

SILCOCAT 74553

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SAFETY DATA SHEET

SILCOCAT 74553

Section 1. Identification

GHS product identifier : SILCOCAT 74553

Chemical name: MixtureCAS number: MixtureOther means of identification: FO00014255

Product type : solid

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

Product use : Industrial applications. Plastics.

Supplier's details : AVIENT CORPORATION

1675 Navarre Road SW, Massillon,

Ohio USA 44646

1 330 837 8679

Emergency telephone number (with hours of operation)

CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or

accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

ORGANIC PEROXIDES - Type E

GHS label elements



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Hazard pictograms

Signal word : Warning

Hazard statements: Heating may cause a fire.

Causes skin irritation.

Precautionary statements

Not applicable.

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing, incompatible materials and combustible materials. Keep only in original container. Wash hands

thoroughly after handling.

Response: IF ON SKIN: Wash with plenty of soap and water. Take off

contaminated clothing and wash it before reuse. If skin irritation

occurs: Get medical attention.

Storage: Protect from sunlight. Store at temperatures not exceeding

 $38^{\circ}\text{C}/100^{\circ}\text{F}$. Keep cool. Store away from other materials.

Disposal: Dispose of contents and container in accordance with all local,

regional, national and international regulations.

Supplemental label elements :

Hazards not otherwise classified : Temperature control may be required. Hazardous decomposition may

occur.

Not available.

None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Chemical name : Mixture
Other means of identification : FO00014255

CAS number/other identifiers

%	CAS number
>= 25 - < 50	78-63-7
	<mark>%</mark> >= 25 - < 50

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require



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reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable

for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated

clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim

to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie,

belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms



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Eye contact Adverse symptoms may include the following:

pain or irritation

watering redness

No specific data. Inhalation

Skin contact Adverse symptoms may include the following:

> irritation redness

No specific data. **Ingestion**

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. Contact poison treatment specialist Notes to physician

immediately if large quantities have been ingested or inhaled.

No specific treatment. **Specific treatments**

Protection of first-aiders No action shall be taken involving any personal risk or without

suitable training. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Use dry chemical, CO₂, water spray (fog) or foam.

Do not use water jet.

Specific hazards arising from the

chemical

This material increases the risk of fire and may aid combustion.

Heating may cause a fire. May re-ignite itself after fire is

extinguished. Hazardous decomposition may occur. Runoff to sewer

may create fire or explosion hazard.

Hazardous thermal decomposition products Decomposition products may include the following materials:

carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for fire-

fighters

Promptly isolate the scene by removing all persons from the vicinity

of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-

exposed containers cool.

Special protective equipment for

fire-fighters

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated



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in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without

suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal

protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note

of any information in Section 8 on suitable and unsuitable materials.

See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil,

waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil

or air).

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Use spark-proof tools and explosion-

proof equipment. Avoid contamination with reactive substances. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Use spark-proof tools and explosion-

proof equipment. Approach release from upwind. Prevent entry into

sewers, water courses, basements or confined areas. Avoid

contamination with reactive substances. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact

information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do

not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is



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Advice on general occupational hygiene

other ignition source. Use only non-sparking tools. Keep away from clothing, incompatible materials and combustible materials.

Temperature control may be required. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated

inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any

Conditions for safe storage, including any incompatibilities

clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
To avoid the risk of formation of shock-sensitive crystals or loss of stability, it is important to store the product within the recommended temperature range. Temperature control may be required. Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry.

accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store at temperatures not exceeding 38°C/100°F. Eliminate all ignition sources. Separate from reducing agents and combustible materials. Keep container tightly closed and sealed until ready for use. Prevent product contamination. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2,5-Dimethyl-2,5-di(tert- butylperoxy)hexane	None.

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof



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Environmental exposure controls

ventilation equipment.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be

necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

selected respirator.

Section 9. Physical and chemical properties



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Appearance

Physical state solid [Paste.] Color NO PIGMENT Odor Not available. **Odor threshold** Not available. Not available. pН Not available. **Melting point Boiling** point Not available. Flash point Not available. **Burning time** Not available. **Burning** rate Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressure: Not available.Vapor density: Not available.Relative density: Not available.Solubility: Not available.Solubility in water: Not available.Partition coefficient: n-: Not available.

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : Dynamic: Not available.
Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity: This product, in laboratory testing, neither detonates nor deflagrates

and only shows low or no effect when heated under confinement.

