

化学品安全技术说明书

1. 化学品

1.1 名称

对苯二甲酸二甲酯

1.2 鉴别的其他方法

无数据资料

2. 危险性概述

2.1 GHS危险性类别

非危险物质或混合物。

2.2 GHS 标签要素，包括防范说明

无数据资料

2.3 其它危害物

无数据资料

3. 成分/组成信息

分子式： $C_{10}H_{10}O_4$

分子量：194.18 g/mol

组分	浓度或浓度范围
Dimethyl terephthalate	
CAS No.	120-61-6
EC-编号	204-411-8
	50 - 100 %

4. 急救措施

4.1 必要的急救措施描述

一般的建议

无数据资料

吸入

如果吸入, 请将患者移到新鲜空气处。如呼吸停止, 进行人工呼吸。

皮肤接触

用肥皂和大量的水冲洗。

眼睛接触

谨慎起见用水冲洗眼睛。

食入

切勿给失去知觉者喂食任何东西。用水漱口。

4.2 最重要的症状和健康影响

据我们所知, 此化学, 物理和毒性性质尚未经完整的研究。

4.3 及时的医疗处理和所需的特殊处理的说明和指示

无数据资料

5. 消防措施

5.1 灭火介质

灭火方法及灭火剂

用水雾，耐醇泡沫，干粉或二氧化碳灭火。

5.2 源于此物质或混合物的特别的危害

碳氧化物

5.3 给消防员的建议

如有必要，佩戴自给式呼吸器进行消防作业。

5.4 进一步信息

无数据资料

6. 泄露应急处理

6.1 人员防护措施、防护装备和应急处置程序

避免粉尘生成。避免吸入蒸气、气雾或气体。

6.2 环境保护措施

无特别的环境预防要求。

6.3 泄漏化学品的收容、清除方法及所使用的处置材料

扫掉和铲掉。放入合适的封闭的容器中待处理。

6.4 参考其他部分

丢弃处理请参阅第13节。

7. 操作处置与储存

7.1 安全操作的注意事项

在有粉尘生成的地方,提供合适的排风设备。

7.2 安全储存的条件,包括任何不兼容性

贮存在阴凉处。使容器保持密闭，储存在干燥通风处。

7.3 特定用途

无数据资料

8. 接触控制和个体防护

8.1 控制参数

职业接触限值

8.2 暴露控制

适当的技术控制

常规的工业卫生操作。

个体防护装备

眼面防护	请使用经官方标准如NIOSH (美国) 或 EN 166(欧盟) 检测与批准的设备防护眼部。
皮肤保护	<p>戴手套取手套在使用前必须受检查。 请使用合适的方法脱除手套(不要接触手套外部表面),避免任何皮肤部位接触此产品。 使用后请将被污染过的手套根据相关法律法规和有效的实验室规章制度谨慎处理. 请清洗并吹干双手 所选择的保护手套必须符合EU的89/686/EEC规定和从它衍生出来的EN 376标准。</p> <p>完全接触 材料: 丁基橡胶 最小的层厚度 0.3 mm 溶剂渗透时间: 480 min 测试过的物质Butoject (KCL 897 / Aldrich Z677647, 规格 M)</p> <p>飞溅保护 材料: 天然乳胶 最小的层厚度 0.6 mm 溶剂渗透时间: 30 min 测试过的物质Lapren (KCL 706 / Aldrich Z677558, 规格 M) 数据来源 KCL GmbH, D-36124 Eichenzell, 电话号码 +49 (0)6659 87300, e-mail sales@kcl.de, 测试方法 EN374 如果以溶剂形式应用或与其它物质混合应用, 或在不同于EN 374规定的条件下应用, 请与EC批准的手套的供应商联系。 这个推荐只是建议性的, 并且务必让熟悉我们客户计划使用的特定情况的工业卫生学专家评估确认才可。 这不应该解释为在提供对任何特定使用情况方法的批准。</p>
身体保护	根据危险物质的类型, 浓度和量, 以及特定的工作场所选择身体保护措施。 , 防护设备的类型必须根据特定工作场所中的危险物的浓度和数量来选择。
呼吸系统防护	不需要保护呼吸。如需防护粉尘损害, 请使用N95型 (US) 或P1型 (EN 143) 防尘面具。 呼吸器使用经过测试并通过政府标准如NIOSH (US) 或CEN (EU) 的呼吸器和零件。

