LOWILITE® 28 POWDER



VersionRevision Date:SDS Number:Country: US1.12019/03/31400000004865Language: Z8

SECTION 1. IDENTIFICATION

Recommended use of the chemical and restrictions on use

Recommended use : UV absorber

Restrictions on use : Reserved for industrial and professional use.

Manufacturer or supplier's details

Company: Supplier

SI Group USA (USAA), LLC 4 Mountainview Terrace

Suite 200 Danbury, CT

United States of America (USA)

06810

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.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Specific target organ

systemic toxicity - repeated

exposure (Oral)

: Category 2 (Liver, Kidney)

Long-term (chronic) aquatic

hazard

: Category 4

Combustible dust

GHS label elements

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 400000004865 Language: Z8

Hazard pictograms



Signal Word : Warning

Hazard Statements : H373 May cause damage to organs (Liver, Kidney) through

prolonged or repeated exposure if swallowed.

H413 May cause long lasting harmful effects to aquatic life.

May form combustible dust concentrations in air.

Precautionary Statements : Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P273 Avoid release to the environment.

Response:

P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Pure substance

Chemical nature : Benzotriazole

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol	25973-55-1	>= 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

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

LOWILITE® 28 POWDER



Version 1.1

Revision Date: 2019/03/31

SDS Number: 400000004865

Country: US Language: Z8

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

Product dust may be irritating to eyes, skin and respiratory

system.

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.

Specific hazards during fire

fighting

Avoid generating dust; fine dust dispersed in air in sufficient

concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

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 Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Non-sparking tools should be used. Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Ensure adequate ventilation.

LOWILITE® 28 POWDER



Version **Revision Date:** SDS Number: Country: US 2019/03/31 400000004865 1.1 Language: Z8

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.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.

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.

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 It is recommended that all dust control equipment such as

> local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen

deficient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

LOWILITE® 28 POWDER



Version 1.1

Revision Date: 2019/03/31

SDS Number: 400000004865

Country: US Language: Z8

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.

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

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. 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 : powder

Color : off-white, to, light yellow

Odor : odorless

Odor Threshold : No data available

pH : 5.8

Concentration:1 %

Melting point/range : 80 - 88 °C

Boiling point/boiling range : 477.84 °C

Flash point : 229 °C

Method: DIN 51758

Evaporation rate : No data available

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: 1.1 2019/03/31 400000004865

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapor pressure : No data available.

Relative vapor density : No data available

Relative density : No data available

Density : 1.17 g/cm3 (20 °C)

Solubility(ies)

Water solubility : 0.00001 g/l (25 °C)

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Pow: 7.25

Autoignition temperature : 390 °C

Decomposition temperature : > 220 °C

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Surface tension : No data available

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

: Hazardous polymerization does not occur.

Stable under recommended storage conditions.

Country: US

Language: Z8

No decomposition if used as directed.

Conditions to avoid : No data available

LOWILITE® 28 POWDER



VersionRevision Date:SDS Number:Country: US1.12019/03/31400000004865Language: Z8

Incompatible materials : Strong oxidizing agents, Acids and bases

Carbon oxides

Hazardous decomposition

products Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 7,750 mg/kg

LD50 (Mouse): > 7,750 mg/kg

LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit):> 1,100 mg/kg

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Acute oral toxicity : LD50 (Rat): > 7,750 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit Result: slight irritation

Remarks: No significant adverse effects were reported

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: No eye irritation

Remarks: No significant adverse effects were reported

Components:

LOWILITE® 28 POWDER



VersionRevision Date:SDS Number:Country: US1.12019/03/31400000004865Language: Z8

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitization

Product:

Test Type: Maximization Test

Species: Guinea pig

Result: Did not cause sensitization on laboratory animals.

Remarks: No data available

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Test Type: Maximization Test

Species: Guinea pig

Assessment: Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity -

Assessment

Not classified due to data which are conclusive although

insufficient for classification.

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity -

Assessment

In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

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.

LOWILITE® 28 POWDER



VersionRevision Date:SDS Number:Country: US1.12019/03/31400000004865Language: Z8

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:

Reproductive toxicity -

Assessment

Not classified due to data which are conclusive although

insufficient for classification.

STOT-single exposure

Product:

Assessment: Not classified due to lack of data.

STOT-repeated exposure

Product:

Assessment: Not classified due to lack of data.

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Routes of exposure:Oral Target Organs:Kidney, Liver

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Product:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/lExposure time: 96

h

LC50 (Zebra fish (Brachydanio rerio)): > 100 mg/IExposure

time: 96 h

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 40000004865 Language: Z8

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 24 h

EC50 (Desmodesmus subspicatus (green algae)): > 10 Toxicity to algae

mg/IExposure time: 72 h

Toxicity to microorganisms IC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 24 h

Persistence and degradability

Product:

Biodegradability Result: Not readily biodegradable.

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Biodegradability Result: According to the results of tests of biodegradability this

product is not readily biodegradable.

Biodegradation: 2 - 8 % Exposure time: 28 d

Bioaccumulative potential

Product:

Bioaccumulation Remarks: No data available

Components:

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol:

Partition coefficient: n-: Pow: 7.25

octanol/water

Mobility in soil

Product:

Mobility Remarks: No data available

Other adverse effects

Product:

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 400000004865 Language: Z8

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

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 400000004865 Language: Z8

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 SOCMI 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

Not listed

New Jersey Right To Know

Not listed

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:

TSCA : On TSCA Inventory

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

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

NZIoC : Not in compliance with the inventory

ENCS : 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

LOWILITE® 28 POWDER



VersionRevision Date:SDS Number:Country: US1.12019/03/31400000004865Language: Z8

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

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

CH INV : On the inventory, or in compliance with the inventory

TCSI : Not in compliance with the 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

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 400000004865 Language: Z8

Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

NFPA: HMIS® IV:

Flammability

1 1 eg 0

HMIS® ratings are based on a 0-4 rating Special hazard. 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.

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Revision Date : 2019/03/31

<** Phrase language not available: [Z8] CUST - 10000000012264 **>

US / Z8

Carechem24 International Worldwide Coverage

Emergency Phone Numbers:

Europe:	All European Countries	+44 (0) 1235 239 670
Asia Pacific:	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

LOWILITE® 28 POWDER



Version Revision Date: SDS Number: Country: US 1.1 2019/03/31 400000004865 Language: Z8

Sri Lanka +65 3158 1195 +65 3158 1200 Bangladesh Middle East / Africa: Arabic speaking countries +44 (0) 1235 239 671 All other countries +44 (0) 1235 239 670 United States / Canada <u>America</u> 001866 928 0789 Latin America: Brazil +55 113 711 9144 All other countries +44 (0) 1235 239 670 Mexico +52 555 004 8763