

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 1 of 16
Print date: 31-1-2025

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

1.1 Product identification:

Product name: Silicone ASSYST for PU - hardener (Bluesil Cata SPU)
UFI code: GH90-U0Q2-500G-KDHX

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

Usage: Hardener. Catalyst.
Uses advised against: Not known.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a
2590 Berlaar
Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency phone number:

For Belgium: Call the **Poison Control Centre (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
NHS 24 Direct For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to directive (EC) No 1272/2008 and its amendments.

The product is classified according to current legislation.

Classification in accordance with Regulation (EC) No 1272/2008 as amended.

Health hazards

Eye irritation, Category 2 - H319: Causes severe eye irritation.
Skin sensitiser, Category 1 - H317: May cause an allergic skin reaction.
Mutagenicity in Sex Cells, Category 2 - H341: Suspected of causing genetic damage.
Toxic to reproduction, Category 1B - H360FD: May impair fertility. May damage the unborn child.
Specific Target Organ Toxicity - Single Exposure, Category 1 - H370: Causes damage to organs.
Specific Target Organ Toxicity - Repeated Exposure, Category 1 - H372: Causes damage to organs on prolonged or repeated exposure. (Target organs: immune system)

Environmental hazards:

Acute hazards to the aquatic environment, Category 1 - H400: Very toxic to aquatic organisms.
Chronic hazards to the aquatic environment, Category 1 - H410: Very toxic to aquatic organisms, with long-lasting effects.

2.2 Labelling elements:

Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:



Hazard pictograms:

Signal word:

Danger.

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 2 of 16
Print date: 31-1-2025

Hazard-determining components for labelling:

- ✓ Dibutyltin dilaurate
- ✓ 2-ethylhexanoic acid

Hazard statements:

H319: Causes severe eye irritation.
H317: May cause an allergic skin reaction.
H341: Suspected of causing genetic damage.
H360FD: May impair fertility. May damage the unborn child.
H370: Causes damage to organs.
H372: Causes damage to organs with prolonged or repeated exposure.
H410: Very toxic to aquatic organisms, with long-lasting effects.

Precautions

Prevention:

P201: Consult special instructions before use.
P273: Avoid discharge into the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Action:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P308+P313: AFTER (possible) exposure: consult a doctor.

Waste disposal:

P501: Dispose of contents/container to an appropriate waste site or recycling plant in accordance with/according to local, regional, national and international national regulations.

Additional labelling information:

For use by professionals only.

UFI:

GH90-U0Q2-500G-KDHX

2.3 Other hazards:

Physical Hazards:

No specific recommendations.

Health hazards:

Inhalation:

No specific symptoms listed.

Eye contact:

Causes severe eye irritation.

Skin contact:

May cause allergic skin reaction.

Ingestion:

Causes damage to organs with prolonged or repeated exposure.

Other health implications:

May impair fertility.
May harm the unborn child.
Suspected of causing genetic damage.

Environmental hazards:

Highly toxic to aquatic organisms, with long-term effects.

Results of PBT and vPvB assessment:

This substance/mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disruption - Health:

The substance/mixture does not contain components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

Endocrine disruption - Environment:

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 3 of 16
Print date: 31-1-2025

The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

Other dangers:

No other information given.

Substance(s) formed under conditions of use:

Chemical name	CAS no. EC no.	Classification	Concentration *
Propan-1-ol	71-23-8 200-746-9	Flam. Liq. 2 H225; Eye Dam. 1 H318; STOT SE 3 H336;	<20,5%

* All concentrations are expressed by weight unless the component is a gas.

Gas concentrations are expressed as volume percentages.

The full text of all H-phrases is shown in Section 16.

SECTION 3: Composition and information on ingredients**3.2 Mixtures:****General information:**

Mixture of additive.

Hazardous component(s):

Chemical name Type: constituent	CAS number EC number Index number REACH registration number	Classification Specific concentration limit: / ATE / M factors:	Concentration % (*)
Dibutyltin dilaurate Remark (#)	77-58-7 201-039-8 - 01-2119496068-27	Muta. 2 H341; STOT RE 1 H372; Eye Irrit. 2 H319; Repr. 1B H360FD; Skin Sens. 1 H317; STOT SE 1 H370; Aquatic Acute 1 H400; Aquatic Chronic 1 H410; M-Factor Aquatic toxicity (acute): 1 Aquatic toxicity (chronic): 1	50-< 100
2-ethylhexanoic acid Note (#)	149-57-5 205-743-6 - 01-2119488942-23	Repr. 2, H361d	20-< 50

* All concentrations are expressed by weight unless the component is a gas.