Chemical stability : Stable under recommended storage and handling conditions (see

Section 7).

Possibility of hazardous reactions : Hazardous reactions or instability may occur under certain conditions

of storage or use. Conditions may include the following: temperature increase high temperature Reactions may include the following:

hazardous decomposition risk of causing fire

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Avoid

increased storage temperature.

Incompatible materials: Reactive or incompatible with the following materials:

combustible materials reducing materials

copper



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iron

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Conclusion/Summary

Skin: Mixture.Not fully tested.Eyes: Mixture.Not fully tested.Respiratory: Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Skin: Mixture.Not fully tested.Respiratory: Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Reproductive toxicity

Conclusion/Summary : Mixture. Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)



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Not available.

Aspiration hazard

Not available.

Information on the likely routes of

exposure

Not available.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following: pain or irritation,

watering, redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following: irritation, redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Mixture.Not fully tested.

General:No known significant effects or critical hazards.Carcinogenicity:No known significant effects or critical hazards.Mutagenicity:No known significant effects or critical hazards.Teratogenicity:No known significant effects or critical hazards.Developmental effects:No known significant effects or critical hazards.Fertility effects:No known significant effects or critical hazards.

Numerical measures of toxicity



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Acute toxicity estimates

Other information: This mixture has not been evaluated as a whole for health effects.

Exposure effects listed are based on existing health data for the

individual components which comprise the mixture.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
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Remarks - Acute - Aquatic	Dangerous for the environment: May cause long term adverse effects in the aquatic		
invertebrates.:	environment.		_

Conclusion/Summary: Dangerous for the environment: May cause long term adverse effects in

the aquatic environment.

Persistence and degradability

Conclusion/Summary : Not available.

Conclusion/Summary : Dangerous for the environment: May cause long term adverse effects

in the aquatic environment.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Peroxide, 1,1'-(1,1,4,4-tetramethyl-	7.34	839.00	high
1,4-butanediyl)bis[2-(1,1-			
dimethylethyl)			

Mobility in soil

Soil/water partition coefficient

(KOC)

Not available.

Other adverse effects : No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S.DOT 49CFR : UN3108, ORGANIC PEROXIDE TYPE E, SOLID (2,5-Dimethyl-

Ground/Air/Water 2,5-di-(tert-butylperoxy)hexane, as a paste ≤47%), 5.2

IATA : UN3108, ORGANIC PEROXIDE TYPE E, SOLID (2,5-Dimethyl-

2,5-di-(tert-butylperoxy)hexane, as a paste ≤47%), 5.2

IMDG : UN3108, ORGANIC PEROXIDE TYPE E, SOLID (2,5-Dimethyl-

2,5-di-(tert-butylperoxy)hexane, as a paste \leq 47%), 5.2

Section 15. Regulatory information

U.S. Federal regulations : United States - TSCA 12(b) - Chemical export notification: None

of the components are listed.

United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not

listed

United States - TSCA 5(a)2 - Proposed significant new use rules:



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Not listed

United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined

United States - TSCA 8(a) - Preliminary assessment report (PAIR): Listed Siloxanes and Silicones, di-Me, Me hydrogen

United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Not listed

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Flammable substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Toxic substances: Not listed

United States - Department of commerce - Precursor chemical:

Not listed

Not listed

Not listed

Not listed

Clean Air Act Section 112(b)

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

Chemicals)

DEA List II Chemicals (Essential

Not listed

Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification: Reactive - Immediate (acute) health hazard

Composition/information on ingredients



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Not applicable.

State regulations

Massachusetts : The following components are listed:

Silica, amorphous

New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: The following components are listed:

Silica, amorphous

California Prop. 65

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

International regulations

Inventory list

Australia

Canada : All components are listed or exempted.
China : All components are listed or exempted.

Eurasian Economic Union :

Japan

Japan inventory (ISHL): Not determined.

New Zealand
Philippines
All components are listed or exempted.
All components are listed or exempted.
Republic of Korea
All components are listed or exempted.
All components are listed or exempted.
Not determined. Not determined.

Thailand

Turkey : Not determined.

United States : All components are listed or exempted.

Viet Nam :

Section 16. Other information

History

Date of printing: 07/15/2025Date of issue/Date of revision: 07/14/2025Date of previous issue: 08/10/2016

Version : 1.3

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals



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IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From

Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

UN = United Nations

References : Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.