

Product name: Dynasylan® SIVO 160

# SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

### 1.1 Product identifier

**Product name:**  
Dynasylan® SIVO 160

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

**Identified uses:** For industrial use  
Coupling agent  
Crosslinking agents  
Surface modifier

**Uses advised against:** Not determined.

### 1.3 Details of the supplier of the safety data sheet

Company Name : Evonik Operations GmbH  
Rellinghauser Str. 1-11  
45128 Essen  
Germany

Telephone : +49 6181 59 4787

E-mail : sds-hu@evonik.com

### 1.4 Emergency telephone number:

24-Hour Health Emergency : +49 7623 919191

National Poison Information Service (NPIS)  
England, Scotland and Wales: NHS: 111

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

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Not classified

**2.2 Label Elements** Not applicable

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## 2.3 Other hazards

### PBT/vPvB data

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

## 3.2 Mixtures

**General information:** preparation silicones, aminomodified, hydroformates

Polymers are exempt from REACH registration. The monomers of this polymer are registered pursuant to EC Regulation No. 1907/2006 (REACH).

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Inhalation:</b>	If aerosol or mists are formed: If necessary: Provide with fresh air.
<b>Skin Contact:</b>	Wash off with plenty of water and soap.
<b>Eye contact:</b>	Rinse thoroughly with plenty of water keeping eyelid open. In case of persistent discomfort: Consult an ophthalmologist.
<b>Ingestion:</b>	Have the mouth rinsed with water. After absorbing large amounts of substance / In case of discomfort: Supply with medical care.
<b>Personal Protection for First-aid Responders:</b>	No data available.

### 4.2 Most important symptoms and effects, both acute and delayed

<b>Symptoms:</b>	None known.
<b>Hazards:</b>	None known.

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

<b>Treatment:</b>	After absorbing large amounts of substance: administration of activated charcoal. Acceleration of gastrointestinal passage
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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:** Water spray, foam, dry powder or carbon dioxide.

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<b>Unsuitable extinguishing media:</b>	High volume water jet.
<b>5.2 Special hazards arising from the substance or mixture:</b>	Standard procedure for chemical fires.
<b>5.3 Advice for firefighters</b>	
<b>Special fire fighting procedures:</b>	Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
<b>Special protective equipment for fire-fighters:</b>	In case of fire: wear a self contained respiratory apparatus

**SECTION 6: Accidental release measures**

<b>6.1 Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment.
<b>6.1.1 For non-emergency personnel:</b>	No data available.
<b>6.1.2 For emergency responders:</b>	No data available.
<b>6.2 Environmental Precautions:</b>	Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.
<b>6.3 Methods and material for containment and cleaning up:</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Fill into marked, sealable containers. To be disposed of in compliance with existing regulations.
<b>6.4 Reference to other sections:</b>	For personal protection see section 8. For disposal considerations see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

<b>Technical measures:</b>	No data available.
<b>Local/Total ventilation:</b>	Provide for good ventilation if vapours/aerosols are formed.
<b>Safe handling advice:</b>	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and amendments (CE certification). If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Do not breathe in vapours or aerosols. Avoid contact with skin and eyes.
<b>Contact avoidance measures:</b>	No data available.

**7.2 Conditions for safe storage, including any incompatibilities**

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**Safe storage conditions:** Normal measures for preventive fire protection. Keep container tightly closed.

**Safe packaging materials:** No data available.

**7.3 Specific end use(s):** Applications; see Section 1. No further information available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

None of the components have assigned exposure limits.

#### Biological Limit Values

No biological exposure limits noted for the ingredient(s).

### 8.2 Exposure controls

**Appropriate Engineering Controls:** Provide for good ventilation if vapours/aerosols are formed.

#### Individual protection measures, such as personal protective equipment (PPE)

**Eye/face protection:** Safety glasses

**Hand Protection:**

Material: Butyl rubber.  
Break-through time:  $\geq$  480 min  
Glove thickness: 0.5 mm  
Material: Fluorinated rubber (Viton)  
Break-through time:  $\geq$  480 min  
Glove thickness: 0.4 mm  
Additional Information: Selection of protective gloves to meet the requirements of specific workplaces., The suitability for a specific workplace should be discussed with the producers of the protective gloves., The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

**Skin and Body Protection:** suitable protective clothing - Use disposable clothing if appropriate.

**Respiratory Protection:** In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self contained respiratory apparatus Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Note time limit for wearing respiratory protective equipment.