9. 理化特性

9.1 基本的理化特性的信息

外观与性状	形状: 薄片 颜色: 白色
气味	无数据资料
气味阈值	无数据资料
pH值	无数据资料
熔点/凝固点	熔点/熔点范围: 139 - 141 ° C
初沸点和沸程	288 ° C 在 1,013 hPa
闪点	151 ° C - 闭杯
蒸发速率	无数据资料
易燃性(固体, 气体)	无数据资料
高的/低的燃烧性或爆炸性限度	无数据资料
蒸气压	0.00319 hPa 在 20.00 ° C
蒸气密度	无数据资料
密度/相对密度	1.36 g/cm ³ 在 20 ° C
水溶性	0.0493 g/l 在 20 ° C - OECD测试导则105 - 微溶
正辛醇/水分配系数	log Pow: 2.21 在 23 ° C
自燃温度	无数据资料
分解温度	无数据资料
黏度	无数据资料

10. 稳定性和反应活性

10.1 反应性

无数据资料

10.2 稳定性

无数据资料

10.3 危险反应

无数据资料

10.4 应避免的条件

无数据资料

10.5 禁配物

强氧化剂, 强酸, 强碱, 硝酸钾

10.6 危险的分解产物

其它分解产物 - 无数据资料

11. 毒理学资料

11.1 毒理学影响的信息

急性毒性
无数据资料 吸入: 无数据资料 经皮: 无数据资料
皮肤腐蚀/刺激
严重眼睛损伤/眼刺激
无数据资料
呼吸或皮肤过敏
豚鼠 - 未引起试验动物过敏。
生殖细胞致突变性
体外基因毒性 - Ames试验 - 鼠伤寒沙门氏菌 - 有或没有代谢活化作用 - 阴性 体内基因毒性 - 小鼠 - 腹膜内的 - 阴性 微核测试
致癌性
IARC: 此产品中并没有大于或等于 0.1%含量的组分被 IARC鉴别为可能的或肯定的人类致癌物。
生殖毒性
无数据资料
特异性靶器官系统毒性（一次接触）
无数据资料
特异性靶器官系统毒性（反复接触）
无数据资料
吸入危害
无数据资料
潜在的健康影响
吸入 吸入可能有害。可能引起呼吸道刺激。 食入 吞咽可能有害。 皮肤 通过皮肤吸收可能有害。可能引起皮肤刺激。 眼睛 可能引起眼睛刺激。
接触后的征兆和症状
据我们所知, 此化学, 物理和毒性性质尚未经完整的研究。
附加说明
重复染毒毒性 - 大鼠 - 经口 - 观察到有害效果的最低水平 - 5,000 mg/kg 化学物质毒性作用登记: 无数据资料

12. 生态学资料

12.1 生态毒性

对鱼类的毒性	半静态试验 LC50 - 青鳉鱼 - > 5.37 mg/l - 96 h 方法: OECD测试导则203
对水溞和其他水生无脊椎动物的毒性	活动抑制 EC50 - Daphnia magna (水溞) - > 23.5 mg/l - 48 h 方法: OECD测试导则202

对藻类的毒性	生长抑制 EC50 - Selenastrum capricornutum (绿藻) - > 6.5 mg/l - 72 h 方法: OECD测试导则201
细菌毒性	呼吸抑制 EC50 - 污泥处理 - > 1,000 mg/l - 3 h 方法: OECD测试导则209

