## SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

BLUESTAR SILICONES

Delivering your potential.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier: <br> Product name: CAF 33 WHITE

> 1.2 Relevant identified uses of the substance or mixture and uses advised against:
> Identified uses: Used for making joints, sealing and gluing.
> Uses advised against: None known.
1.3 Details of the supplier of the safety data sheet:

Manufacturer:
BLUESTAR SILICONES Usines Rhône-Alpes Telephone: +33 (0) 472737475
1-55 rue des Frères PERRET
F-69 192 SAINT FONS Cedex
E-mail: fds.sil@bluestarsilicones.com
Supplier:
Bluestar Silicones Germany GmbH Telephone: +49 (0) 4516 09 81-27
Hans-Sachs-Strasse 4a
D-23566 Lübeck

Fax: +33 (0) 472737599

Fax: +49 (0) 451609 81-11
1.4 Emergency telephone number: +49 (0) 451609 81-27

## SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has been classified according to the legislation in force.
Classification according to Regulation (EC) No 1272/2008 as amended.:

## Health Hazards:

Serious eye irritation Category 2 Causes serious eye irritation.
Hazard summary:
During curing, the product will release small quantities of irritating vapors.
Health Hazards:
Inhalation: No specific symptoms noted.
Eye contact: Causes serious eye irritation.
Skin Contact: No specific symptoms noted.
Ingestion: No specific symptoms noted.
Other Health Effects: No other information noted.
Environmental hazards: Not regarded as dangerous for the environment.

### 2.2 Label Elements:



| Signal Words: | Warning |
| :--- | :--- |
| Hazard Statement(s): | Causes serious eye irritation. |
| Precautionary Statement: |  |
| Prevention: | Wear protective gloves/protective clothing/eye protection/face <br> protection. |
| Response: | IF IN EYES: Rinse cautiously with water for several minutes. Remove <br> contact lenses, if present and easy to do. Continue rinsing. If eye <br> irritation persists: Get medical advice/attention. |

### 2.3 Other hazards: <br> No data available.

Substance(s) formed under the conditions of use:
$\left.\begin{array}{|l|l|l|l|l|}\hline \text { Chemical name } & \text { Concentration } & \text { CAS-No. } & \text { EC No. } & \begin{array}{l}\text { REACH } \\ \text { Registration No. }\end{array} \\ \hline \text { acetic acid...\% } & <3 \% & 64-19-7 & 200-580-7 & \\ \text { INDEX }\end{array}\right]$

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures:

General information: Mixture of polydimethylsiloxanes, silica and curing agents.

| Chemical name | Concentration | CAS-No. | EC No. | REACH <br> Registration No. | Notes |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Methylsilanetriyl triacetate | $<3 \%$ | $4253-34-3$ |  |  |  |
| octamethylcyclotetrasiloxane | $<3 \%$ | $556-67-2$ | $209-136-7$ | $01-2119529238-$ <br> $36-0002$ | $\#$ |
| acetic acid...\% | $<1 \%$ | $64-19-7$ | $200-580-7$ |  | $\#$ |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. \#: \# This substance has workplace exposure limit(s).
PBT: persistent, bioaccumulative and toxic substance.
vPvB : very persistent and very bioaccumulative substance.


## Classification:

| Chemical name | Classification |  | Notes |
| :--- | :--- | :--- | :--- |
| Methylsilanetriyl triacetate | DSD: | C; R34 Xn; R22 |  |
|  | CLP: | Acute Tox. 4;H302, Skin Corr. 1C;H314 |  |
|  | DSD: | R53 Repr. 3; R62 |  |
|  | CLP: | Repr. 2;H361f, Aquatic Chronic 4;H413, Flam. Liq. <br> $3 ; H 226$ |  |
| acetic acid...\% | DSD: | R10 C; R35 |  |
|  | CLP: | Flam. Liq. 3;H226, Skin Corr. 1A;H314 |  | | DSD: Directive 67/548/EEC. |
| :--- |

## CLP: Regulation No. 1272/2008.:

The full text for all R-phrases and H -statements is displayed in section 16.

## SECTION 4: First aid measures

General: Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.
4.1 Description of first aid measures:

Inhalation:

Ingestion: Do not induce vomiting. Rinse mouth thoroughly.
4.2 Most important symptoms None known.

Eye contact: In the event of contact with the eyes, rinse thoroughly with clean water. Continue to rinse for at least 15 minutes.

Skin Contact: Remove contaminated clothing and shoes. Wash with soap and water.
Move into fresh air and keep at rest.
and effects, both acute and delayed:

### 4.3 Indication of any immediate medical attention and special treatment needed:

Hazards: No specific recommendations.

Treatment: No specific recommendations.

