

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

BIANCOSAN

Version Revision Date:
1.3.1 14.02.2017

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to authorized collection centres.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Silicone elastomer

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Distillates (petroleum), hydrotreated middle	64742-46-7 265-148-2	Asp. Tox. 1; H304	>= 10 - < 20
Distillates (petroleum), hydrotreated light	64742-47-8 265-149-8	Asp. Tox. 1; H304	>= 1 - < 10
4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One	64359-81-5 264-843-8	Acute Tox. 4; H302 Acute Tox. 2; H330 Acute Tox. 4; H312 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.025 - < 0.14

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Protection of first-aiders : No special precautions are necessary for first aid responders.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.
Get medical attention if symptoms occur.
- In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

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6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in properly labelled containers. Store in accordance with the particular national regulations.

Advice on common storage : Do not store with the following product types:
Strong oxidizing agents

7.3 Specific end use(s)

Specific use(s) : These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Amorphous fumed silica	112945-52-5	TWA (inhalable dust)	6 mg/m ³ (Silica)	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
		TWA (Respirable dust)	2.4 mg/m ³ (Silica)	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller			

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definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Amorphous fumed silica

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One	Fresh water	0.034 µg/l
	Fresh water sediment	0.41 mg/kg
	Marine sediment	0.0034 mg/kg
	Sewage treatment plant	0.064 mg/l
	Soil	0.062 mg/kg
	Oral (Secondary Poisoning)	4.49 mg/kg food
	Marine water	0.0068 µg/l

8.2 Exposure controls

Engineering measures

Processing may form hazardous compounds (see section 10).
Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.

Personal protective equipment

- Eye protection : Wear the following personal protective equipment:
Safety glasses
- Hand protection
- Remarks : Wash hands before breaks and at the end of workday.
- Skin and body protection : Skin should be washed after contact.
- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Combined particulates and organic vapour type (A-P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : Paste
- Colour : White, Transparent
- Odour : Acetic acid

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Odour Threshold	:	No data available
pH	:	Not applicable
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	Not applicable
Flash point	:	> 100 °C Method: closed cup
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	No data available
Relative density	:	0.97
Solubility(ies) Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	>20,5 mm ² /sec (40°C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Molecular weight	:	No data available
Self-ignition	:	The substance or mixture is not classified as pyrophoric. The substance or mixture is not classified as self heating.

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Distillates (petroleum), hydrotreated light:

- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
- Acute inhalation toxicity : LC50 (Rat): > 5.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials
- Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

- Acute oral toxicity : LD50 (Rat): 1,636 mg/kg
- Acute inhalation toxicity : LC50 (Rat): 0.26 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: Corrosive to the respiratory tract.
- Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
Method: Expert judgement

Skin corrosion/irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Distillates (petroleum), hydrotreated light:

Assessment: Repeated exposure may cause skin dryness or cracking.

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Result: Corrosive after 1 to 4 hours of exposure

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Species: Rabbit
Method: OECD Test Guideline 405

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Result: No eye irritation

Distillates (petroleum), hydrotreated light:

Species: Rabbit

Result: No eye irritation

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Result: Irreversible effects on the eye

Remarks: Based on skin corrosivity.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Test Type: Maximisation Test

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated light:

Test Type: Maximisation Test

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

Remarks: Based on data from similar materials

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Test Type: Maximisation Test

Exposure routes: Skin contact

Species: Guinea pig

Result: positive

Assessment: Probability or evidence of high skin sensitisation rate in humans

Germ cell mutagenicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

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Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Rat
Application Route: Intraperitoneal injection
Result: negative

Distillates (petroleum), hydrotreated light:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Chromosomal aberration
Species: Rat
Application Route: Intraperitoneal injection
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Carcinogenicity - Assessment : Classified based on the conditions cited in Nota N (Regulation (EC) 1272/2008, Annex VI, Part 3, Note N)

Reproductive toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative

Distillates (petroleum), hydrotreated light:

Effects on fertility : Test Type: One-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion

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Result: negative
Remarks: Based on data from similar materials

Effects on foetal develop- : Test Type: Embryo-foetal development
ment Species: Rat
 Application Route: Ingestion
 Result: negative

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Effects on fertility : Test Type: Two-generation reproduction toxicity study
 Species: Rat
 Application Route: Ingestion
 Result: negative

Effects on foetal develop- : Test Type: Embryo-foetal development
ment Species: Rat
 Application Route: Ingestion
 Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Components:

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Exposure routes: Ingestion

Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated middle:

Species: Rat

NOAEL: >= 5,000 mg/kg

Application Route: Ingestion

Exposure time: 13 Weeks

Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated light:

Species: Rat

NOAEL: > 10.4 mg/l

Application Route: inhalation (vapour)

Exposure time: 90 Days

Remarks: Based on data from similar materials

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4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Species: Rat
NOAEL: 20 mg/kg
LOAEL: 100 mg/kg
Application Route: Ingestion
Exposure time: 28 Days

Aspiration toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated middle:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Distillates (petroleum), hydrotreated light:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Distillates (petroleum), hydrotreated middle:

- | | | |
|--|---|--|
| Toxicity to fish | : | LL50 (Scophthalmus maximus (turbot)): > 1,028 mg/l
Exposure time: 96 h
Test substance: Water Accommodated Fraction |
| Toxicity to daphnia and other aquatic invertebrates | : | LL50 (Acartia tonsa): > 3,193 mg/l
Exposure time: 48 h
Test substance: Water Accommodated Fraction |
| Toxicity to algae | : | EL50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction |
| Toxicity to microorganisms | : | EC50 : > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOELR: > 100 mg/l
Exposure time: 8 d
Species: Ceriodaphnia dubia (water flea)
Test substance: Water Accommodated Fraction |

Distillates (petroleum), hydrotreated light:

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- Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 250 mg/l
Exposure time: 96 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 203
- Toxicity to daphnia and other : EL50 (Acartia tonsa): > 3,193 mg/l
aquatic invertebrates Exposure time: 48 h
Test substance: Water Accommodated Fraction
- Toxicity to algae : EL50 (Skeletonema costatum (marine diatom)): > 3,200 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
- NOELR (Skeletonema costatum (marine diatom)): 993 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
- Toxicity to microorganisms : EC50 : > 100 mg/l
Exposure time: 3 h
- Toxicity to daphnia and other : NOELR: > 70 mg/l
aquatic invertebrates (Chronic Exposure time: 8 d
toxicity) Species: Ceriodaphnia dubia (water flea)
Test substance: Water Accommodated Fraction

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.0027 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.0052 mg/l
aquatic invertebrates Exposure time: 48 h
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.077
mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic tox- : 100
icity)
- Toxicity to microorganisms : EC50 : > 5.7 mg/l
Exposure time: 3 h
- Toxicity to fish (Chronic tox- : NOEC: 0.00056 mg/l
icity) Exposure time: 97 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other : NOEC: 0.00063 mg/l
aquatic invertebrates (Chronic Exposure time: 21 d
toxicity) Species: Daphnia magna (Water flea)
- M-Factor (Chronic aquatic : 10

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toxicity)

12.2 Persistence and degradability

Components:

Distillates (petroleum), hydrotreated middle:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 74 %
Exposure time: 28 d
Method: OECD Test Guideline 306

Distillates (petroleum), hydrotreated light:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 82 %
Exposure time: 24 d
Method: OECD Test Guideline 301F

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Biodegradability : Result: rapidly degradable

12.3 Bioaccumulative potential

Components:

4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 750

Partition coefficient: n- : log Pow: 2.8
octanol/water

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

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tion 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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