

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: ECOCUT

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

Plastic engraving materials.

1.3. Details of the supplier of the safety data sheet

Registered company name: GRAVOTECH MARKING SAS.

Address: 56, avenue Jean Jaurès. 10600. La Chapelle Saint Luc. France.

Telephone: +33 (0)3 25 41 65 65. Fax: +33 (0)3 25 79 04 25.

e-mail: info@gravograph.fr http://www.gravograph.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

Other emergency numbers

National Poisons Information Service of England: http://npis.org - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - LUXEMBOURG: (+352) 8002 5500 - European Emergency Number Association (EENA): 112

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

No labelling requirements for this mixture.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

| Identification | Classification (EC) 1272/2008 | Note | % |
|--------------------------------|-----------------------------------|------|-----------|
| CAS: 9003-56-9 | | | x% <= 100 |
| | | | |
| 2-PROPENENITRILE, POLYMER WITH | | | |
| 1,3-BUTADIENE AND | | | |
| ETHENYLBENZENE | | | |
| INDEX: 608-003-00-4 | GHS02, GHS06, GHS08, GHS05, GHS09 | DE | x% < 0.1 |
| CAS: 107-13-1 | Dgr | [1] | |
| EC: 203-466-5 | Flam. Liq. 2, H225 | [2] | |
| REACH: 01-2119474195-34 | Carc. 1B, H350 | | |

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|---|--|-----------------|----------|
| ACRYLONITRILE | Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | | |
| INDEX: 601-013-00-X CAS: 106-99-0 EC: 203-450-8 1,3-BUTADIENE | GHS02, GHS04, GHS08 Dgr Flam. Gas 1, H220 Carc. 1A, H350 Muta. 1B, H340 | D : | x% < 0.1 |
| INDEX: 601-026-00-0 CAS: 100-42-5 EC: 202-851-5 REACH: 01-2119457861-32 STYRENE | GHS02, GHS08, GHS07 Dgr Flam. Liq. 3, H226 Repr. 2, H361d Acute Tox. 4, H332 STOT RE 1, H372 Skin Irrit. 2, H315 Eye Irrit. 2, H319 | D [1] [2] | x% < 0.1 |

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Information on ingredients:

(Full text of H-phrases: see section 16)

- [1] Substance for which maximum workplace exposure limits are available.
- [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

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SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation:

If inhaled, move the patient into the fresh air and keep warm and at rest.

If breathing is irregular or has stopped, proceed with artificial respiration and seek medical attention.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of swallowing:

Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- dry chemical agents
- carbon dioxide (CO2)
- sprayed water or water mist
- foam

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

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Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Storage temperature: < 49°C.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE):

| CAS | VME-mg/m3: | VME-ppm: | VLE-mg/m3: | VLE-ppm: | Notes : |
|----------|------------|----------|------------|----------|-------------|
| 107-13-1 | 1 | 0.45 | | 1.8 | Skin Dermal |
| | | | | | sens. |
| 106-99-0 | 2.2 | 1 | | | |

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010);

| | ······································ | | | | | | | |
|----------|--|--------|----------|--------------|------------|--|--|--|
| CAS | TWA: | STEL: | Ceiling: | Definition : | Criteria : | | | |
| 107-13-1 | 2 ppm | | | Skin; A3 | | | | |
| 106-99-0 | 2 ppm | | | A2 | | | | |
| 100-42-5 | 20 ppm | 40 ppm | | A4· BFI | | | | |

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

| | - ' | , , | | | |
|----------|-------|----------|--------|-------|--|
| CAS | VME : | VME : | Excess | Notes | |
| 100-42-5 | | 20 ppm | | 2(II) | |
| | | 86 mg/m³ | | | |

- Australia (NOHSC: 3008, 1995) :

| CAS | TWA: | STEL: | Ceiling: | Definition : | Criteria : |
|----------|-----------|-----------|----------|--------------|------------|
| 107-13-1 | 2 ppm | | | Н | |
| | 4.3 mg/m3 | | | | |
| 106-99-0 | 10 ppm | | | Н | |
| | 22 mg/m3 | | | | |
| 100-42-5 | 50 ppm | 100 ppm | | Н | |
| | 213 mg/m3 | 426 mg/m3 | | | |

- Austria (BGBI. II Nr. 156/2021) :

| CAS | TWA: | STEL: | Ceiling: | Definition : | Criteria : | |
|----------|-----------------------|-----------------------|----------|--------------|------------|--|
| 107-13-1 | 2 ppm | 8 ppm | | | | |
| | 4.5 mg/m ³ | 18 mg/m³ | | | | |
| 106-99-0 | 1 ppm | 8 ppm | | | | |
| | 2.2 mg/m ³ | 17 mg/m³ | | | | |
| 100-42-5 | 20 ppm | 80 ppm | | | | |
| | 85 mg/m³ | 340 mg/m ³ | | | | |

