

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

1.1. Product identifier

Trade name: eco primer
Contains: Propan-2-ol, Nr CAS: 67-63-0.

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

Identified uses of the mixture: Primering substrates for polyurethane adhesives.
Uses advised against: Undetermined.

1.3. Details of the supplier of the safety data sheet

Supplier: eco in spółka z ograniczoną odpowiedzialnością sp. k.
 ul. Powsińska 18
 02-920 Warszawa
 Tel.: +48 22 651 68 14
 Fax: +48 22 651 81 72
 e-mail: biuro@ecoin.pl

E-mail of person responsible for Safety Data Sheet: biuro@ecoin.pl, lse1@wp.pl

1.4. Emergency telephone number

Tel.: + 48 22 651 68 14 (hours: 8 a.m. – 5 p.m., Monday - Friday) or 112 (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008, as amended:

Flammable liquid, hazard category 2 (Flam. Liq. 2).

Highly flammable liquid and vapour (H225)

Eeye irritation, category 2 (Eye Irrit. 2).

Causes serious eye irritation (H319)

Specific target organ toxicity — single exposure (STOT SE 3)

May cause drowsiness or dizziness (H336).

Classification according to Directive 1999/45/EC, as amended:

Highly flammable (F, R11).

Product vapours are heavier than air and may form explosive mixtures with air. Accumulate on the surface of the ground and the lower parts of rooms.

Irritant (Xi).

Irritating to eyes (R36).

Vapours may cause drowsiness and dizziness (R67).

Adverse effects on human health:

High concentrations of vapors or direct mixture getting into the eyes may result in irritation, redness, tearing, burning, conjunctivitis. Contamination or pouring of skin with a plenty of liquid mixture may cause redness, itching, and dryness of the skin. Inhalation of vapors in high concentrations causes headaches, dizziness, nausea, bradycardia, hypotension, hallucinations, cough, shortness of breath, respiratory disorders, respiratory depression, impaired consciousness. By ingestion (when swallowed large amounts) causes nausea, vomiting, abdominal pain, diarrhea, and symptoms of narcotic, as in poisoning by inhalation.

Adverse effects on the environment:

Proper use does not pose a risk to the environment.

Effects related to the physicochemical properties:

Product vapours are heavier than air and may form explosive mixtures with air. Accumulate on the surface of the ground and the lower parts of rooms.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008, as amended:****Pictograms:**

Signal word: DANGER.

Hazard statements:

H225 - Highly flammable liquid and vapour

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

Precautionary statements:

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

P261 - Avoid breathing vapours.

P271- Use only outdoors or in a well-ventilated area

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 – Dispose of contents/container according to local regulations.

Additional labelling:

Contains: Propan-2-ol

2.3. Other hazards

The mixture does not meet the criteria for PBT and vPvB.




SECTION 3: Composition/information on ingredients

3.2. Mixtures

Product identifier: eco primer

Contains: Propan-2-ol, Nr CAS: 67-63-0.

Components of the mixture:

Substance name	Index No:	CAS No:	EC No:	% w/w	Classification according to Directive 67/548/EEC			Classification according to Regulation (EC) No.: 1272/2008	
					Sign	Sym- bol	R- phrases	Hazard class and code of category	Hazard Statements
Propan-2-ol						F	11	Flam. Liq. 2	H225
REACH registraton No:	603-117-00-0	67-63-0	200-661-7	95		Xi	36	Eye Irrit. 2	H319
01-2119457558-25-XXXX						-	67	STOT SE 3	H336

The full text of R-phrases, H-statements, hazard classes and codes of categories are given in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After contact with eyes:

Immediately rinse with plenty of fresh water for at least 15 minutes. Remove contact lenses. Avoid strong stream of water due to the risk of mechanical damage to the cornea. If irritation persists, consult a doctor.

After contact with skin:

Immediately rinse with plenty of water. Remove contaminated clothing. Wash off contaminated skin with soap and water. If necessary, consult a doctor.

After ingestion:

If swallowed, do not induce vomiting. Rinse mouth with water, and then give to drink plenty of water (if the person is conscious). Provide medical assistance.

After inhalation:

Remove the victim from exposure, place in a comfortable position reclining or sitting, keep calm, protect against heat loss. If you experience abnormal breathing, give artificial respiration. If symptoms persist, call a physician.

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

High concentrations of vapours or when liquid gets into the eye may cause watery eyes, a feeling of irritation of the nose. Inhalation of vapors in high concentrations causes headaches, dizziness, nausea, bradycardia, hypotension, hallucinations, cough, shortness of breath, respiratory disorders, respiratory depression, impaired consciousness. Contamination of the skin can cause redness and inflammation, and absorption through the skin can cause general symptoms of poisoning. Contact with eyes causes redness, severe inflammation. Ingestion causes nausea, vomiting, abdominal pain, diarrhea with the risk of hemorrhagic gastritis and symptoms of narcotic intoxication as by inhalation. Drinking of about 100 ml can result in death. The consequence of acute poisoning may damage the liver and kidneys.