Gas concentrations are expressed as volume percentages.

One or more occupational exposure limit values have been established for this substance.

This substance is listed as a substance of very high concern (SVHC).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

ED: Endocrine disruptor.

The full text of all H-phrases is shown in Section 16.

SECTION 4: First aid measures**General information:**

Move into fresh air and let it rest.

Remove and wash contaminated clothing before reuse.

Seek medical attention immediately.

4.1 Description of first-aid measures:**Inhalation:**

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 4 of 16
Print date: 31-1-2025

Inhalation of this substance does not normally pose a risk as long as it is used under normal conditions and for its intended use.

In case of inhalation: Move the person to fresh air and let him/her rest.

Seek medical attention if symptoms occur.

Skin contact:

Rinse immediately with plenty of water for at least 15 minutes and remove contaminated clothing and shoes.

Wash skin with soap and water.

Seek medical attention immediately.

Keep contaminated clothing in sealed container until disposal or decontamination.

Wash contaminated clothes before reusing them.

Eye contact:

In case of contact with the eyes, rinse them thoroughly with clean water for at least 15 minutes.

Remove any contact lenses after the first 1-2 minutes of rinsing and on the advice of the treating physician.

Continue rinsing for a few more minutes.

Sper the eyes wide open.

Get medical attention immediately, preferably from an ophthalmologist.

Ingestion:

Do not induce vomiting.

Clean the mouth thoroughly with water.

Give unconscious victim nothing to drink.

Seek medical attention immediately.

Consult an ANTIGIFCENTRUM/doctor immediately.

Personal protection for first responders:

First responders must protect themselves and must wear the recommended protective clothing (chemical-resistant gloves, splash protection).

Refer to Sections 5 and 8 for information on emergency procedures and protective equipment

4.2 Main acute and delayed symptoms and effects:

Important symptoms and effects are described in Section 11 (Toxicological information) of this safety data sheet.

Due to the irritant properties of this product, its swelling may give rise to a burning sensation or ulcers in the mouth, stomach and gastrointestinal tract, followed by stenosis.

Main symptoms/effects:

Discomfort of the respiratory system, burning sensation, itching.

4.3 Indication of any necessary immediate medical care and special treatment:

Medical information:

No specific recommendations.

Show this safety data sheet to the attending physician.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing agents:

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:

When extinguishing fire, do not use water spray as it spreads the fire.

For further information, see section 10 : "Stability and Reactivity".

5.2 Special hazards arising from the substance or mixture:

Product burns if exposed to open flame.

Thermal decomposition or combustion can release carbon oxides, silicon oxides and other toxic gases or vapours.

5.3 Advice for firefighters:

Special firefighting procedures:

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 5 of 16
Print date: 31-1-2025

Apply standard fire-fighting procedures and take into account the hazards that may be posed by the other materials involved.

If this can be done safely, undamaged packages should be removed from the fire zone.

Evacuate to a safe location and alert emergency services

Water spray should be used for cooling containers/containers/packaging.

Contaminated firewater should be collected and disposed of separately.

This should not end up in drains or surface water.

Special protected equipment for firefighters:

In case of fire, wear self-contained breathing apparatus and full protective clothing.

SECTION 6: Measures in case of accidental release of the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

Personnel not required or not equipped with personal protection should leave the area.

Note: Contaminated surfaces may be slippery.

Follow the recommendations for safe use and personal protective equipment.

Avoid contact with eyes, skin and clothing.

Ensure good ventilation.

Avoid inhalation of fumes, mist or dust.

Do not touch damaged containers/containers/packaging or spills unless appropriate protective clothing is worn.

Avoid further leaks and spills if it is safe to do so.

Alert the Health, Safety and Environment Department in case of leakage.

6.2 Environmental precautions:

Do not discharge into the environment.

Do not discharge to sewer, soil or aquatic environment.

Clean up leaks/spills.

If large quantities of the product have been spilt, contain and clean up.

Inform designated authorities if this material is released into the environment.

6.3 Methods and materials for containment and cleaning:

Access to contaminated area is for authorised persons only.

Absorb with sand or other inert absorbent material.

Scoop up and place in a container for reuse or disposal.

For large spills, a dike or other suitable containment should be provided to prevent the material from spreading.