**Hygiene measures:** When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Immediately remove contaminated clothing. Wash contaminated clothing before reuse.

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**Environmental Controls:** see section 6.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Yellow
<b>Odor:</b>	Characteristic
<b>Odor Threshold:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	100 °C
<b>Flammability:</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Flash Point:</b>	> 95 °C Method: DIN EN ISO 2719
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>pH:</b>	3 - 7 at 20 °C
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	No data available.
<b>Kinematic viscosity:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Miscible with water.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Density:</b>	1.025 g/cm <sup>3</sup> at 20 °C Method: DIN 51757
<b>Relative vapor density:</b>	No data available.

### 9.2 Other information

**Peroxides:** Not applicable

## SECTION 10: Stability and reactivity

- |   |   |
|---|---|
| <b>10.1 Reactivity:</b>                         | No dangerous reaction known under conditions of normal use. |
| <b>10.2 Chemical Stability:</b>                 | Stable under recommended storage conditions.                |
| <b>10.3 Possibility of hazardous reactions:</b> | No dangerous reactions known.                               |

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- 10.4 Conditions to avoid:** Extremes of temperature and direct sunlight.
- 10.5 Incompatible Materials:** Strong acids.
- 10.6 Hazardous Decomposition Products:** formic acid

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

**Inhalation:** Information on effects are given below.

**Skin Contact:** Information on effects are given below.

**Eye contact:** Information on effects are given below.

**Ingestion:** Information on effects are given below.

#### Acute toxicity (list all possible routes of exposure)

##### Oral

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

##### Dermal

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

##### Inhalation

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

##### Repeated dose toxicity

**Product:** No data available.

##### Skin Corrosion/Irritation

**Product:** No data available.

##### Serious Eye Damage/Eye Irritation

**Product:** No data available.

##### Respiratory or Skin Sensitization

**Product:** No data available.

##### Carcinogenicity

**Product:** An Expert Judgment stated that no classification is necessary based on present knowledge.

##### Germ Cell Mutagenicity

###### In vitro

**Product:** No data available.

###### In vivo

**Product:** No data available.

##### Reproductive toxicity

**Product:** No data available.

#### Specific Target Organ Toxicity - Single Exposure

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**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No evidence of aspiration toxicity

**11.2 Information on other hazards**

**Other information**

**Product:** No toxicological tests are available on the product.; An Expert Judgment stated that no classification is necessary based on present knowledge.;

**SECTION 12: Ecological information**

**12.1 Toxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Toxicity to microorganisms**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Toxicity to microorganisms**

**Product:** No data available.

**12.2 Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**12.3 Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

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**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**12.4 Mobility in soil:**

**Product** No data available.

**12.5 Results of PBT and vPvB assessment:**

**Product** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects:**

**Other hazards**

**Product:** An Expert Judgment stated that no classification is necessary based on present knowledge.

**Additional Information:** No ecotoxicological data is available for this product.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**General information:** No data available.

**Disposal methods:** With respect to local regulations, e.g. dispose of to suitable waste incineration plant. No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

**Contaminated Packaging:** Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

**SECTION 14: Transport information**

**14.1 UN/ID No.**

Not regulated as a dangerous good

**14.2 UN proper shipping name**

Not regulated as a dangerous good

**14.3 Transport hazard class(es)**

Not regulated as a dangerous good

**14.4 Packing group**

Not regulated as a dangerous good



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#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

### SECTION 15: Regulatory information

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

##### EU Regulations

**EU. REACH Annex XIV, Substances Subject to Authorization:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**UK EXP1: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**UK EXP2: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**UK EXP3: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**UK BAN: UK. GB PIC List, Regulation (EU) 649/2012 as amended by EU Exit Regulations S.I. 2019/720 and S.I. 2020/1567, as amended:** None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

**EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:**

**15.2 Chemical safety assessment:** No chemical safety assessment is required for this product.

##### International regulations

###### Montreal protocol

Not applicable

**Product name: Dynasylan® SIVO 160****Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**SECTION 16: Other information****Abbreviations and acronyms:**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation 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; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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

**Wording of the statements in section 2 and 3**

: none

**Training information:** No data available.

**Revision Information** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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