## SECTION 5: Firefighting measures

General Fire Hazards: No specific recommendations.
5.1 Extinguishing media:

Suitable extinguishing media:

Unsuitable extinguishing media:
5.2 Special hazards arising from the substance or mixture:
5.3 Advice for firefighters: Special fire fighting procedures:

Special protective equipment for fire-fighters:

Extinguish with foam, carbon dioxide or dry powder.

Do not use water as an extinguisher.

For further information, refer to Section 10: "Stability and Reactivity".

Water spray should be used to cool containers.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Do not breathe vapor. See Section 8 of the SDS for Personal Protective Equipment. Ventilate the area.
6.2 Environmental Precautions: Collect spillage. Do not discharge into drains, water courses or onto the ground.

### 6.3 Methods and material for containment and cleaning up:

Notification Procedures:

Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling:
7.2 Conditions for safe storage, including any incompatibilities:

Adequate ventilation should be provided so that exposure limits are not exceeded.

Avoid discharge into drains, water courses or onto the ground. Store in tightly closed original container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Avoid contact with oxidizing agents. Vulcanises at room temperature on contact with moisture in the air. For further information, refer to Section 10: "Stability and Reactivity". Suitable containers: Steel drums coated with epoxy-resin.
7.3 Specific end use(s):

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters:

Occupational Exposure Limits:

| Chemical name | type | Exposure Limit Values | Source |
| :--- | :--- | :--- | :--- |
| octamethylcyclotetrasiloxane | VME | $10 \mathrm{ppm} \quad 120 \mathrm{mg} / \mathrm{m} 3$ |  |

Additional exposure limits under the conditions of use

| Chemical name | type | Exposure Limit Values | Source |
| :--- | :--- | :--- | :--- |
| acetic acid...\% | MAK | $10 \mathrm{ppm} \quad 25 \mathrm{mg} / \mathrm{m} 3$ | Germany. DFG MAK List (advisory OELs). <br> Commission for the Investigation of Health <br> Hazards of Chemical Compounds in the Work <br> Area (DFG) (2009) |
|  | TWA | $10 \mathrm{ppm} \quad 25 \mathrm{mg} / \mathrm{m} 3$ | EU. Indicative Exposure Limit Values in <br> Directives 91/322/EEC, 2000/39/EC, <br> $2006 / 15 / E C, ~ 2009 / 161 / E U ~(12 ~ 2009) ~$ |
|  | AGW | $10 \mathrm{ppm} \quad 25 \mathrm{mg} / \mathrm{m} 3$ | Germany. TRGS 900, Limit Values in the <br> Ambient Air at the Workplace (01 2010) |

### 8.2 Exposure controls: <br> Appropriate engineering controls:

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Use engineering controls to reduce air contamination to permissible exposure level.

Individual protection measures, such as personal protective equipment:

| General information: | Provide sufficient ventilation during operations which cause vapor <br> formation. |
| :--- | :--- |
| Eye/face protection: | Safety Glasses |
| Skin protection: <br> Hand Protection: | Rubber gloves are recommended. |
| Other: | It is a good industrial hygiene practice to minimize skin contact. Wear <br> suitable protective clothing. |
| Respiratory Protection: | If ventilation is insufficient, suitable respiratory protection must be provided. |
| Hygiene measures: | Provide eyewash station and safety shower. |
| Environmental Controls: | No data available. |

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

| Appearance: |  |
| :--- | :--- |
| $\quad$ Physical state: | Paste |
| Form: | Thixotropic |
| Color: | White |
| Odor: | Vinegar. |
| Odor Threshold: | No data available. |
| pH: | Not applicable. |
| Melting Point: | No data available. |
| Boiling Point: | No data available. |
| Flash Point: | $>150^{\circ} \mathrm{C}$ (Closed cup according to method Afnor T 60103.) |
| Evaporation Rate: | No data available. |
| Flammability (solid, gas): | No data available. |
| Flammability Limit - Upper (\%): | No data available. |
| Flammability Limit - Lower (\%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density (air=1): | No data available. |
| Relative density: | 1,04 (20 $\left.{ }^{\circ} \mathrm{C}\right)$ Approximate |
| Solubility(ies): |  |
| Solubility in Water: | Practically Insoluble |
| Solubility (other): | Acetone.: Insoluble |
|  | Ethanol.: Insoluble |
|  | Petrol.: Partially soluble. |
| Partition coefficient (n-octanol/water): | White-spirit.: Partially soluble. |
| Autoignition Temperature: | Nomatic hydrocarbons.: Partially soluble. |
| Decomposition Temperature: | No data available. |
| Viscosity: | No data available. |
| Oxidizing properties: | No data available. |
|  | No data available. |
|  | According to the data on the components Not considered as |
| oxidizing. (evaluation by structure-activity relationship) |  |

## SECTION 10: Stability and reactivity

10.1 Reactivity:
10.2 Chemical Stability:
10.3 Possibility of hazardous reactions:
10.4 Conditions to avoid: No other information noted.
10.5 Incompatible Materials:
10.6 Hazardous Decomposition Products:

No data available.

