

1. 化学品及企业标识

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

化学产品中文名称: CI-4/SL/SH 10W-30 (高碱)

Product Name: CI-4/SL/SH 10W-30 (high base)

使用: 工程机械油

Use: Engineering machinery oil

产品代码: 2101510

Product Code: 2101510

制造商/供货商: 统一石油化工有限公司

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

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Emergency Call: 010-61238119 (24h)

修订日期: 2015 年 11 月 28 日

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2.危险性概述

2. HAZARDS IDENTIFICATION

分级分类: 无危害。

Classification: Non-hazardous

GHS标签要素 符号: 无符号。

GHS Label Element Symbol: No symbol

警示词: 无警示词。

Signal Word: No signal word.

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: 按照GHS标准, 未被归类为有害物质。

Health hazards: Not classified as hazardous in accordance with GHS

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

GHS 预防措施说明:

GHS Precautionary Statements:

预防措施: 无预防用语。

Preventive measures: Not available.

事故响应: 无预防用语。

Response: Not available.

安全贮存: 无预防用语。

Safe storage: Not available.

废弃处置: 无预防用语。

Disposal: Not available.

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.

3.成分 / 组成信息

3. COMPOSITION / INFORMATION ON INGREDIENTS

配方说明: 高度精炼的矿物油及添加剂。

Recipe Description: Highly refined mineral oils and additives.

4.急救措施

4. FIRST AID MEASURES

一般信息: 在正常条件下使用不应会成为健康危险源。

General Information: Not a health hazard if used under normal conditions

吸入: 晕眩或反胃不太可能出现;

Inhalation: Dizziness or nausea is unlikely to occur;

如果发生了, 将患者移到有新鲜空气的地方。

If this happens, move the victim to fresh air.

若症状持续则要求求助医生。

Get medical assistance if symptoms persist.

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.

在使用高压设备时, 有可能造成本品注入皮下;

It may be injected into the skin if high pressure equipment is used;

如发生此种情况, 请立即送往医院治疗, 不要等待, 以免症状恶化。

If this happens, immediately send the victim to the hospital without hesitation before it becomes worse.

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: 不要催吐，用水漱口并就医。

Ingestion: Do not induce vomiting. Rinse mouth with water and seek medical advice.

医生须知: 对症治疗。

Notes to Physician: Treat symptomatically and supportively.

吸入肺中可导致化学性肺炎。

Causes chemical pneumonia if inhaled into the lungs.

长期或反复暴露可能造成皮炎。

Prolonged or repeated exposure to it may cause dermatitis.

高压注入伤害需要立即进行外科处理和/或类固醇类治疗，

以降低组织伤害和机能丧失。

Injuries due to high pressure injection require immediate surgical treatment and / or steroid therapy in order to minimize tissue damage and loss of function.

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、二氧化碳、干粉。

Appropriate Extinguishing Media: Chemical foam, carbon dioxide or dry chemical.

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.

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: 溢出后，地面非常光滑。为避免事故，应立即清洁。

Methods for Clearing: The ground will be very smooth with spills. Immediately clean up
spill to avoid accidents.

用沙、泥土或其它可用来拦堵的材料设置障碍，以防止扩散。

Set obstacles with sand, earth or other blocking materials to prevent spreading.

直接回收液体或存放于吸收剂中。

Reclaim liquid directly or store it in an absorbent.

用粘土、沙或其它适当的吸附材料来吸收残余物，
然后予以适当的弃置。

Absorb the residue with clay, sand or other suitable absorbent, and then properly dispose it.

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。

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.

不适用的物质: PVC。

Unsuitable Material: PVC

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 ³	标记
矿物油雾	ACGIH	TWA (可吸入的碎片)		5 mg/m ³	

Occupational Exposure Limits

Chemical Product	Source	Type	ppm	mg/m ³	Mark
Mineral oil mist	ACGIH	TWA (inhalable fragments)		5 mg/m ³	

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.

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: 个人防护设备 (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。

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 $>65^{\circ}\text{C}$ ，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 $> 65^{\circ}\text{C}$, 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.

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。

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

外观: 琥珀色。室温下液体。

Appearance: Amber; liquid at room temperature.

气味: 弱烃。

Odor: Slight hydrocarbon.

恶臭极限值: 无数据可供参考。

Odor Threshold: No data available for reference.

pH值: 不适用的。

PH: Not applicable.

初沸点及沸程: >280°C/536°F。

Initial Boiling Point and Boiling Range: > 280 °C / 536 °F.

倾点: 典型-39°C/-38.2°F。

Pour Point: Typically -39°C/-38.2°F.

闪点: 典型230°C/446°F。

Flash Point: Typically 230°C/446°F.

可燃性或爆炸上限: 典型1%- 10%(V) (基于矿物油)。

Upper Flammable or Explosive Limit: Typically 1% - 10% (V) (based on mineral oil).

自燃温度: >320°C/608°F。

Autoignition Temperature: > 320 °C / 608 °F.

蒸气压力: <0.5Pa于20°C/68°F(估计值)。

Vapor Pressure: < 0.5Pa at 20 °C / 68 °F (estimated value).