- Belgium (Royal decree of 11/05/2021):

| CAS | TWA: | STEL: | Ceiling : | Definition : | Criteria : |
|----------|-----------------------|-----------|-----------|--------------|------------|
| 107-13-1 | 2 ppm | | | C. D | |
| | 4.4 mg/m³ | | | | |
| 106-99-0 | 1 ppm | | | С | |
| | 2.2 mg/m ³ | | | | |
| 100-42-5 | 25 ppm | 50 ppm | | D | |
| | 108 mg/m³ | 216 mg/m³ | | | |

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021):

| CAS | VME-ppm: | VME-mg/m3: | VLE-ppm: | VLE-mg/m3: | Notes : | TMP No: |
|----------|----------|------------|----------|------------|------------|---------|
| 107-13-1 | 2 | 4.5 | 15 | 32.5 | C2 | - |
| 106-99-0 | 1 | 2.2 | - | - | C1A. M1B | 99 |
| 100-42-5 | 23.3 | 100 | 46.6 | 200 | Peau/Bruit | 84 |

- Switzerland (Suva 2021) :

| CAS | VME | VLE | Valeur plafond | Notations |
|----------|-----------|-----------|----------------|-----------|
| 107-13-1 | 2 ppm | | | |
| | 4.5 mg/m³ | | | |
| 106-99-0 | 2 ppm | | | |
| | 4.4 mg/m³ | | | |
| 100-42-5 | 20 ppm | 40 ppm | | |
| | 85 mg/m³ | 170 mg/m³ | | |

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020):

| CAS | TWA: | STEL: | Ceiling: | Definition : | Criteria : |
|----------|-----------------------|------------------------|----------|--------------|------------|
| 107-13-1 | 2 ppm | | | Carc. Sk | |
| | 4.4 mg/m³ | | | | |
| 106-99-0 | 1 ppm | | | Carc | |
| | 2.2 mg/m ³ | | | | |
| 100-42-5 | 100 ppm | 250 ppm | | | |
| | 430 mg/m ³ | 1080 mg/m ³ | | | |

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits):

| CAS | TWA: | STEL: | Ceiling : | Definition : | Criteria : |
|----------|---------|-------|-----------|--------------------|------------|
| 107-13-1 | 2 ppm | | 10 ppm | 15-minute. skin | |
| 106-99-0 | 1 ppm | 5 ppm | | | |
| 100-42-5 | 100 ppm | | 600 ppm | | |

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling dust.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical state | |
|--|-----------------|
| Physical state : | Solid. |
| Colour | |
| Colour: | White / Black. |
| Odour | |
| Odour threshold: | Not stated. |
| Odour: | Characteristic. |
| Freezing point | |
| Freezing point / Freezing range : | Not stated. |
| Boiling point or initial boiling point and boiling range | |
| Boiling point/boiling range : | Not relevant. |
| Flammability | |
| Flammability (solid, gas): | Not stated. |
| Lower and upper explosion limit | |
| Explosive properties, lower explosivity limit (%): | Not stated. |
| Explosive properties, upper explosivity limit (%): | Not stated. |
| Flash point | |
| Flash point interval : | Not relevant. |
| Auto-ignition temperature | |
| Self-ignition temperature : | 454 °C. |
| Decomposition temperature | |
| Decomposition point/decomposition range : | Not relevant. |
| pH | |
| pH (aqueous solution): | Not stated. |
| pH: | Not relevant. |
| Kinematic viscosity | |
| Viscosity: | Not stated. |
| Solubility | |
| Water solubility: | Insoluble. |
| Fat solubility : | Not stated. |
| Partition coefficient n-octanol/water (log value) | |
| Partition coefficient: n-octanol/water : | Not stated. |
| Vapour pressure | |
| Vapour pressure (50°C): | Not relevant. |
| Density and/or relative density | |
| Density: | 1.05 - 1.12 |

9.2. Other information

Vapour density:

Relative vapour density

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

Not stated.

9.2.2. Other safety characteristics

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- formation of dusts
- heat
- flames and hot surfaces
- sparks

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from:

- acids
- bases
- combustible material
- halogen compounds
- oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

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

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

$\label{thm:monograph:equation} \textbf{Monograph(s)} \ \ \textbf{from the IARC (International Agency for Research on Cancer)}:$

CAS 100-42-5: IARC Group 2A: The agent is probably carcinogenic to humans.

CAS 106-99-0 : IARC Group 1 : The agent is carcinogenic to humans.

CAS 107-13-1 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE AND ETHENYLBENZENE (CAS: 9003-56-9)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

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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.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws):

WGK 1: Slightly hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

Explosives precursors:

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions:

No data available

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws):

WGK 1: Slightly hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

| H220 | Extremely flammable gas. |
|-------|--|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H340 | May cause genetic defects . |
| H350 | May cause cancer . |
| H361d | Suspected of damaging the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure . |
| H411 | Toxic to aquatic life with long lasting effects. |

Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorization and Restriction of Chemical Substances.

CMR: Carcinogenic, mutagenic or reprotoxic.

STEL: Short-term exposure limit
TWA: Time Weighted Averages
TMP: French Occupational Illness table
TLV: Threshold Limit Value (exposure)

AEV: Average Exposure Value.

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.