

1 Identification

- **Product identifier**

- **Trade name:** *SabaPVC S3*

- **Application of the substance / the mixture** *Adhesive.*

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

*SABA Dinxperlo BV
 Industriestraat 3
 NL-7091 DC Dinxperlo
 The Netherlands*

*P.O Box 3
 NL - 7090 AA Dinxperlo
 The Netherlands*

Tel.: +31 315 65 89 99

Fax: +31 315 65 32 07

E-mail: info@saba-adhesives.com

Internet: www.saba-adhesives.com

- **Information department:** *HSE department (e-mail: sds@saba-adhesives.com)*

- **Emergency telephone number:** *SABA Dinxperlo BV: Tel.: +31 315 65 89 99*

2 Hazard(s) identification

- **Classification of the substance or mixture**

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

Carc. 2 H351 Suspected of causing cancer.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02

GHS05

GHS07

GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

cyclohexanone

tetrahydrofuran

butanone

- **Hazard statements**

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H351 Suspected of causing cancer.

H336 May cause drowsiness or dizziness.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing vapours.

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- P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P310 *Immediately call a doctor.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

78-93-3	butanone	≥10-<45%
108-94-1	cyclohexanone	≥10-<19%
109-99-9	tetrahydrofuran	≥0.1-<14%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Take affected persons out of danger area and lay down.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting.
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Hydrogen chloride (HCl)
Carbon monoxide and carbon dioxide
Metal oxides.

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- **Advice for firefighters**
- **Protective equipment:**
 - Wear fully protective suit.
 - Wear self-contained respiratory protective device.
 - Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 - Keep people at a distance and stay upwind.
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation
- **Environmental precautions:** Prevent seepage into sewage system, workpits and cellars.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - The usual precautionary measures for handling chemicals should be followed.
 - Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store only in the original receptacle.
 - Protect from frost.
 - Protect from heat and direct sunlight.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

78-93-3 butanone

PEL	Long-term value: 590 mg/m ³ , 200 ppm
REL	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
TLV	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
BEI	

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108-94-1 cyclohexanonePEL Long-term value: 200 mg/m³, 50 ppmREL Long-term value: 100 mg/m³, 25 ppm
SkinTLV Long-term value: 50 mg/m³, 20 ppm
Skin**109-99-9 tetrahydrofuran**PEL Long-term value: 590 mg/m³, 200 ppmREL Short-term value: 735 mg/m³, 250 ppm
Long-term value: 590 mg/m³, 200 ppmTLV Short-term value: 295 mg/m³, 100 ppm
Long-term value: 147 mg/m³, 50 ppm
Skin**· Ingredients with biological limit values:****78-93-3 butanone**BEI 2 mg/L
Medium: urine
Time: end of shift
Parameter: MEK**108-94-1 cyclohexanone**BEI 80 mg/L
Medium: urine
Time: end of shift at end of workweek
Parameter: 1.2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)8 mg/L
Medium: urine
Time: end of shift
Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)**109-99-9 tetrahydrofuran**BEI 2 mg/L
Medium: urine
Time: end of shift
Parameter: Tetrahydrofuran**· Additional information:** The lists that were valid during the creation were used as basis.**· Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Remove any clothing soiled by the product.

· Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

Recommended filter:

Filter A

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Neoprene gloves

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Characteristic

- **Odor threshold:** No data available.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/Melting range:	No data available.
Boiling point/Boiling range:	65 °C (149 °F)

- **Flash point:** 4 °C (39.2 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 230 °C (446 °F)

- **Decomposition temperature:** No data available.

- **Auto igniting:** Product is not auto-igniting.

- **Danger of explosion:** May form explosive peroxides.

- **Explosion limits:**

Lower:	1.1 Vol %
Upper:	12 Vol %

- **Oxidizing properties** No data available.

- **Vapor pressure at 20 °C (68 °F):** 173 hPa (129.8 mm Hg)

- **Density at 20 °C (68 °F):** 0.95 g/cm³ (7.9 lbs/gal)

- **Vapor density** No data available.

- **Evaporation rate** No data available.

- **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

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- | | |
|--|--|
| · Partition coefficient (n-octanol/water): No data available. | |
| · Viscosity: | |
| Dynamic at 20 °C (68 °F): | 1,150 mPas |
| · Solvent separation test | No data available. |
| · Solvent content: | |
| Organic solvents: | 76.0 % |
| VOC content: | 76.00 % |
| | 722.0 g/l / 6.03 lb/gal |
| Solids content: | 24.0 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Violent reactions with strong alkalis and oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Hydrogen chloride (HCl)
Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

78-93-3 butanone

Oral	LD50	>2,193 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)

108-94-1 cyclohexanone

Oral	LD50	2,070-2,110 mg/kg (mouse)
		1,890 mg/kg (rat)
Dermal	LD50	1,100 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (rat)

109-99-9 tetrahydrofuran

Oral	LD50	2,500 mg/kg (rat)
Inhalative	LC50/4 h	82.5 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:**
Strong irritant with the danger of severe eye injury.
Irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is classified as IARC 1 or 2

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

78-93-3 butanone

EC50 (48h) 308 mg/l (daphnia)

108-94-1 cyclohexanone

EC50 820 mg/kg (daphnia)

109-99-9 tetrahydrofuran

EC50 6,670 mg/kg (daphnia)

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **DOT, ADR/RID/ADN, IMDG, IATA** UN1133

· **UN proper shipping name**

· **DOT** Adhesives

· **ADR/RID/ADN** 1133 ADHESIVES, special provision 640D

· **IMDG, IATA** ADHESIVES

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· **Transport hazard class(es)**· **DOT**

· **Class** 3 Flammable liquids
 · **Label** 3

· **ADR/RID/ADN**

· **Class** 3 (F1) Flammable liquids
 · **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**· **DOT, ADR/RID/ADN, IMDG, IATA** II· **Environmental hazards:** Not applicable.· **Special precautions for user** Warning: Flammable liquids· **Danger code (Kemler):** -· **EMS Number:** F-E,S-D· **Stowage Category** A· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.· **Transport/Additional information:**· **ADR/RID/ADN**

· **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**· **Limited quantities (LQ)** 5L

· **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":** UN 1133 ADHESIVES, SPECIAL PROVISION 640D, 3, II

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

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· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Carcinogenity categories**

· **TLV (Threshold Limit Value established by ACGIH)**

108-94-1 cyclohexanone

A3

109-99-9 tetrahydrofuran

A3

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** HSE department (e-mail: sds@saba-adhesives.com).

· **Date of preparation / last revision** 05/07/2019 / 15

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Corr. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

Flam. Liq. 2: Flammable liquids – Category 2

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

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