

SAFETY DATA SHEET

LOWINOX 22M46



Version	Revision Date:	SDS Number:	Country : US
1.2	2019/03/31	4000000004859	Language: Z8

SECTION 1. IDENTIFICATION

Product name	:	LOWINOX 22M46
Product code	:	000000000020002647
Other Identifiers	:	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol
CAS-No.	:	119-47-1

Recommended use of the chemical and restrictions on use

Recommended use	:	Antioxidant
Restrictions on use	:	Reserved for industrial and professional use.

Manufacturer or supplier's details

Company:	<u>Supplier</u> SI Group USA (USAA), LLC 4 Mountainview Terrace Suite 200 Danbury, CT United States of America (USA) 06810
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Prepared by	SI Group Regulatory Affairs
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Further information for the material safety data sheet : msdsrequest@siigroup.com

Emergency telephone

Emergency telephone:	+1 703-741-5970(CHEMTREC/US) +44 (0) 1235 239 670(NCEC/EU) 0 512 8090 3042(NRCC/CHINA) For additional emergency telephone numbers see section 16 of the Safety Data Sheet.
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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Reproductive toxicity (Oral)	:	Category 2
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GHS label elements

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Hazard pictograms

:



Signal Word

:

Warning

Hazard Statements

:

H361 Suspected of damaging fertility or the unborn child if swallowed.

Precautionary Statements

:

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

:

Substance

Substance name

:

6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol

CAS-No.

:

119-47-1

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	>= 90 - <= 100

The exact percentage concentrations of components are being withheld as a trade secret in accordance with paragraph (i) of §1910.120

SECTION 4. FIRST AID MEASURES

General advice

:

Move out of dangerous area.

Show this material safety data sheet to the doctor in attendance.

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If inhaled	:	Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention.
Most important symptoms and effects, both acute and delayed	:	No information available.
Notes to physician	:	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	Water spray
Specific hazards during fire fighting	:	No information available.
Hazardous combustion products	:	No hazardous combustion products are known.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
Environmental precautions	:	Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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SECTION 7. HANDLING AND STORAGE

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| Advice on protection against fire and explosion | : | Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. |
| Advice on safe handling | : | Avoid formation of respirable particles.
Avoid exceeding the given occupational exposure limits (see section 8).
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | : | Keep container tightly closed in a dry and well-ventilated place. |
| Materials to avoid | : | Never allow product to get in contact with water during storage. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

- | | | |
|----------------------|---|--|
| Engineering measures | : | Use mechanical ventilation for general area control.
Dust must be extracted directly at the point of origin.
Ensure that extracted air cannot be returned to the workplace through the ventilation system.
Ensure that eyewash stations and safety showers are close to the workstation location. |
|----------------------|---|--|

Personal protective equipment

- | | | |
|------------------------|---|---|
| Respiratory protection | : | In the case of dust or aerosol formation use respirator with an approved filter.
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. |
|------------------------|---|---|

Hand protection

- | | | |
|--------------------------|---|---|
| Remarks | : | Polyvinyl alcohol or nitrile- butyl-rubber gloves Before removing gloves clean them with soap and water. |
| Eye protection | : | Eye wash bottle with pure water
Tightly fitting safety goggles |
| Skin and body protection | : | Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink. |

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When using do not smoke.
Wash hands before breaks and at the end of workday.

Environmental exposure controls

Water : Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid, granular, or, powder
Color : white
Odor : none
Odor Threshold : No data available

pH : No data available

Melting point/range : 120 - 136 °C

Initial boiling point and boiling range : No data available

Flash point : 190 °C
Method: open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available
Upper explosion limit : No data available

Lower explosion limit : 30 g/m3

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : 1.04

Density : No data available

Bulk density : 308 kg/m3

Solubility(ies)
Water solubility : 0.1 g/l

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : 350 °C

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available

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Explosive properties	:	No data available
Oxidizing properties	:	No data available
Surface tension	:	No data available
Dust explosion class	:	St2
Minimum ignition energy	:	< 10 mJ

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Will not occur.
Conditions to avoid	:	No data available
Incompatible materials	:	Oxidizing agents, Strong acids and strong bases
Hazardous decomposition products	:	Carbon oxides Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat): > 10,000 mg/kg
Acute inhalation toxicity	:	Remarks: Not classified due to lack of data.
Acute dermal toxicity	:	Remarks: Not classified due to lack of data.

Skin corrosion/irritation

Product:

Remarks: No significant adverse effects were reported

Serious eye damage/eye irritation

Product:

Remarks: No significant adverse effects were reported

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Respiratory or skin sensitization

Product:

Remarks: No data available

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Germ cell mutagenicity - Assessment : Not classified due to lack of data.

Carcinogenicity

Product:

Remarks: This information is not available.

Carcinogenicity - Assessment : Not classified due to lack of data.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

Reproductive toxicity - Assessment : Suspected of damaging fertility or the unborn child.

STOT-single exposure

Product:

Remarks: Not classified due to lack of data.

STOT-repeated exposure

Product:

Assessment: Not classified due to lack of data.

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Repeated dose toxicity

Product:

Remarks: No data available

Aspiration toxicity

Product:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50: > 50 mg/l/Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : Remarks: Not classified due to lack of data.

Toxicity to algae : Remarks: Not classified due to lack of data.

Toxicity to microorganisms : Remarks: Not classified due to lack of data.

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

Product:

Mobility : Remarks: No data available

Other adverse effects

Product:

Results of PBT and vPvB : This substance is not considered to be persistent, bioaccumu-

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assessment	lating and toxic (PBT).
Ozone-Depletion Potential	: Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. May cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

SARA 311/312 Hazards	: Chronic Health Hazard
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SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : 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.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

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

Pennsylvania Right To Know

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New Jersey Right To Know

6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol 119-47-1

California Prop 65 : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

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TCSI	:	Not in compliance with the inventory
TSCA	:	On TSCA Inventory
REACH	:	On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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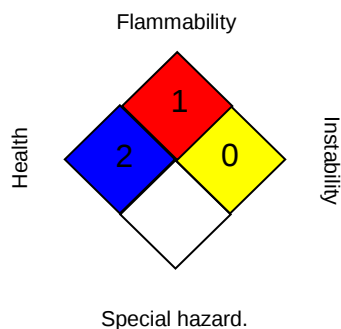
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Further information

NFPA:



HMIS® IV:

HEALTH	/	2
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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<** Phrase language not available: [Z8] CUST - 100000000012264 **>

US / Z8

Carechem24 International Worldwide Coverage

Emergency Phone Numbers:

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670
<u>Asia Pacific:</u>	East / South East Asia	Regional Number : +65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	:Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285
	Vietnam	+65 3158 1255
	India	+65 3158 1198
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Bangladesh	+65 3158 1200
<u>Middle East / Africa:</u>	Arabic speaking countries	+44 (0) 1235 239 671
	All other countries	+44 (0) 1235 239 670
<u>America</u>	United States / Canada	001866 928 0789

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<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
	Mexico	+52 555 004 8763