# GEA

# Safety Data Sheet Adhesive mixture for rat glue

## Safety Data Sheet dated 20/10/2022, version 1

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

#### 1.1. Product identifier

Mixture identification:

Trade name: Adhesive mixture for rat glue Trade code: P-14001NO; P-14001IN

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

Recommended use:

Adhesive mixture for the monitoring of mice and rats.

Product category

PC1 Adhesives, sealants

Uses advised against:

the mixture has to be used for the mentioned application and use.

# 1.3. Details of the supplier of the safety data sheet

Company:

**GEA SRL** 

Via A. B. Sabin, 31

20019 - Settimo Milanese (MI) - ITALIA

Tel: +39 02 33514890 Fax: +39 02 00665233

Competent person responsible for the safety data sheet:

msds@geaitaly.it

# 1.4. Emergency telephone number

Milan Poison Control Centre + 39 02 66101029 (CAV Ospedale Niguarda Ca` Granda - Milan)

Pavia Poison Control Centre + 39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Bergamo Poison Control Centre + 39 800 883300 (CAV Ospedali Riuniti - Bergamo)

Florence Poison Control Centre + 39 055 7947819 (CAV Ospedale Careggi - Florence)

Rome Poison Control Centre + 39 06 3054343 (CAV Policlinico Gemelli - Rome)

Rome Poison Control Centre + 39 06 49978000 (CAV Policlinico Umberto I - Rome)

Rome Poison Control Centre + 39 06 68593726 (CAV Ospedale Pediatrico Bambino Gesù -

Roma)

Naples Poison Control Centre +39 081 5453333 (CAV Ospedale Cardarelli - Naples)

Foggia Poison Control Centre +39 800183459 (CAV Azienda Ospedaliera Universitaria -

Foggia)

Verona Poison Control Centre +39 800011858 (CAV Azienda Ospedaliera Integrata - Verona)

Company emergency telephone number: +39 02 33514890 (available from Monday to Friday from 9 a.m. to 6 p.m., for technical assistance only).

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Hazard pictograms:

P-14001NO/1

# GEA

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None

Hazard statements:

None

Precautionary statements:

None

**Special Provisions:** 

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

# 2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1% Other Hazards:

No other hazards

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 0.1% - < 0.25%	cyclohexane	Index 601-017-00-1 number: CAS: 110-82-7 EC: 203-806-2	<ul> <li>2.6/2 Flam. Liq. 2 H225</li> <li>3.10/1 Asp. Tox. 1 H304</li> <li>3.2/2 Skin Irrit. 2 H315</li> <li>3.8/3 STOT SE 3 H336</li> <li>4.1/A1 Aquatic Acute 1 H400</li> </ul>
			4.1/C1 Aquatic Chronic 1 H410

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

# Adhesive mixture for rat glue



# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide

foam

Dry chemical powder.

Extinguishing media which must not be used for safety reasons:

High pressure water jets.

# 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

# 5.3. Advice for firefighters

Keep containers cool with water spray.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Use suitable breathing apparatus.

# SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

# 7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

#### 7.3. Specific end use(s)

None in particular

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

cyclohexane - CAS: 110-82-7

OEL Type: IOELV - TWA: 700 mg/m3, 200 ppm
 OEL Type: EU - TWA(8h): 700 mg/m3, 200 ppm

- OEL Type: ACGIH - TWA(8h): 100 ppm - Notes: CNS impair

**DNEL Exposure Limit Values** 

cyclohexane - CAS: 110-82-7





Worker Industry: 2016 mg/kg - Exposure: Human Dermal - Frequency: Long Term,

systemic effects - Notes: (Ratto)

Worker Industry: 1400 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,

systemic effects - Notes: (Pesci)

Worker Industry: 700 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term.

local effects

Worker Industry: 700 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term,

systemic effects

Worker Industry: 1400 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term,

local effects

**PNEC Exposure Limit Values** 

cyclohexane - CAS: 110-82-7

Target: Fresh Water - Value: 0.207 mg/l

Target: Freshwater sediments - Value: 16.68 mg/kg

Target: Marine water - Value: 0.207 mg/l

Target: Marine water sediments - Value: 16.68 mg/l

Target: STP - Value: 3.24 mg/l Target: Soil - Value: 3.38 mg/kg Target: 11 - Value: 0.207 mg/l

#### 8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

# SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	N.A.		
Odour:	None		
Melting point/freezing	N.A.		
point:			
Boiling point or initial	N.A.		
boiling point and boiling			
range:			
Flammability:	N.A.		
Lower and upper explosion	N.A.		
limit:			
Flash point:	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			



# Adhesive mixture for rat glue

pH:	N.A.	 
Kinematic viscosity:	N.A.	 
Solubility in water:		 
Solubility in oil:		 
Partition coefficient n-octanol/water (log value):	N.A.	 
Vapour pressure:	N.A.	 
Density and/or relative density:	0.900-0.920 a 20°C	 
Relative vapour density:	N.A.	 

Particle characteristics:

Particle size:	N.A.	 