If the collected material can be pumped, the recovered material should be stored in a suitable container.

Never put the leaked product back into the original container for reuse.

Containers/containers with collected spill must be labelled in the prescribed manner with the designation of the contents and the appropriate hazard symbol.

Packaging must remain tightly closed.

To clean the floor and all objects soiled with this material, use a suitable solvent (see also § 9).

Rinse area with abundant water.

Collect waste and contaminated materials as soon as possible, remove from the workplace and store in a suitable container/container labelled appropriately.

Dispose of the residue in accordance with applicable regulations.

6.4 Reference to other sections:

Observe the important information in the other sections.

In particular, information on exposure control/personal protection and disposal provisions can be found in sections 8 and 13.

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 6 of 16
Print date: 31-1-2025

SECTION 7: Handling and storage:**7.1 Precautions for safe handling of the substance or mixture:****Precautions:**

Avoid inhalation of vapour/propellant/dust and contact with skin and eyes.
Ensure adequate ventilation, including suitable local exhaust ventilation, so that the established occupational exposure limit is not exceeded.
If ventilation is insufficient, suitable respiratory protection should be provided.
See Section 8. for personal protective equipment.
Make sure eye wash and safety showers are present and the way to them is clearly signposted.
Limit the quantity of the product within the work zone to that required for the work to be performed.
Act in accordance with good industrial hygiene and safety practices.
Handle and open packaging carefully.
Protect against contamination.
Do not mix with incompatible materials.
For further information, see section 10 : "Stability and Reactivity".
Avoid spills, waste and reduce the release of this product into the environment to the strict minimum.
In case of spills: be careful of slippery floors and surfaces.

Hygiene measures:

Observe good personal hygiene at all times: wash up after handling the substance and before eating, drinking and/or smoking.

Wash work clothes and protective equipment regularly to remove contaminants.

Contaminated work clothes must not leave the work area.

7.2 Conditions for safe storage, including incompatibilities:

Store in accordance with local/regional/national regulations.

Avoid discharge into sewers, waterways and soil.

Equipped with an impermeable bottom.

Store in a dry place.

Store in a well-ventilated place.

Keep in tightly closed container.

Store in properly labelled containers.

Keep temperature above freezing point of chemical product.

Protect against material damage and/or friction.

Keep away from incompatible substances.

For further information, see section 10 : "Stability and Reactivity".

Commonly used packaging at our sites:

Steel drums coated with epoxy resin

7.3 Specific end use:

No specific recommendations.

See the technical data sheet of this product for more information.

SECTION 8: Exposure controls/personal protection measures**8.1 Control parameters:****Occupational Exposure Limits:**

Dibutyltin dilaurate

Type	Exposure limits	Source	Date	Comment
STEL	0-.2 mg/m ³	OEL (BE)	10 2018	as Sn
TWA	0-.1 mg/m ³	OEL (BE)	06 2007	as Sn
SKIN_DES		OEL (BE)	06 2007	Can be absorbed through the skin. as Sn

2-ethylhexanoic acid

Type	Exposure limits	Source	Date	Comment
TWA	5 -mg/m ³	OEL (BE)	06 2007	Vapour and aerosol.

Additional exposure limit values under conditions of use:

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 7 of 16
Print date: 31-1-2025

propane-1-ol

Type	Exposure limits	Source	Date	Comment
TWA	100 ppm 250 mg/m3	OEL (BE)	04 2014	

Monitoring methods:

Ensure that worker exposure is controlled in accordance with national and European regulations, in particular Directives 98/24/EC and 2004/37/EC.

8.2 Exposure control measures:**Appropriate Technical Measures:**

Apply engineering control measures to keep concentration in air below permissible exposure limit. The degree of protection and the nature of the measures required depend on the potential exposure conditions.

Technical control measures are always preferable to personal protective equipment.

Protective measures to be considered: Ensure adequate ventilation.

In case of insufficient ventilation: Use means to shut down the process, local exhaust ventilation, or other technical measures to keep the concentration of this product in the air below the recommended exposure limits.

Where exposure limits have not been set, keep airborne concentrations at acceptable levels.

Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment:

Avoid inhalation of vapours/propellant/dust and contact with skin and eyes.

Personal protective equipment must be chosen in accordance with applicable standards, adapted to the conditions in which the product is used and in consultation with the supplier of the personal protective equipment.

Eye/face protection:

Safety glasses.

Use face shield in case of splash hazard.