Strong oxidizing agents. Water.

Vulcanises at room temperature on contact with moisture in the air.
Stable at room temperature provided it is not on contact with air.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Amorphous silica.

## SECTION 11: Toxicological information

| Information on likely routes of exposure <br> Inhalation: | No data available. |
| :--- | :--- |
| Ingestion: | No data available. |
| Skin Contact: | No data available. |
| Eye contact: | No data available. |

### 11.1 Information on toxicological effects:

## Acute toxicity:

## Oral:

$$
\text { Product: } \quad \text { Not classified for acute toxicity based on available data. }
$$

## Dermal:

Product: Not classified for acute toxicity based on available data.

## Inhalation:

Product: Composition/information on ingredients

Specified substance(s):
octamethylcyclotetrasiloxan e
acetic acid...\% LC 50 (Rat, 4 h ): > $40 \mathrm{mg} / \mathrm{l}$ Vapor
Repeated dose toxicity:
Product:

Specified substance(s):
Methylsilanetriyl triacetate
NOAEL (Rat(Female, Male), Oral): $50 \mathrm{mg} / \mathrm{kg}$ Results obtained on a similar product.
NOAEL (Rat(Female, Male), Inhalation - vapor): $0,56 \mathrm{mg} / \mathrm{LOAEL}$ (Rat(Female, Male), Inhalation - vapor): $2,2 \mathrm{mg} / \mathrm{l}$ Results obtained on a similar product.
octamethylcyclotetrasiloxan e acetic acid...\%

Composition/information on ingredients
LC 50 (Rat, 4 h): > 36 mg/l

NOAEL (Rat, Inhalation, 24 months): 1,820 mg/l
NOAEL (Rabbit, Dermal, 3 weeks): $960 \mathrm{mg} / \mathrm{kg}$
NOAEL (Rat, Feed (Oral)): 290 mg/kg

## Skin Corrosion/Irritation: <br> Product:

## Serious Eye Damage/Eye

 Irritation:Product:

Respiratory or Skin
Sensitization:
Product:

Specified substance(s):
Methylsilanetriyl triacetate
octamethylcyclotetrasiloxane

## Germ Cell Mutagenicity:

In vitro:
Product:

Specified substance(s):
Methylsilanetriyl triacetate
Bacteria (OECD 471): No mutagenic effects
(OECD 476)No mutagenic effects.Results obtained on a similar product. Chromosomal aberration (OECD 473): No clastogenic effect.
octamethylcyclotetrasiloxa ne
acetic acid...\%

In vivo:
Product:

Specified substance(s):
octamethylcyclotetrasiloxa ne
acetic acid...\%
Test results
Not irritating Results obtained on a similar product.

Test results
Irritant. Results obtained on a similar product.

Composition/information on ingredients

OECD 406 (Guinea Pig) : Not a skin sensitizer.

Pig : Not a skin sensitizer.

Composition/information on ingredients

Bacteria : No mutagenic components identified.
Chromosomal aberration : No mutagenic components identified.
Bacteria (OECD 471): No mutagenic effects.
Chromosomal aberration (OECD 473): No clastogenic effect.
(OECD 476)Inconclusive data

Composition/information on ingredients

No mutagenic components identified.
(According to a standardised method.)Results obtained on a similar product.No mutagenic effects.

Carcinogenicity:
Product:
No data available.

Reproductive toxicity: Product:

No data available.

## Reproductive toxicity

(Fertility):

```
Product: Composition/information on ingredients
Specified substance(s):
    Methylsilanetriyl triacetate
```

Rat Female, Male (Ingestion): NOAEL (parent): >= $1000 \mathrm{mg} / \mathrm{kg}$ NOAEL (F1):NOAEL (F2): Method: OECD 422

## Developmental toxicity

```
(Teratogenicity):
Product: Composition/information on ingredients
Specified substance(s):
acetic acid...\%
Rat (Ingestion): NOAEL (terato): \(1600 \mathrm{mg} / \mathrm{kg}\) NOAEL (mater): Method: According to a standardised method.
Specific Target Organ Toxicity - Single Exposure:
Product: No data available.
```


## Specific Target Organ Toxicity - Repeated Exposure:

```
Product:
Composition/information on ingredients
Specified substance(s):
Methylsilanetriyl triacetate
Not classified
```