12.2 持久性和降解性

生物降解性	好氧的 - 暴露时间 28 d 结果: 94 % - 快速生物降解的。 方法: OECD测试导则301F
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12.3 潜在的生物累积性

无数据资料

12.4 土壤中的迁移性

无数据资料

12.5 PBT和vPvB的结果评价

无数据资料

12.6 其他环境有害作用

无数据资料

化学耗氧量(COD) 60 mg/g

13. 废弃处置

13.1 废物处理方法

产品
将剩余的和不可回收的溶液交给有许可证的公司处理。
污染包装物
按未用产品处置。

14. 运输信息

信息	欧洲陆运危规	国际海运危规	国际空运危规
联合国编号	-	-	-
联合国运输名称	非危险货物	非危险货物	非危险货物
运输危险类别	-	-	-
包裹组	-	-	-
环境危害	否	否	否
特殊防范措施	无数据资料		

15. 法规信息

15.1 专门对此物质或混合物的安全，健康和环境的规章 / 法规

适用法规
请注意废物处理也应该满足当地法规的要求。 若适用，该化学品满足《危险化学品安全管理条例》（2002年1月9号国务院通过）的要求。

SAFETY DATA SHEET

1. PRODUCT

1.1 Product identifiers

Name: Dimethyl terephthalate

CAS-No.: 120-61-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula: $C_{10}H_{10}O_4$
Molecular weight: 194.18 g/mol
CAS-No.: 120-61-6
EC-No.: 204-411-8

Hazardous components

Component	Classification	Concentration
Dimethyl terephthalate		<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice
No data available
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.2 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Dimethyl terephthalate	120-61-6	TWA	5 mg/m ³	USA. Workplace Environmental Exposure Levels (WEEL)

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M) Splash contact Material: Nature latex/chloroprene Minimum layer thickness: 0.6 mm Break through time: 30 min Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
Body Protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	No special environmental precautions required.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Form: Chunks Colour: white
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: 139 - 141 °C (282 - 286 °F)
Initial boiling point and boiling range	288 °C (550 °F) at 1,013 hPa (760 mmHg)
Flash point	151 °C (304 °F) - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	0.00319 hPa (0.00239 mmHg) at 20.00 °C (68.00 °F)
Vapour density	No data available
Relative density	1.36 g/cm ³ at 20 °C (68 °F)
Water solubility	0.0493 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - slightly soluble
Partition coefficient: n-octanol/water	log Pow: 2.21 at 23 °C (73 °F)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases, Nitrates

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
No data available Inhalation: No data available Dermal: No data available No data available
Skin corrosion/irritation
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
- Guinea pig Did not cause sensitisation on laboratory animals.
Germ cell mutagenicity
Ames test S. typhimurium Result: negative Mouse Result: negative Micronucleus test
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity

No data available No data available
Specific target organ toxicity -single exposure
No data available
Specific target organ toxicity -repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
Repeated dose toxicity - Rat - Oral - Lowest observed adverse effect level - 5,000 mg/kg RTECS: WZ1225000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	semi-static test LC50 - <i>Oryzias latipes</i> - > 5.37 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - <i>Daphnia magna</i> (Water flea) - > 23.5 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	Growth inhibition EC50 - <i>Selenastrum capricornutum</i> (green algae) - > 6.5 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Respiration inhibition EC50 - Sludge Treatment - > 1,000 mg/l - 3 h (OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 94 % - Readily biodegradable. (OECD Test Guideline 301) Chemical Oxygen Demand (COD) 60 mg/g
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12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
Dimethyl terephthalate	120-61-6	

New Jersey Right To Know Components

Component	CAS-No.	Revision Date
Dimethyl terephthalate	120-61-6	

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating

Health hazard: 0

Chronic Health Hazard:

Flammability: 1

Physical Hazard 0

NFPA Rating

Health hazard: 0

Fire Hazard: 1

Reactivity Hazard: 0