Protection of Hands:

This recommendation applies only to the product specified in the safety data sheet supplied by us, and the purpose of use specified by us.

When mixing this product with other substances, contact a supplier of EC-approved safety gloves to choose the appropriate gloves.

Prolonged or repeated contact:

Material: Nitrile.

Glove thickness: 1.25 mm

Directive: EN374-3

Other information: Gloves typically used in Elkem's premises.

Brief contact:

Material: Nitrile/Neoprene

Glove thickness: 0.198 mm

Directive: EN374-3

Other information: Gloves typically used in Elkem laboratories.

Skin and body protection:

Wear suitable clothing to avoid any risk of skin contact.

Isolate and wash contaminated clothing before reuse.

In case of splash hazard: wear an apron or special work clothes.

Respiratory protection:

If engineering controls are insufficient to keep airborne concentrations below the recommended exposure limits (if applicable) or at acceptable levels (in countries where no exposure limits have been set), an approved respiratory protective device must be worn.

Use the following EC-approved air-purifying respirators: respirator with combined filter of the ABEK type.

Wear respiratory protection with combination filter (dust and gas filter) during activities that may give rise to dust/gas formation.

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 8 of 16
Print date: 31-1-2025

Work environment measures:

See sections 7 and 13 of the safety data sheet.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Occurrence:

Aggregation state:	liquid
Shape:	Slightly viscous.
Colour:	Colourless to pale yellow.
Fragrance:	Alcohol
pH:	By definition, a pH measurement determines the concentration of hydrogen ions in a usually aqueous solution. Silicone products are hydrophobic and are therefore insoluble in water. Consequently, the pH value cannot be measured.
Melting point/freezing point:	No data available.
Boiling point:	No data available.
Flash point:	85°C (Closed cup according to ASTM D56 standard).
Flammability:	No data available.
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Vapour pressure:	No data available.
Relative vapour density:	No data available.
Evaporation rate:	No data available.
Density:	Approximately 0.95 kg/dm ³ (20°C)
Solubility:	
Solubility in water:	Practically insoluble
Solubility (other):	Acetone: Miscible (in all proportions). Aliphatic hydrocarbons: Miscible (in all ratios). Ethanol: Mixable (in all ratios). Aromatic hydrocarbons: Miscible (in all proportions). Chlorinated solvents: Mixable (in all ratios).
Partition coefficient (n-octanol/water):	No data available.
Self-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity, kinematic:	Approximately 10 mm ² /s (25°C)
Particle characteristics:	Not applicable.
<u>9.2 Other information:</u>	
Viscosity, dynamic:	Approximately 9.5 mPa.s (25°C)
Oxidising properties:	According to constituent data Not considered oxidative. (evaluation by structure/activity-re)

SECTION 10: Stability and reactivity

10.1 Reactivity:

No other information given.

10.2 Chemical stability:

Under normal conditions, it is stable.

10.3 Possible hazardous reactions:

Won't happen.

10.4 Conditions to avoid:

No other information given.

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 9 of 16
Print date: 31-1-2025

10.5 Incompatible materials:

Strong oxidising agents. Water, moisture.

10.6 Hazardous decomposition products:

Thermal decomposition or combustion can release carbon oxides and other toxic gases or vapours.

Amorphous silica.

Tin oxides.

May generate hazardous substances during use or in contact with water.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

Ingestion:

Based on available data, not classified for acute toxicity.

Skin contact:

Based on available data, not classified for acute toxicity.

Inhalation:

Based on available data, not classified for acute toxicity.

Repeated-dose toxicity:

Based on our knowledge of information related to composition:

DIBUTYLTIN DILAURATE (77-58-7):

NOAEL (No Observed Adverse Effect Level): 0.6 - 0.8 mg/kg ; (Rat ; Female, Male ; Feed (oral)) ; Method:

According to a standardised method. ;

Results were obtained with a similar product.

Subacute exposure.

2-ETHYLHEXANOIC ACID (149-57-5):

An expert assessment has indicated that no classification is needed based on current knowledge.

NOAEL (No Observed Adverse Effect Level): 303 mg/kg ;

LOAEL (Lowest Observed Adverse Effect Level): 917 mg/kg ; (Rat ; 90 d ; Feed (oral)) ; Systemic toxicity ;

Method: According to a standardised method.

NOAEL (No Observed Adverse Effect Level): 180 mg/kg ;

LOAEL (Lowest Observed Adverse Effect Level): 885 mg/kg ; (Mouse ; 90 d ; Feed (oral)) ; Systemic toxicity ;

Method: According to a standardised method.