## Aspiration Hazard:

```
Product: No data available.
Other Adverse Effects:
```


## SECTION 12: Ecological information

### 12.1 Toxicity:

## Acute toxicity:

Fish:
Product: Composition/information on ingredients
Specified substance(s):
Methylsilanetriyl triacetate
LC 50 (96 h): > $100 \mathrm{mg} / \mathrm{l}$ Results obtained on a similar product.
octamethylcyclotetrasiloxan
LC 50 (Oncorhynchus mykiss, 96 h ): >= $0,022 \mathrm{mg} / \mathrm{l}$
e
acetic acid...\%
LC 50 (Oncorhynchus mykiss, 96 h ): > $1000 \mathrm{mg} / \mathrm{l}$
Aquatic Invertebrates:
Product:
Composition/information on ingredients
Specified substance(s):
Methylsilanetriyl triacetate
LC 50 (48 h): > $100 \mathrm{mg} / \mathrm{l}$ Results obtained on a similar product.
octamethylcyclotetrasiloxan
e
EC 50 (Water flea (Daphnia magna), 48 h ): >0,015 mg/l
acetic acid...\%
EC 50 (Water flea (Daphnia magna), 48 h ): > $1000 \mathrm{mg} / \mathrm{l}$

## Chronic Toxicity:

Fish:
Product: Composition/information on ingredients

## Specified substance(s):

octamethylcyclotetrasiloxan e

Aquatic Invertebrates:
Product:
Specified substance(s):
octamethylcyclotetrasiloxan e

Toxicity to Aquatic Plants: Product:

## Specified substance(s):

 Methylsilanetriyl triacetate octamethylcyclotetrasiloxa neacetic acid...\%

NOEC (Oncorhynchus mykiss, 93 d ): >= 0,0044 mg/l

Composition/information on ingredients

NOEC (Water flea (Daphnia magna), 21 d ): 0,0079 mg/l

Composition/information on ingredients

EC 50 ( 96 h ): $660 \mathrm{mg} / \mathrm{l}$ Results obtained on a similar product.

EC 50 (Green algae (Selenastrum capricornutum), 96 h ): $>0,022 \mathrm{mg} / \mathrm{l}$

EC 50 (Alga, 72 h ): > $1000 \mathrm{mg} / \mathrm{l}$
NOEC (Alga, 72 h ): $1000 \mathrm{mg} / \mathrm{l}$

### 12.2 Persistence and Degradability:

## Biodegradation:

Product:
Specified substance(s):
Methylsilanetriyl triacetate
octamethylcyclotetrasiloxane
acetic acid...\%
BOD/COD Ratio:
Product:

### 12.3 Bioaccumulative Potential:

Product:

Specified substance(s):
octamethylcyclotetrasiloxane
acetic acid...\% Bioconcentration Factor (BCF): 3,16 (estimated)
12.4 Mobility in Soil:

### 12.5 Results of PBT and vPvB assessment:

Composition/information on ingredients

74 \% (21 d, According to a standardised method.) Readily biodegradable Results obtained on a similar product.

3,7 \% (29 d)

96 \% (20 d) Readily biodegradable

No data available.

No data available.

Fathead Minnow, Bioconcentration Factor (BCF): 12400

No data available.

No data available.

No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods:

General information: The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate.

Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

## SECTION 14: Transport information

This material is not subject to transport regulations.
Other information: No special precautions.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable..

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

National Regulations:
Wassergefährdungs- WGK 2: wassergefährdend. klasse (WGK):

Water Hazard Class WGK 2: water-endangering. (WGK):
15.2 Chemical safety $\quad$ No data available.
assessment:

## SECTION 16: Other information

Revision Information: Not relevant.
Key abbreviations or acronyms used:
No data available.

Key literature references and No data available. sources for data:

Wording of the R-phrases and $\mathbf{H}$-statements in section 2 and 3:
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H361f Suspected of damaging fertility.
H413 May cause long lasting harmful effects to aquatic life.
R10 Flammable.
R22 Harmful if swallowed.
R34 Causes burns.

R35 Causes severe burns.
R53 May cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.

## Training information: No data available.

## Inventory Status

Australia AICS: On or in compliance with the inventory.
Canada DSL Inventory List: On or in compliance with the inventory.
EINECS, ELINCS or NLP:
Japan (ENCS) List:
China Inv. Existing Chemical Substances:
Korea Existing Chemicals Inv. (KECI):
Philippines PICCS:
US TSCA Inventory:
New Zealand Inventory of Chemicals:

On or in compliance with the inventory.
On or in compliance with the inventory.
On or in compliance with the inventory.
On or in compliance with the inventory.
On or in compliance with the inventory.
On or in compliance with the inventory.
On or in compliance with the inventory.

Issue Date:
SDS No.:
Disclaimer:
17.11.2016

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