4.3. Indication of any immediate medical attention and special treatment needed

No special requirements. Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Foam, carbon dioxide, dry powder, water spray jet.

Not suitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Toxic fumes may release in a fire: carbon monoxide (CO), carbon dioxide (CO₂).

5.3. Advice for firefighters

Highly flammable liquid and vapors. Vapours are heavier than air and may accumulate at the surface of the ground and in the lower parts of rooms, can form explosive mixtures with air. Containers exposed to fire cool from a safe distance (danger of explosion) with water spray and if only possible, remove them from the danger zone. Wear gas-tight protective clothing in antielectrostatic version and breathing apparatus independent of the ambient air.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear required protective clothing. Do not drink, eat or smoke during use. Provide adequate general and local ventilation. Remove sources of ignition (extinguish flames, announce smoking and use sparking tools). Remove unprotected persons out of danger area. Avoid direct contact with skin and avoid breathing vapors.

6.2. Environmental precautions

Prevent from entering drains, surface waters, groundwater and soil.

6.3. Methods and material for containment and cleaning up

Secure sink basins. If possible, stop the leak (close liquid flow, seal). Damaged packaging place in container replacement. In the event of a large spill embank it. Pump out the collected liquid. Vapor dilute with water spray. Remove sources of ignition (extinguish flames, announce prohibition of smoking and using sparking tools). Small amounts absorb in chemically inert binding material (sand, diatomaceous earth), transfer to a tightly sealed containers and should be disposed. Contaminated surface rinse with water.

6.4. Reference to other sections

Information regarding waste disposal, see section 13.

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

Provide adequate general and local ventilation. Keep away from sources of heat and ignition. Take precautionary measures during work with the mixture in order to avoid contact with skin and eyes. Do not breathe vapors. Prevent from entering into drains, groundwater surfaces and soil. Do not eat, drink or smoke during work. Wash hands during breaks and after work. Remove contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Use only in well-ventilated areas with exhaust ventilation. Installation, equipment and containers should always be sealed. Vapor mixture with air can form explosive mixtures. Vapors are heavier than air and may accumulate at the surface of the floor or the ground. Store in the original, properly labeled, tightly sealed containers in a cool, dry, well-ventilated storage area with explosion-proof ventilation and electrical installation. Keep away from heat, sources of ignition and oxidizers. Protect from sunlight.

7.3. Specific end use(s)

No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EU Indicative Exposure Limit Values were not designated. Use values for your country if were designated.

DNEL/DMEL values

DNEL/DMEL values are not available.

PNEC values

PNEC values are not available.

8.2. Exposure controls

8.2.1 Appropriate engineering controls

Necessary general ventilation and local exhaust ventilation, which removes vapors from the place of their emissions. Ventilation sucking openings of local ventilation at the working level or below. General ventilation with ventilation at the top of the room and the floor. Ventilation systems must comply with the conditions determined due to the danger of fire or explosion. Do not use near sources of heat and sources of ignition. In case of inadequate ventilation wear respiratory protection. Ensure eyes wash stand.

8.2.2. Individual protection measures, such as personal protective equipment



Eye protection: safety goggles
Requirements for eye protection: EN 166.



Hand protection: chloroprene/nitrile gloves (thickness 0.65 ± 0.1 mm, breakthrough time ≥ 480 min), nitrile (thickness 0.4 ± 0.05 mm, breakthrough time ≥ 480 min), fluorine rubber (thickness 0.7 ± 0.1 mm, breakthrough time ≥ 480 min), butyl (thickness $0,3 \pm 0,05$ mm, breakthrough time ≥ 480).
Requirements for hand protection: EN 374.



Skin protection: in a case of operating large quantities use protective clothing made of natural materials (cotton) or synthetic fibres.
Requirements for protective clothing: EN 943.



Respiratory protection: in the case of exceeding the permissible concentrations of vapors use respiratory protection with particle filter marked with white color and a symbol of P2 and vapour filter marked with brown color and the letter A. You can apply complex

filters AP. Requirements for respiratory protection equipment: EN 143.

Recommended procedures for monitoring air quality in the workplace:

EU: EN 689, EN 1540.

Hygiene at work: follow the general rules of industrial hygiene. After work take off contaminated clothing. Before breaks at work wash hands and face. After work, wash the entire body. Do not eat, drink or smoke while working. Do not allow to cross in the workplace permissible concentrations. After work, remove contaminated clothing. Before breaks wash hands and face. After work, wash the whole body. Do not eat, drink or smoke while working.