相对密度: 典型0.8662 g/cm³于15°C/59°F。

Relative Density: Typically 0.8662 g/cm³ at 15 °C / 59 °F.

密度: 典型866.2 kg/m³于15°C/59°F。

Density: Typically 866.2 kg/m³ at 15 °C / 59 °F.

水溶性: 可忽略的。

Water Solubility: Negligible.

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: >6 (基于类似产品数据)。

Partition Coefficient: > 6 (based on data of similar products).

动态粘度: 无数据可供参考。

Dynamic Viscosity: No data available for reference.

运动粘度: 典型10.7mm²/s于100°C/212°F。

Kinematic Viscosity: Typically 10.7 mm²/s at 100°C/212°F.

蒸气密度: >1 (估计值) (空气=1)。

Vapor Density: > 1 (estimated value) (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.

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: 皮肤和眼睛接触是主要暴露途径;
尽管暴露可通过摄入或以下意外发生。

Likely Routes of Exposure: Skin and eye contact are the main routes of exposure although exposure may occur through ingestion or the following accidents.

急性毒性:

Acute Toxicity:

经口急性毒性: 预期毒性低: LD50 > 5000 mg/kg, 鼠。

Acute oral toxicity: Low expected toxicity: LD50 > 5000 mg / kg, rat.

经皮肤急性毒性: 预期毒性低: LD50 > 5000 mg/kg, 兔。

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

吸入急性毒性: 在正常使用状况下, 不认为存在吸入危险。

Acute inhalation toxicity: Inhalation hazard is considered inexistent under normal conditions of use.

皮肤腐蚀/刺激: 预期会感到轻微刺激。

Skin Corrosion/Irritation: Expected to be slightly irritating.

长期或持续接触皮肤，而不适当清洗，可能会阻塞皮肤毛孔，
导致油脂性粉刺 / 毛囊炎等疾病。

Prolonged or repeated skin contact without proper cleaning may cause
clogging of the pores of the skin, resulting in greasy acne / folliculitis or
other diseases.

眼睛严重损伤/刺激: 预期会感到轻微刺激。

Serious Eye Damage / Irritation: Expected to be slightly irritating.

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: 产品包含各类矿物油, 动物皮肤涂抹研究显示,
此等矿物油不具有致癌性。

Carcinogenicity: The product contains various types of mineral oils. Animal skin-applying tests show that these mineral oils are not carcinogenic.

国际癌症研究机构 (IARC) 并未将高度精炼的矿物油归类为致癌物质。

Highly refined mineral oils are not classified as carcinogenic by the IARC.

其它成份是否具有致癌性, 尚不可知。

It is unknown whether other components are carcinogenic.

生殖/发育毒性: 无预期危害。

Reproductive / Developmental Toxicity: No expected hazards.

特定目标器官系统毒性:

Specific Target Organ Systematic Toxicity:

无预期危害。

No expected hazards.

额外信息: 用过的油包含在使用过程中累积的有害杂质。

Additional Information: Used oils may contain harmful impurities accumulated during use.

此等有害杂质的浓度视乎用途而定，处理时可能存在损害健康及环境的风险。所有用过的油应小心处理，并尽可能避免接触皮肤。

The concentration of such impurities depends on use, and there may be risks to health and the environment in disposal.

ALL used oil should be handled with caution and skin contact should be avoided as much as possible.

在动物试验中，持续接触用过的发动机油会导致皮肤癌。

Animal tests show that sustained contact with used engine oil may cause skin cancer.

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: 溶解性较差的混合物。可能致使水生生物体散发秽臭预期实际无毒：
LL/EL/IL50 >100 mg/l (针对水生生物)

Acute Toxicity: Poorly soluble mixture. May cause aquatic organisms to give out foul smell; expected to be practically non-toxic: LL/EL/IL50 >100 mg/l (for aquatic organisms)

(LL/EL50 表示为标称产品量, 需要准备水分测试)

(LL/EL50 is expressed as the nominal amount of product; moisture test is required)

浓度低于1 mg/l时, 矿物油不会对水生生物产生慢性影响。

When the concentration is below 1mg/L, the mineral oil is not expected to cause any chronic effects to aquatic organisms.

微生物: 无数据可供参考。

Microorganisms: No data available for reference.

流动性: 在大多数环境条件下为液体。飘浮于水面。

Liquidity: Liquid under most ambient conditions; float on water.

持久性/降解性: 预期不容易生物降解。预期主要组份有固有的生物降解性, 但本品也含一些可能持续存留于环境的组份。

Persistence / Degradability: Expected to be not readily biodegradable. Major components are expected to be inherently biodegradable, but this product contains components that may persist in the environment.

潜在的生物积累性: 含生物积累的潜力的组份。

Bioaccumulative Potential: Contains components with bioaccumulative potential.

其它不良反应: 产品是非挥发性成份的混合物, 预期不会大量排入空气中。

Other Adverse Reactions: The product is a mixture of non-volatile components and is not expected to be discharged into the air a lot.

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。

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.

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

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.

16.其他信息

16. OTHER INFORMATION

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 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.