Skin corrosion/irritation:

Based on our knowledge of information related to composition:

DIBUTYLTIN DILAURATE (77-58-7):

Based on available data, the classification criteria have not been met.

2-ETHYLHEXANOIC ACID (149-57-5):

Not classified Not irritating (Rabbit) ; Method: OECD 404

Serious Eye Injury/Eye Irritation:

Based on our knowledge of compositional information: Causes severe eye irritation.

DIBUTYLTIN DILAURATE (77-58-7):

Causes severe eye irritation. Irritant. (Rabbit)

2-ETHYLHEXANOIC ACID (149-57-5):

Not classified Not irritating (Rabbit) ; Method: OECD 405

Respiratory or skin sensitisation:

Based on our knowledge of compositional information: May cause allergic skin reaction.

DIBUTYLTIN DILAURATE (77-58-7):

Skin sensitiser: Skin sensitiser (guinea pig) ;

Method: OECD 406 ;

Results were obtained with a similar product.

2-ETHYLHEXANOIC ACID (149-57-5):

Skin sensitisation: No skin sensitiser. ; No skin sensitiser. (Subject) ;

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 10 of 16
Print date: 31-1-2025

Method: OECD 406

Mutagenicity in Sex Cells:

In vitro: Based on our knowledge of compositional information: Suspected of causing genetic damage.

DIBUTYLTIN DILAURATE (77-58-7):

Bacteria: No mutagenic effects. (Salmonella typhimurium and Escherichia coli ;

With and without metabolic activation) ; Method: OECD 471

Chromosomal aberration : Clastogenic effect. (Human lymphocytes ; With and without metabolic activation) ;

Method: OECD 473 ;

Results were obtained with a similar product.

In vitro gene mutation assay on mammalian cells: No mutagenic effects. (Lung cells of Chinese hamsters ; With and without metabolic activation) ;

Method: OECD 476 ;

Results were obtained with a similar product.

2-ETHYLHEXANOIC ACID (149-57-5):

Back mutation test with bacteria: No mutagenic effects. (Salmonella typhimurium and Escherichia coli ;

With and without metabolic activation) ; Method: OECD 471

In vitro gene mutation assay on mammalian cells: No mutagenic effects. (Oocytes from Chinese hamsters ;

With and without metabolic activation) ; Method: OECD 476

In vitro gene mutation assay on mammalian cells: No mutagenic effects. (Mouse lymphoma cells ;

With and without metabolic activation) ; Method: OECD 476

In vitro test for chromosomal aberrations in mammals: No clastogenic effect. (Mammalian-derived peripheral blood lymphocytes ;

With and without metabolic activation) ; Method: OECD 473

In vivo:

Based on our knowledge of compositional information: Suspected of causing genetic damage.

DIBUTYLTIN DILAURATE (77-58-7):

Micronucleus test in mammalian erythrocytes: Mutagenic. (Mouse ; Female, Male ; Ingestion) ;

Method: OECD 474 ;

Results were obtained with a similar product.

2-ETHYLHEXANOIC ACID (149-57-5):

Micronucleus test in mammalian erythrocytes: No mutagenic effects. (Mouse ; Female, Male ; Tube feeding (oral)) ;

Method: OECD 474

Carcinogenicity:

No data available.

Reproductive toxicity:

Fertility:

Based on our knowledge of composition-related information: May impair fertility.

May harm the unborn child.

DIBUTYLTIN DILAURATE (77-58-7):

May impair fertility.

NOAEL (parent): 1.7 - 2.4 mg/kg ; NOAEL (F1): None. ; NOAEL (F2): None. (Rat ; Female, Male ; Probe feeding (oral)) ;

Method: OECD 421 ;

Results were obtained with a similar product.

2-ETHYLHEXANOIC ACID (149-57-5):

Unclassified

Comprehensive reproductive toxicity study over one generation: NOAEL (parent): > 800 mg/kg ; NOAEL (F1): > 800 mg/kg ; NOAEL (F2): None. (Rat ; Female, Male ; Ingestion) ; Method: OECD 443 ; No effect was observed up to the highest test dose.

Teratogenicity:

Based on our knowledge of composition-related information: May impair fertility.

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 11 of 16
Print date: 31-1-2025

May harm the unborn child.

DIBUTYLTIN DILAUATE (77-58-7):

May harm the unborn child.

