

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.09.2025

Version number 1

Revision: 31.08.2025

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

- **1.1 Product identifier**
- **Trade name:** *Epoch 331 part B*
- **Article number:** NL-5286204-3
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Paint Hardener
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Nirlat Ltd.  
Kibbutz Nir Oz  
D.N. Negev 85122  
ISRAEL
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:** During normal opening times: +972 8 9986330

**SECTION 2: Hazards identification**

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



*GHS02 flame*

*Flam. Liq. 3 H226*      *Flammable liquid and vapour.*



*GHS05 corrosion*

*Eye Dam. 1 H318*      *Causes serious eye damage.*



*GHS07*

*Acute Tox. 4 H302*      *Harmful if swallowed.*

*Skin Irrit. 2 H315*      *Causes skin irritation.*

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

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

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

*The product is classified and labelled according to the CLP regulation.*

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**· Hazard pictograms**



GHS02    GHS05    GHS07

**· Signal word Danger**

**· Hazard-determining components of labelling:**  
butan-1-ol

Fatty acids, C18-unsatd., dimers, polymers with triethylenetetramine, reaction products with poly(bisphenol A diglycidyl ether)  
xylene

**· Hazard statements**

H226    Flammable liquid and vapour.

H302    Harmful if swallowed.

H315    Causes skin irritation.

H318    Causes serious eye damage.

H317    May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

**· Precautionary statements**

P101    If medical advice is needed, have product container or label at hand.

P102    Keep out of reach of children.

P103    Read label before use.

P210    Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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 POISON CENTER/doctor.

P321    Specific treatment (see on this label).

P330    Rinse mouth.

P362+P364    Take off contaminated clothing and wash it before reuse.

P405    Store locked up.

P501    Dispose of contents/container in accordance with local/regional/national/international regulations.

**· 2.3 Other hazards**

**· Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

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### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

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

· **Dangerous components:**

CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6	butan-1-ol  ☒ Flam. Liq. 3, H226; ☒ Eye Dam. 1, H318; ☒ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	≥10-≤100%
CAS: 68424-41-9	Fatty acids, C18-unsatd., dimers, polymers with triethylenetetramine, reaction products with poly(bisphenol A diglycidyl ether)  ☒ Flam. Liq. 3, H226; ☒ Eye Dam. 1, H318; ☒ Skin Irrit. 2, H315; Skin Sens. 1, H317	>50-≤100%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9	xylene  ☒ Flam. Liq. 3, H226; ☒ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	>10-≤25%
CAS: 1330-20-7 EINECS: 215-535-7	xylene  ☒ Flam. Liq. 3, H226; ☒ STOT RE 2, H373; Asp. Tox. 1, H304; ☒ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	>2.5-≤10%

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

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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:** Call for a doctor immediately.

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

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

Prevent seepage into sewage system, workpits and cellars.

- **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Do not eat, drink or smoke while working. Refer to section 8 concerning personal protection.

- **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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

- **Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep container tightly sealed.

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

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

**71-36-3 butan-1-ol**

TLV	Short-term value: 6 mg/m <sup>3</sup>
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**1330-20-7 xylene**

IOELV	Short-term value: 442 mg/m <sup>3</sup> , 100 ppm Long-term value: 221 mg/m <sup>3</sup> , 50 ppm Skin
TLV	Short-term value: 6 mg/m <sup>3</sup>

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as 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.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

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.

· **Hand protection**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· **Eye/face protection**



Tightly sealed goggles

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**SECTION 9: Physical and chemical properties**

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

**· General Information**

**· Physical state**

Liquid

**· Colour:**

Clear

**· Odour:**

Characteristic

**· Odour threshold:**

Not determined.

**· Melting point/freezing point:**

Undetermined.

**· Boiling point or initial boiling point and boiling range**

116 °C

**· Flammability**

Flammable.

**· Lower and upper explosion limit**

1.1 Vol %

**· Lower:**

9.4 Vol %

**· Upper:**

27 °C

**· Flash point:**

340 °C

**· Auto-ignition temperature:**

Not determined.

**· Decomposition temperature:**

Not determined.

**· pH**

Not determined.

**· Viscosity:**

Not determined.

**· Kinematic viscosity**

1,200 mPas

**· Dynamic at 20 °C:**

**· Solubility**

Not miscible or difficult to mix.

**· water:**

Not determined.

**· Partition coefficient n-octanol/water (log value)**

6.7-8.2 hPa

**· Vapour pressure at 20 °C:**

**· Density and/or relative density**

0.93399 g/cm<sup>3</sup>

**· Density at 20 °C:**

Not determined.

**· Relative density**

Not determined.

**· Vapour density**

Not determined.

**· 9.2 Other information**

**· Appearance:**

Liquid

**· Form:**

Liquid

**· Important information on protection of health and environment, and on safety.**

Product is not selfigniting.

**· Ignition temperature:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**· Explosive properties:**

Not determined.

**· Solvent content:**

26.4-176.4 %

**· Organic solvents:**

246.6-1,647.2 g/l

**· Change in condition**

Not determined.

**· Evaporation rate**

**· Information with regard to physical hazard classes**

Void

**· Explosives**

Void

**· Flammable gases**

Void

**· Aerosols**

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· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Flammable liquid and vapour.
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

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

· **Acute toxicity** Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

### 71-36-3 butan-1-ol

Oral	LD50	790 mg/kg (rat)
Dermal	LD50	3,400 mg/kg (rabbit)
Inhalative	LC50/4 h	8,000 mg/l (rat)

- **Primary irritant effect:**

· **Skin corrosion/irritation** Causes skin irritation.

· **Serious eye damage/irritation** Causes serious eye damage.

· **Respiratory or skin sensitisation** May cause an allergic skin reaction.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

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- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**

None of the ingredients is listed.

## **SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even small quantities leak into the ground.

## **SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## **SECTION 14: Transport information**

· <b>14.1 UN number or ID number</b>	
· <b>ADR, IMDG, IATA</b>	UN1263
· <b>14.2 UN proper shipping name</b>	
· <b>ADR</b>	1263 PAINT
· <b>IMDG</b>	PAINT, MARINE POLLUTANT

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· <b>IATA</b>	PAINT
· <b>14.3 Transport hazard class(es)</b>	
· <b>ADR, IATA</b>	
	
· <b>Class</b>	3 Flammable liquids.
· <b>Label</b>	3
· <b>IMDG</b>	
	
	
· <b>Class</b>	3 Flammable liquids.
· <b>Label</b>	3
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	Symbol (fish and tree)
· <b>14.6 Special precautions for user</b>	Warning: Flammable liquids.
· <b>Hazard identification number (Kemler code):</b>	30
· <b>EMS Number:</b>	F-E,S-E
· <b>Stowage Category</b>	A
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml

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- UN "Model Regulation": UN 1263 PAINT, 3, III

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - Seveso category P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
  - DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
    - None of the ingredients is listed.
  - REGULATION (EU) 2019/1148
    - Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
      - None of the ingredients is listed.
    - Annex II - REPORTABLE EXPLOSIVES PRECURSORS
      - None of the ingredients is listed.
    - Regulation (EC) No 273/2004 on drug precursors
      - None of the ingredients is listed.
    - Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
      - None of the ingredients is listed.
  - National regulations:
    - Other regulations, limitations and prohibitive regulations Use tactile warning
    - 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**SECTION 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.

· **Relevant phrases**

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department

· **Contact:** Mr. Ori Raz orir@nirlat.com

· **Date of previous version:** 13.02.2019

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

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

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

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

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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