



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

- **Product identifier**
- **Trade name:** SWIN VOC-HÄRTER
- **Article number:** 30-800-*
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category PC9a** Coatings and paints, thinners, paint removers
- **Process category**
 PROC7 Industrial spraying
 PROC11 Non industrial spraying
- **Environmental release category**
 ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix
- **Application of the substance / the mixture** Hardening agent/ Curing agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 SWIN Lacksysteme
 Boschweg 5
 D-48351 Everswinkel
 info@swinsysteme.de
- **Further information obtainable from:** +49 2582-67613 / +49 2582-67677
- **Emergency telephone number:** Giftnotruf Berlin: ++49 (0) 30 19240

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
 Hexamethylen-1,6-diisocyanat Homopolymer
 n-butyl acetate
 hexamethylene-di-isocyanate
 4-isocyanatosulphonyltoluene

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· Hazard statements

- H226 Flammable liquid and vapour.
 H332 Harmful if inhaled.
 H317 May cause an allergic skin reaction.
 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· Precautionary statements

- P260 Do not breathe mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

Contains isocyanates. May produce an allergic reaction.

· Other hazards -**· Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterisation: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 28182-81-2 Reg.nr.: 01-2119485796-17-XXXX	Hexamethylen-1,6-diisocyanat Homopolymer ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	25-50%
CAS: 4083-64-1 EINECS: 223-810-8 Reg.nr.: 01-2119980050-47-XXXX	4-isocyanatosulphonyltoluene ⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤ 2.5%
CAS: 822-06-0 EINECS: 212-485-8 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene-di-isocyanate ⚠ Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≤ 2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures

· **General information:** Personal protection for the First Aider.

· After inhalation:

- Supply fresh air.
- Seek medical treatment in case of complaints.

· After skin contact:

- Immediately wash with water and soap and rinse thoroughly.
- If skin irritation continues, consult a doctor.

· After eye contact:

- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· Information for doctor:

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, 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** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Restrict the quantity stored at the work place.
- **Information about fire - and explosion protection:**
Fumes can combine with air to form an explosive mixture.
Flammable gas-air mixtures may form in empty receptacles.
Keep ignition sources away - Do not smoke.
Use explosion-proof apparatus / fittings and spark-proof tools.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Provide solvent resistant, sealed floor.
Suitable material for receptacles and pipes: steel or stainless steel.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

123-86-4 n-butyl acetate

WEL	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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822-06-0 hexamethylene-di-isocyanate

WEL	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO
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- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A2/P2

- **Protection of hands:**

Only use chemical-protective gloves with CE-labelling of category III.



Protective gloves

Preventive skin protection by use of skin-protecting agents is recommended.

- **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 exactly calculated in advance and has therefore to be checked prior to the application.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber (Ansell Sol-Vex®)

Recommended thickness of the material: ≥ 0.4 mm

- **Penetration time of glove material**

Value for the permeation: Level ≤ 1

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 => 480 minutes gloves made of the following materials are suitable:**

HPPE-laminated film (Ansell Barrier®)

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**

Protective clothing, anti-static (TYVEK® CLASSIC PLUS)
Safety shoes/boots, antistatic

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9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Colourless
· Odour:	Solvent-like
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	124 °C

· **Flash point:** 21 - 55 °C

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

· **Ignition temperature:** 370 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· Lower:	1.2 Vol %
· Upper:	7.5 Vol %

· **Vapour pressure at 20 °C:** 10.7 hPa

· Density at 20 °C:	1.03 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· Dynamic:	Not determined.
· Kinematic at 20 °C:	12 s (DIN 53211/4)

· **Solvent content:**

· **VOC (EC)** 39.70 %

· **Solids content:** 59.9 %

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

10 Stability and reactivity

· **Reactivity**

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Respiratory or skin sensitisation**
Sensitisation possible through skin contact.
 - Persons already sensitised to may develop allergic reactions when using this product.
 - Persons suffering from asthma, eczema or skin problems should avoid contact with this product.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
- **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 together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

- **Uncleaned packaging:**
15 00 00: WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00: packaging (including separately collected municipal packaging waste)
15 01 10*: packaging containing residues of or contaminated by dangerous substances

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14 Transport information

· UN-Number · ADR, IMDG, IATA	UN1263
· UN proper shipping name · ADR · IMDG, IATA	1263 PAINT RELATED MATERIAL PAINT RELATED MATERIAL
· Transport hazard class(es) · ADR, IMDG, IATA	
· Class · Label	3 Flammable liquids. 3
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Flammable liquids. 30 F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN1263, PAINT RELATED MATERIAL, 3, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
- 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.

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· **Relevant phrases**

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.

· **Department issuing MSDS: -**

· **Contact: -**

· **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
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- 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)
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Acute Tox. 3: Acute toxicity, Hazard Category 3
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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