NOAEL (terato): < 50.5 mg/kg ; NOAEL (mater): < 50.5 mg/kg (Rat ; Tube feeding (oral))

2-ETHYLHEXANOIC ACID (149-57-5):

May harm the unborn child.

NOAEL (terato): 100 mg/kg ; NOAEL (mater): 250 mg/kg (Rat ; Feeding tube (oral)) ; Method: OECD 414 ; The product is considered developmentally toxic.

NOAEL (terato): 250 mg/kg ; NOAEL (mater): 25 mg/kg (Rabbit ; Feeding tube (oral)) ; Method: OECD 414 ; No developmental effects observed.

Specific Target Organ Toxicity - Single Exposure:

Corrosive to the respiratory tract.

Specific Target Organ Toxicity - Repeated Exposure:

Based on our knowledge of the information related to the composition: Causes damage to organs through prolonged or repeated exposure.

DIBUTYLTIN DILAUATE (77-58-7):

Causes damage to organs with prolonged or repeated exposure.

Ingestion: Target organ(s): thymus

2-ETHYLHEXANOIC ACID (149-57-5):

Unclassified

Aspiration hazard:

Based on our knowledge of information related to composition:

2-ETHYLHEXANOIC ACID (149-57-5):

Unclassified

11.2 Information on other hazards:

Endocrine-disrupting properties:

No data available.

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity:

Highly toxic to aquatic organisms.

Fish:

Based on our knowledge of information related to composition:

DIBUTYLTIN DILAUATE (77-58-7):

LC 50 (Zebrafish (Brachydanio rerio); 96 h ; Static) : > 100 mg/l ;

Method: OECD 203

2-ETHYLHEXANOIC ACID (149-57-5):

LC 50 (Oryzias latipes; 96 h ; semi-static) : > 100 mg/l ;

Method: OECD 203 ;

Aquatic Invertebrates:

Based on our knowledge of composition-related information:

DIBUTYLTIN DILAUATE (77-58-7):

EC50 (Water flea (Daphnia magna); 48 h ; Static) : < 1 mg/l ;

Method: OECD 202

2-ETHYLHEXANOIC ACID (149-57-5):

EC50 (Water flea (Daphnia magna); 48 h) : 910 mg/l ;

Method: OECD 202 ;

Aquatic plants:

Based on our knowledge of information related to composition:

DIBUTYLTIN DILAUATE (77-58-7):

ErC50 (Green algae; 72 h ; Static) : > 1 mg/l ;

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 12 of 16
Print date: 31-1-2025

Methodology: OECD 201

2-ETHYLHEXANOIC ACID (149-57-5):

ErC50 (Seaweed (Pseudokirchneriella subcapitata); 96 h ; Static) : 485.1 mg/l ;

Method: According to a standardised method. ;

Results were obtained with a similar product.

ErC10 (Seaweed (Pseudokirchneriella subcapitata); 96 h ; Static) : 231.2 mg/l ;

Method: According to a standardised method. ;

Results were obtained with a similar product.

Toxicity to micro-organisms:

Based on our knowledge of information related to composition:

2-ETHYLHEXANOIC ACID (149-57-5):

EC50 (Pseudomonas putida; 17 h ; Static) : 112.1 mg/l

EC 10 (Pseudomonas putida; 17 h ; Static) : 71.7 mg/l

Chronic toxicity:

Highly toxic to aquatic organisms, with long-term effects.

Fish:

2-ETHYLHEXANOIC ACID (149-57-5):

No data available.

Aquatic Invertebrates:

Based on our knowledge of information related to composition:

2-ETHYLHEXANOIC ACID (149-57-5):

EC 10 (Water flea (Daphnia magna); 21 d ; semi-static) : 19.9 mg/l ;

Method: OECD 211

12.2 Persistence and degradability:

Biodegradation:

Based on our knowledge of information related to composition:

DIBUTYL TIN DILAURATE (77-58-7):

23 % (Activated sludge, domestic (adjustment not specified) ; 39 d ; Oxygen deficiency) ;

Method: OECD 301 F ;

The product is not easily biodegradable.

2-ETHYLHEXANOIC ACID (149-57-5):

99 % (Activated sludge, domestic (adaptation not specified) ; 28 d ; Dissolved organic carbon (DOC)) ;

Method: OECD 301 E ; The 10-d window requirement is met;

The substance meets the criteria for ultimate aerobic biodegradability and ready biodegradability.

BOD/COD ratio:

No data available.

