

2K PU ADHESIVE - PART A

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 1 / 9

Replaced revision:2 (Dated 21/06/2017)

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Product name: ETALON 2K PU ADHESIVE / ET/PU-9050

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

Intended use Two components, polyurethane based, adhesive.

Industrial **Professional** Consumer **Identified Uses** SEALANTS AND ADHESIVES FORMULATIONS **IN INDUSTRY** SU: 10. ERC: 2. PROC: 3, 4, 5, 8a, 8b, 9. PC: 1. INDUSTRIAL APPLICATIONS OF SEALANTS SU: 17, 19. **AND ADHESIVES** SU: 17, 19. ERC: 5, 8b. ERC: 5, 8b. PROC: 10, 8a, 8b. PROC: 10, 8a, 8b. PC: 1. PC: 1. **CHEMICAL SUBSTANCE USE IN** PROC: 15. LABORATORY, INDUSTRIAL PC: 1, 21.

1.3. Details of the supplier of the safety data sheet

ETALON is a brand of Alexport Company. Pontou 26, P.C. 546 28, Thessaloniki, Greece, Tel: +30 2310 501814, Fax: +30 2310 524 771 info@alexport.gr, www.alexport.gr www.etalon-refinish.com

1.4. Emergency telephone number

e-mail address

For urgent inquiries refer to 122 or call your local doctor/poison center

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation.

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 2 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 2. Hazards identification .../>>

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P280 Wear eye protection / face protection.

P337+P313 If eye irritation persists: Get medical advice / attention.

P264 Wash hands thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification x = Conc. % Classification 1272/2008 (CLP)

1,1',1",1"'-ETHYLENEDINITRILOTETRAPROPAN-2-OL

CAS 102-60-3 $47,5 \le x < 50$ Eye Irrit. 2 H319

EC 203-041-4

INDEX

GLYCERYL POLY(OXYPROPYLENE)TRIAMINE

CAS 64852-22-8 2,5 ≤ x < 3 Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412

EC INDEX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

2K PU ADHESIVE - PART A

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 3 / 9

Replaced revision:2 (Dated 21/06/2017)

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 4 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

		1.1'.1".1"	'-ETHYLENEDII	NITRILOTETRA	APROPAN-2-OL			
Predicted no-effect con	centration	, , ,						
Normal value in fresh water						0,085	mg/l	
Normal value in marine water						0,0085	mg/l	
Normal value for fresh water sediment						0,193	mg/kg	
Normal value for marine water sediment						0,0193	mg/kg	
Normal value for water, intermittent release						1,51	mg/l	
Normal value of STP microorganisms						70	mg/l	
Normal value for the terrestrial compartment						0,0183	mg/kg	
Health - Derived no-effe	ect level - D	NEL / DMEL						
	Effects on consumers Effects on wor					kers		
Route of exposure	Acute	Acute	Chronic	Chronic	Acute local	Acute	Chronic	Chronic
	local	systemic	local	systemic		systemic	local	systemic
Oral				2,5				
				mg/kg/d				
Inhalation				8,7				29,4
				mg/m3				mg/m3
Skin				2,5				4,2
				mg/kg/d				mg/kg/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties Value Information
Appearance liquid

Colour black
Odour Not available
Odour threshold Not available

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 5 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 9. Physical and chemical properties .../>>

Not available Melting point / freezing point Not available Initial boiling point 200 °C Boiling range Not available Flash point 182 °C Evaporation rate Not available Flammability (solid, gas) Not available Not available Lower inflammability limit Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure 0,1 Pa Vapour density Not available Relative density 0,98 Not available Solubility Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Not available Decomposition temperature Viscosity 3500 mPas Not available Explosive properties Not available Oxidising properties

9.2. Other information

VOC (Directive 2010/75/EC): 0
VOC (volatile carbon): 0

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Revision nr.3
Dated 11/10/2019
Printed on 11/10/2019
Page n. 6 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 11. Toxicological information ... / >> Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

LD50 (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

GLYCERYL POLY(OXYPROPYLENE)TRIAMINE

LD50 (Oral) 2690 mg/kg LD50 (Dermal) 12500 mg/kg

1,1',1"',1"'-ETHYLENEDINITRILOTETRAPROPAN-2-OL

LD50 (Oral) 2890 mg/kg Rattus sp. LD50 (Dermal) > 2000 mg/kg Rattus sp.

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

GLYCERYL POLY(OXYPROPYLENE)TRIAMINE

LC50 - for Fish 68 mg/l/96h

12.2. Persistence and degradability

2K PU ADHESIVE - PART A

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 7 / 9

Replaced revision:2 (Dated 21/06/2017)

SECTION 12. Ecological information .../>>

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC:

None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point

Contained substance

Point 20 DI-N-BUTYLBIS(DODECYLTHIO)TIN Reg. no.: 01-2119841260-50-0000

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 8 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 15. Regulatory information .../>>

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Eye Dam. 1 Serious eye damage, category 1
Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H315 Causes skin irritation.

H412 Harmful to aquatic life with long lasting effects.

Use descriptor system:

ERC 2 Formulation into mixture

ERC 5 Use at industrial site leading to inclusion into/onto article

ERC 8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

PC 1 Adhesives, sealants
PC 21 Laboratory chemicals
PROC 10 Roller application or brushing
PROC 15 Use as laboratory reagent

PROC 3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled

exposure or processes with equivalent containment condition

PROC 4 Chemical production where opportunity for exposure arises

PROC 5 Mixing or blending in batch processes

PROC 8a Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
 PROC 8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

SU 10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU 17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

SU 19 Building and construction work

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP

Revision nr.3 Dated 11/10/2019 Printed on 11/10/2019 Page n. 9 / 9

Replaced revision:2 (Dated 21/06/2017)

2K PU ADHESIVE - PART A

SECTION 16. Other information .../>>

- LC50: Lethal Concentration 50%- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:

The following sections were modified:

01/02/03/08/09/11/12/15.