8.2.3. Environmental exposure controls

Prevent from entering drains, surface waters, groundwater and soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: colourless liquid.
Odour: alcoholic
Odour threshold: for propan-2-ol: 22 ppm i 40 ppm.
pH: no data available for the mixture
Melting point/ freezing point: for propan-2-ol: -88.5 °C to -89.5 °C
Initial boiling point and boiling range: for propan-2-ol: 82.5-83°C, at 760 mmHg
Flash point: for propan-2-ol: 12 °C (closed cup)
Evaporation rate: no data available for the mixture
Flammability: the mixture is highly flammable.
Upper/lower flammability or explosive limits: for propan-2-ol: 12.7% / 2% (Vol.) at 200 °C
Vapour pressure: for propan-2-ol: 45.4 mm Hg at 25 °C
Vapour density: for propan-2-ol: 2.1 (water=1)
Relative density: 0,784 – 0,787 at 20 °C (water=1)
Solubility: for propan-2-ol: in water 1.00×10^6 at 25 °C, > 10% in alcohol, ether, acetone, miscible with many various organic solvents
Partition coefficient: n-octanol/water: for propan-2-ol: 0.05 at 25 °C
Auto-ignition temperature: for propan-2-ol: 425°C
Decomposition temperature: no data available for the mixture
Viscosity: for propan-2-ol: 2.2 mPa x s at 25 °C
Explosive properties: vapours of the product with air can form explosive mixtures
Oxidizing properties: due to the construction of the molecule oxidizing properties are not expected.

9.2. Other information

The refractive index: for propan-2-ol: 1.3768-1.378 at 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

In the recommended conditions of storage and (see Subsection 7.2) - no reactivity.

10.2. Chemical stability

Under normal conditions of handling and storage the product is stable.

10.3. Possibility of hazardous reactions

Vapours of the product with air can form explosive mixtures.

10.4. Conditions to avoid

Sources of ignition, open flame, direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents, alkalis, amines, aldehydes, iron, aluminum

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

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

Component	CAS No:	dose	value	unit
Propan-2-ol	67-63-0	LD50 (rat, oral)	> 5045	mg/kg
		LD50 (rabbit, skin)	> 12800	mg/kg
		LD50 (rabbit, oral)	> 8.0	g/kg
		LD50 (mouse, oral)	> 3600	mg/kg
		LD50 (rabbit, oral)	> 6410	mg/kg
		LD50 (rat, intraperitoneally)	> 2735	mg/kg
		LD50 (rat, intravenously)	> 1099	mg/kg

Skin corrosion/irritation:

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

Serious eye damage/irritation:

Irritating to eyes.

Respiratory or skin sensitization:

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

Germ cell mutagenicity:

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

Carcinogenicity:

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

Reproductive toxicity:

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

STOT-single exposure:

May cause drowsiness or dizziness.

STOT-repeated exposure:

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

Aspiration hazard:

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

Local exposure

By inhalation:

Inhalation of vapors may cause nausea, headaches and dizziness, sore throat, cough, nausea, vomiting, gasping breath, agitation, abnormal coordination, awareness. In high concentrations may cause depression of the central nervous system.

Contact with eyes:

Vapors may cause irritation to the eyes, causing redness, pain and weakness of view

Contact with skin:

May cause irritation. Repeated or prolonged contact leads to loss of fat in the skin, and may cause not allergic skin damage. It can also occur by sorption through damaged skin

By ingestion:

May cause nausea, vomiting, abdominal pain, headache and dizziness.

SECTION 12: Ecological information

12.1. Toxicity

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

Acute toxicity:

Component	CAS:	dose	value	unit
Propan-2-ol	67-63-0	LD50 fish	> 5000	mg/l/24h.
		Carrasius auratus (goldfish)		
		LC50 crabs	> 1400	mg/l/48h.
		(Crangon crangon)		
		LD50 fish	> 1150	mg/l/96h.
		(Semolitus atromaculatus)		
		LC50 fish	> 1830	mg/l/1h.
		(Pimephales promelas)		
LC50 fish	> 1160	mg/l/24h.		
(Pimephales promelas)				
LC50 fish	> 10.4	g/l/96h.		
(Pimephales promelas)				

12.2. Persistence and degradability

For propan-2-ol:

Easy biodegradable > 70%, 10 d.

Easy biodegradable both in aerobic and anaerobic aquatic systems.

12.3. Bioaccumulative potential

Partition coefficient octanol/water (Kow): No data available.

Bioconcentration factor (BCF): No data available.

On the basis of data from literature, estimated BCF for propan-2-ol is 3, which indicates that the bioconcentration in aquatic organisms is low. The hydrolysis should take place because of the absence of functional groups which may be hydrolyzed.