12.3 Bioaccumulation:

Bioconcentration factor (BCF)

Based on our knowledge of information related to composition:

DIBUTYL TIN DILAURATE (77-58-7):

Bioconcentration factor (BCF):

812.83 (Crucian carp (Carassius carassius) ; 7 d) ;

Method: OECD 305

2-ETHYLHEXANOIC ACID (149-57-5):

Bioconcentration factor (BCF)

< 4 ; Method: QSAR ;

The potential for bioaccumulation is small.

Partition coefficient (n-octanol/water):

Based on our knowledge of information related to composition:

DIBUTYL TIN DILAURATE (77-58-7):

Log Kow: 3.12

Log Kow: 4.44 (20.8 °C) ; Method: OECD 107

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 13 of 16
Print date: 31-1-2025

2-ETHYLHEXANOIC ACID (149-57-5):

Log Kow: 2.64

Log Kow: 2.7 (25 °C) ; Method: OECD 107

12.4 Mobility in soil:

Based on our knowledge of information related to composition:

2-ETHYLHEXANOIC ACID (149-57-5):

Log Koc: 2.58 ;

Koc: 378 ;

Method: estimated

12.5 Results of PBT and vPvB assessment:

No data available.

12.6 Endocrine-disrupting properties:

No data available.

12.7 Other adverse effects:

No data available.

SECTION 13: Disposal instructions

13.1 Waste treatment methods:

Do not throw waste into the sink.

The user should be aware of the possible existence of local ordinances and regulations regarding waste disposal.

Observe the important information in the other sections.

In particular, information on hazard identification and product stability and reactivity in sections 2 and 10.

Removal methods:

Dispose of the waste to an appropriate treatment and disposal facility.

In doing so, take into account the applicable laws and regulations and the characteristics of the product at the time of disposal.

Burn in suitable incinerator.

Contaminated Packaging:

Contaminated packaging should be as empty as possible.

After cleaning, reuse or have it disposed of by an authorised waste processor.

Packaging that cannot be cleaned should be disposed of in the same way as the product it contains.

Waste code:

The European Waste Catalogue (EWC) waste code cannot be determined for this product, as its determination depends on how the product is used by end-users.

The waste code must be established within the EU in consultation with the disposer.

SECTION 14: Information relating to transport

14.1 UN number

ADR/ADN, RID, IMDG/IMO, IATA: UN3082

14.2 Proper cargo name according to UN model regulations

ADR/ADN/RID: ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S.
(Dibutyltin dilaurate)

IMDG/IMO ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (Dibutyltin dilaurate)

IATA: Environmentally hazardous substance, liquid, n.o.s
(Dibutyltin dilaurate)

14.3 Transport hazard class(es)

ADR/ADN, RID, IMDG/IMO, IATA:

Class: 9

Label: 9

ADR/RID:

According to directive 1907/2006/EC, 2020/878
 Version 8.0 Revision date: 10-10-2023
 Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 14 of 16
 Print date: 31-1-2025

ADR figure: 90
IMDG/IMO:
 EmS no.: F-A , S-F

14.4 Packing group

ADR/ADN, RID, IMDG/IMO, IATA:
 Packaging group: III

14.5 Environmental hazards

ADR/ADN, RID, IMDG/IMO, IATA:
 Environmental hazards: Environmentally hazardous / Marine Pollutant

14.6 Special precautions for the user

IATA:
 Passenger and cargo aircraft: Allowed.
 Only by cargo aircraft: Allowed.

Notes:

The transport of dangerous goods, including loading and unloading, must be carried out in accordance with regulations by personnel who have received the necessary training;
 The transport classification(s) given herein are for information only, and based solely on the properties of the unpackaged material as described in this safety data sheet.
 Transport classifications may vary in terms of mode of transport, packaging size and variations in regional or national regulations.

14.7 Transport in bulk in accordance with Annex II to MARPOL 73/78 and the IBC Code

Not applicable for product, as delivered.

SECTION 15: Statutory information

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

Regulation 1005/2009/EC on Substances that Deplete the Ozone Layer, Annex I, Controlled Substances:

Not present or not present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New substances:

Not present or not present in regulated quantities.

Regulation (EU) 2019/1021 on persistent organic pollutants (revised), as amended:

Not present or not present in regulated quantities.

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended:

Chemical name	CAS number
Dibutyltin dilaurate	77-58-7

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended:

Not present or not present in regulated quantities.

