**SDS生放:** 所有装卸本品的人员均应熟悉本文件所含的信息。

**SDS Commencement:** All handlers of this product should be familiar with the information contained herein.

**免责声明:** 于此提供的信息基于目前我们对已有数据的理解,对本品的描述仅为符合健康、安全和环境的要求。

**Disclaimer:** The information provided herein is based on our understanding of



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existing data, and description of this product is only for the compliance with health, safety and environmental requirements.

我们并不就本品的具体特征提供任何担保。

We provide no guarantee in respect of the specific characteristics of this product.