# 9.2. Other information

Properties	Value	Method:	Notes
Viscosity:	55000 +- 15%		
	cPoise a 25°C		

# SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

# SECTION 11: Toxicological information

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

Toxicological information of the product:

Adhesive mixture for rat glue

a) Acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

# Adhesive mixture for rat glue



f) Carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) Reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

cyclohexane - CAS: 110-82-7

a) Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 12705 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

b) skin corrosion/irritation:

Notes: Provoca irritazione cutanea

h) STOT-single exposure:

Notes: Può provocare sonnolenza o vertigini.

j) aspiration hazard:

Notes: Può essere letale in caso di ingestione e di penetrazione nelle vie aeree

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Adhesive mixture for rat glue

Not classified for environmental hazards

Based on available data, the classification criteria are not met

cyclohexane - CAS: 110-82-7

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 0.9 mg/l - Duration h: 48

Endpoint: 5 - Species: Fish = 4.53 mg/l - Duration h: 96

Endpoint: 5 - Species: Algae = 3.4 mg/l - Duration h: 72

# 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

cyclohexane - CAS: 110-82-7 Notes: BOD35/thOD=67%

12.4. Mobility in soil

cyclohexane - CAS: 110-82-7

Notes: Molto tossico per i pesci

# 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties





No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

# **SECTION 14: Transport information**

# 14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

### 14.2. UN proper shipping name

N.A.

# 14.3. Transport hazard class(es)

N.A.

# 14.4. Packing group

N.A.

# 14.5. Environmental hazards

N.A.

# 14.6. Special precautions for user

N.A.

# 14.7. Maritime transport in bulk according to IMO instruments

N.A.

# SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)



# Adhesive mixture for rat glue

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 40

Restrictions related to the substances contained:

Restriction 57

Restriction 75

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

# 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out:

cyclohexane

# **SECTION 16: Other information**

Full text of phrases referred to in Section 3:

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and	Code	Description
hazard category		
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure,
		Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

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

SECTION 2: Hazards identification

SECTION 9: Physical and chemical properties

SECTION 11: Toxicological information SECTION 12: Ecological information SECTION 14: Transport information SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities







SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO)

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.



1. Short title of Exposure Scenario 3: Formulation & (re)packing of substances and mixtures			
Main User Groups	SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites		
Sectors of end-use	SU 10: Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)		
Process categories	PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) PROC8a: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC14: Production of preparations or articles by tabletting, compression, extrusion, pelletisation PROC15: Use as laboratory reagent		
Environmental Release Categories	ERC2: Formulation of preparations		
Activity	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.		
2.1 Contributing scenario co	ontrolling environmental	exposure for: ERC2	
Product characteristics	Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100 % (unless stated differently).	
	Fraction of EU tonnage used in region:	17142 ton(s)/year	
Amount used	Regional use tonnage (tons/year):	1714 ton(s)/year	
	Annual amount per site	1714 ton(s)/year	
	Fraction of regional tonnage used locally:	1	
Frequency and duration of use	Continuous exposure	300 days/year	
Environment factors not	Other data. Other information	Local freshwater dilution factor:: 10	
influenced by risk management	Other data. Other information	Local marine water dilution factor:: 100	
Other given operational conditions affecting	Emission or Release Factor: Air	0,025	
environmental exposure	Emission or Release Factor: Water	2 .10-4	
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	compression, extrusion, pelletisation		
Technical conditions and measures to control dispersion from source towards the worker	Production of preparations or articles by tabletting,	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).(PROC14)	
Technical conditions and	Transfer from/pouring from containers	Provide extract ventilation to points where emissions occur.(PROC8a, PROC8b, PROC9)	
	Mixing operations (open systems) with potential for aerosol generation	Provide extract ventilation to points where emissions occur.(PROC4, PROC5)	
Other operational conditions affecting workers exposure	Assumes use at not more than 20 °C above ambient temperature, unless stated differently.		
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently).		
	Vapour pressure	> 100 hPa	
Product characteristics	Physical Form (at time of use)	liquid	
	Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100 % (unless stated differently).	
2.2 Contributing scenario co PROC5, PROC8a, PROC8		re for: PROC1, PROC2, PROC3, PROC4, OC15	
Conditions and measures related to external recovery of waste	Recovery Methods	External recovery and recycling of waste should comply with applicable local and/or national regulations.	
Conditions and measures related to external treatment of waste for disposal	Disposal methods	Prevent environmental discharge consistent with regulatory requirements.	
to sewage treatment plant	Sludge Treatment	Do not apply industrial sludge to natural soils., Sludge should be incinerated, contained or reclaimed.	
Conditions and measures related	Degradation efficiency	96,6 %	
	Type of Sewage Treatment Plant	Domestic sewage treatment plant	
releases to soil Organizational measures to prevent/limit release from the site	estimates used.	ross sites thus conservative process release	
Technical conditions and measures at process level (source) to prevent release Technical onsite conditions and measures to reduce or limit discharges, air emissions and	Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal., Prevent discharge of undissolved substance to or recover from onsite wastewater. (Degradation effectiveness: 96,6 %)	
	Emission or Release Factor: Soil	1 .10-4	



maintenance

opening or maintenance.(PROC8a, PROC8b)

# 3. Exposure estimation and reference to its source

#### **Environment**

Used EUSES model. ESVOC spERC 2.2.v1 has been used to evaluate the exposure for the environment. When the recommended risk management measures (RMMs) and operational conditions (OCs) are observed, exposures are not expected to exceed the predicted PNECs and the resulting risk characterisation ratios are expected to be less than 1.

#### Workers

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. When the recommended risk management measures (RMMs) and operational conditions (OCs) are observed, exposures are not expected to exceed the predicted DNELs and the resulting risk characterisation ratios are expected to be less than 1.

# 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

For further information on the assessment method, see: http://www.ecetoc.org/tra

Only properly trained persons shall make use of scaling methods while checking whether the OC and RMM are within the boundaries set by the ES

# Additional good practice advice beyond the REACH Chemical Safety Assessment

Assumes a good basic standard of occupational hygiene is implemented.

Ensure the ventilation system is regularly maintained and tested.

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