LOW EXPANSION PISTOL FOAM B2

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

1.1. Product identifier
Product Name LOW EXPANSION PISTOL FOAM B2
Article number: 01-3-2-020

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 - One-component polyurethane foam - gun grade

1.3 Details of the supplier of the safety data sheet
Company Name
UAB TEGRA STATE
Savanoriu ave. 178A, LT-03154 Vilnius, Lithuania
E-mail address info@tegra.lt
+370 5 266 11 67

1.4 Emergency telephone number: 112

SECTION 2: Hazards identification

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

Aerosol 1	H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
Acute Tox. 4	H332 Harmful if inhaled.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 2	H351 Suspected of causing cancer.
STOT SE 3	H335 May cause respiratory irritation.
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger
Hazard-determining components of labelling:
diphenylmethanediisocyanate,isomeres and homologues
Hazard statements
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction. H351

Suspected of causing cancer. H335
May cause respiratory irritation. H373
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P284 In case of inadequate ventilation wear respiratory protection (a protective mask with an appropriate gas filter - i.e. type A1 according to standard EN 14387).
P302+P352 IF ON SKIN: Wash with plenty of water/soap.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of container to in accordance with local/regional/national/ international regulation.

Additional information:

Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	40-50%
	Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	
CAS: 13674-84-5 EINECS: 237-158-7	tris(2-chlorisopropyl)-phosphate	5-15%
	Acute Tox. 4, H302	
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-01-8	isobutane	1-10%
	Flam. Gas 1A, H220; Press. Gas (Comp.), H280	

CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8	dimethyl ether Flam. Gas 1A, H220; Press. Gas (Comp.), H280	1-10%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	1-5%

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:
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. If symptoms persist, 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: CO2, sand, extinguishing powder. Do not use water.
For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture
Carbon monoxide (CO)
Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)

5.3 Advice for firefighters
Protective equipment: Mouth respiratory protective device.
Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measure

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
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:
Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
Information about storage in one common storage facility:
Store away from oxidising agents.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Further information about storage conditions:
Keep container tightly sealed.
Store in dry conditions.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

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

SECTION 8: Exposure controls/personal

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 115-10-6 dimethyl ether	
IOELV	Long-term value: 1920 mg/m³, 1000 ppm

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

8.2 Exposure controls

Appropriate engineering controls No further data; see item 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.
Do not inhale gases / fumes / aerosols.
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

Protective gloves according to EN 374.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Tightly sealed goggles

Wear airtight protective goggles EN 166

Body protection: Protective work clothing EN 13688

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information	
Colour:	According to product specification
Odour:	Characteristic
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined. Not applicable, as aerosol.
Lower and upper explosion limit	
Lower:	1.8 Vol %
Upper:	8.5 Vol %
Flash point:	Not applicable, as aerosol.
Ignition temperature:	235 °C
Solubility	
water:	Insoluble.
Vapour pressure at 20 °C:	3000 hPa
Density and/or relative density	
Density:	Not determined.

9.2 Other information

Appearance:	
Form:	Aerosol
Important information on protection of health and environment, and on safety.	
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Heating may cause an explosion.
Solvent content:	
VOC (EC)	19,2%
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	

Extremely flammable aerosol. Pressurised container: May burst if heated.

Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	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:
Nitrogen oxides (NOx)
Hydrogen cyanide (prussic acid)
Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No1272/2008
Acute toxicity Harmful if inhaled.

LD/LC50 values relevant for classification:		
CAS: 13674-84-5 tris(2-chlorisopropyl)-phosphate		
Oral	LD50	3,600 mg/kg (rat)
CAS: 115-10-6 dimethyl ether		
Inhalative	LC50/4 h	308 mg/l (rat)

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Causes serious eye irritation.
Respiratory or skin sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Suspected of causing cancer.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure May cause respiratory irritation.
STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.
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 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

12.6 Other adverse effects
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

European waste catalogue	
08 05 01*	waste isocyanates
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA 1950

14.2 UN proper shipping name
ADR 1950 AEROSOLS
IMDG AEROSOLS
IATA AEROSOLS, flammable

14.3 Transport hazard class(es)
ADR
Class 2 5F Gases.
Label 2.1
IMDG, IATA

Class 2.1 Gases.
Label 2.1

14.4 Packing group
ADR, IMDG, IATA Void

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for user Warning: Gases.
EMS Number: F-D,S-U

14.7 Maritime transport in bulk according to IMO instruments
Transport/Additional information:
ADR
Limited quantities (LQ) 1l
UN "Model Regulation": UN 1950 AEROSOLS, 2.1

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.

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.

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

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH204 Contains isocyanates. May produce an allergic reaction.

Abbreviations and acronyms:

Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2