12.4. Mobility in soil

No data available for the mixture. According to the data from literature, propane-2-ol released into the soil has a high mobility.

12.5. Results of PBT and vPvB assessment Mixture does not meet the criteria for PBT and vPvB.

12.6. Other adverse effects No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Do not dispose as household waste, do not empty into drains. Do not allow contamination of groundwater and surface water. Empty thoroughly containers. Reusable packaging can be (after cleaning) re-used. Packaging disposable (after thorough cleaning) recycle.

Comply with national and local regulations

Special precautions:

Remove the product and its container in a safe way. Be careful when handling empty containers that have not been thoroughly cleaned. Prevent the release of the product into the soil, watercourses and drains.

Community law:

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, as amended.

Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, as amended.

Polish law:

The Act of 14 December 2012 on waste (O.J.2013.0.21), as amended.

The Act of 13 June 2013 on packaging and packaging waste (O.J.2013.0.888).

Regulation of the Minister of the Environment of 9 December 2014 on the catalogue of wastes, (O.J.2014.0.1923)

Proclamation of the Marshal of the Polish Sejm on 4 September 2014 on publication of the consolidated text of the law on obligations of entrepreneurs in the field of management of certain wastes and on product fee, (O.J.2014.0.1413).

SECTION 14: Transport information

The product is classified as dangerous in the meaning of national and international transport regulations concerning the transport of dangerous goods: land (RID, ADR), sea (IMDG) and air (IATA).

14.1-14.4

RID, ADR

14.1. UN Number	1219
14.2. UN Proper shipping name IZOPROPYLOWY)	UN IZOPROPANOL (ALKOHOL
14.3. Transport hazard class(es)	3
14.4. Packing group	II

IMDG

14.1. UN Number)	1219
14.2. UN Proper shipping name	UN ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es)	3
14.4. Packing group	II

IATA

14.1. UN Number	1219
14.2. UN Proper shipping name	UN ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es)	3
14.4. Packing group	II

14.5. Environmental hazards

The product does not pose a risk to the environment in accordance with the criteria in the UN Model Regulations.

14.6. Special precautions for user

Always transport in closed containers and properly secured. Ensure that persons transporting the product know what to do in case of failure.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

Regulation (EC) 1907/2006 of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Regulation Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 and Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000 / 21/WE (Official Journal of the European Union, series L No 396 of 30 December 2006), as amended.

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (EC) No 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Official Journal of the European Union, series L No 353 of 31 December 2008), as amended.

Act of 25 February 2011 on chemical substances and their mixtures (Dz.U.2011.63.322).

Regulation of the Minister of Health of 10 August 2012 on the criteria and classification of chemical substances and mixtures (Dz.U.2012.0.1018), as amended.

Regulation of the Minister of Economy of 21 December 2005 on the basic requirements for personal protective equipment (Dz.U.2005.259.2173).

Regulation of the Minister of Health of 30 December 2004 on occupational health and safety related to occurrence of chemical agents at work (Dz.U.2005.11.86), as amended.

Regulation of the Minister of Health on 2 February 2011 on the tests and measurements of harmful factors in the work environment (Dz.U.2011.33.166).

Regulation of the Minister of Labour and Social Policy of 14.03.2000 r on occupational health and safety in transport manual handling (Dz.U.2000.26.313), as amended.

The Act of 19 August 2011 on the transport of dangerous goods (O.J.2011.227.1367), as amended.

Statement of the Government dated 28 May 2013 on the entry into force of amendments to Annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), done at Geneva on 30 September 1957, (O.J.2013.0.815) .

15.2. Chemical safety assessment

No Chemical Safety Assessment was done for this product.

SECTION 16: Other information

The full text of R-phrases, H-statements, hazard classes and codes of categories mentioned in section 3.

R11	Highly flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness
Flam. Liq. 2	Flammable liquid, hazard category 2
Eye Irrit. 2	Eye irritation, category 2.
STOT SE 3	Specific target organ toxicity — single exposure

The key literature and data sources

- SDS received from supplier

Recommendations for staff training

Before starting work with the product the user is required to read the safety rules regarding the safe handling of chemicals, and most of all have appropriate training in the workplace.

Changes:

- Section 1 (E-mail address of the person responsible for the SDS), section 2 (precautionary statements), Section 8 (standards), section 13 (update of law), section 15 (update of law).

This Safety Data Sheet is not a quality certificate of the product. The information contained herein should be considered only as a help in safe handling the product in transportation, distribution use and storage. The information contained herein apply only to the product and its specific identified uses. They may not be current or sufficient for the product used in combination with other materials or in other applications than those listed in this Safety Data Sheet. The user of the product is obliged to comply with all applicable standards and regulations, and responsibility resulting from improper use of information contained herein.