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended:

Not present or not present in regulated quantities.

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended:

Not present or not present in regulated quantities.

DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions (integrated pollution prevention and control), ANNEX II List of pollutants:

Chemical name	CAS number
Dibutyltin dilaurate	77-58-7
2-ethylhexanoic acid	149-57-5

REGULATION (EC) No 1907/2006 (REACH), ANNEX XIV LIST OF AUTHORISED SUBSTANCES:

Not present or not present in regulated quantities.

EU. REACH Candidate list of substances of very high concern for authorisation (SVHC):

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 15 of 16
Print date: 31-1-2025

Not present or not present in regulated quantities.

Regulation (EC) No 1907/2006 Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles:

The packaging must bear the following, visible, clearly legible and indelible wording:

For use by professionals only.

Chemical name	CAS number	Entry number	Concentration:
Dibutyltin dilaurate	77-58-7	75 30 3 75 75 20 20 28	50 - 60%
2-ethylhexanoic acid	149-57-5	75 75 28	20 - 30%

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work:

Chemical name	CAS number	Concentration
Dibutyltin dilaurate	77-58-7	50 - 60%
2-ethylhexanoic acid	149-57-5	20 - 30 %

REGULATION (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register, ANNEX II: Pollutants:

Chemical name	CAS number	Concentration
Dibutyltin dilaurate	77-58-7	50 - 60 %

EU. Directive 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances, as amended:

Classification	Requirements for low threshold devices	Requirements for high threshold devices
E1. Hazard to the aquatic environment	100 t	200 t
H3. STOT SE (Specific target organ toxicity - Single exposure)	50 t	200 t

15.2 Chemical safety assessment:

A chemical safety assessment has not been carried out.

Classification data:

AU AIICL:	On or in accordance with the overview list.
DSL:	On or in accordance with the overview list.
IECSC:	On or in accordance with the overview list.
ENCS (JP):	On or in accordance with the overview list.
KECI (KR):	On or in accordance with the overview list.
NZIOC:	On or in accordance with the overview list.
PICCS (PH):	On or in accordance with the overview list.
TCSI:	At or in line with the overview list.
TSCA list:	On or consistent with the overview list.
TH ECINL:	On or in accordance with the overview list.
VN INVL:	On or in accordance with the overview list.
EU INV:	On or in accordance with the overview list.

SECTION 16: Other information

Revision information:

SECTION 2:	Amendment: identification of hazards
SECTION 3:	Amendment: Composition and information on ingredients

Abbreviations and acronyms:

CLP:	Regulation number 1272/2008.
PBT:	persistent, bioaccumulative and toxic substance.
vPvB:	very persistent and very bioaccumulative substance.
NOAEL:	No level of detectable adverse effect
LOAEL:	Lowest level of detectable adverse effect
ED:	Endocrine disruptor
SVHC:	Listed in the candidate list of substances of very high concern (SVHC)

According to directive 1907/2006/EC, 2020/878
Version 8.0 Revision date: 10-10-2023
Trade name: Silicone ASSYST for PU hardener (Bluesil Cata SPU)

Page 16 of 16
Print date: 31-1-2025

Classification and procedure used to derive the classification for mixtures in accordance with Regulation (EC) 1272/2008 [CLP]:

Classification in accordance with Regulation (EC) No 1272/2008.

Eye irritation ; Category 2 ; H319
Skin sensitiser ; Category 1 ; H317
Mutagenicity in Sexual Cells ; Category 2 ; H341
Toxic for reproduction ; Category 1B ; H360FD
Specific Target Organ Toxicity - Single Exposure ; Category 1 ; H370
Specific Target Organ Toxicity - Repeated Exposure ; Category 1 ; H372
Acute hazards for the aquatic environment ; Category 1 ; H400
Chronic hazards for the aquatic environment ; Category 1 ; H410

Classification procedure

Calculation method
Calculation method

Full text of H-phrases in sections 2 and 3:

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes severe eye irritation.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic damage.
H360FD May impair fertility. May damage the unborn child.
H361d Suspected of damaging the unborn child.
H370 Causes damage to organs.
H372 Causes damage to organs with prolonged or repeated exposure.
H400 Very toxic to aquatic organisms.
H410 Very toxic to aquatic organisms with long-lasting effects.

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Disclaimer of liability:

The information given relies on available data on the substance, its components and similar substances. The information is believed to be correct. It is in good faith. This information should be used to independently determine methods to protect workers and the environment.