

SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification ADHESIVE CONTACT UNIWERSAL ADHESIVE IN SPRAY UFI: TCN0-W0HX-N00N-K3UT *

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

Area of use:
SU3 Industrial manufacturing: Uses of substances as such or in preparations at industrial sites.
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen).
SU21 Consumer uses: Private households / general public / consumers.

Product category: PC1 Adhesives and sealants.

Process category:PROC7Industrial spraying.PROC11Non industrial spraying.

Use of the substance/mixture: Adhesive.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o. Ul. Łódzka 3

42-240 Rudniki k. Częstochowy, PL Tel.: +48 34 329 45 03 Fax: +48 34 320 12 16 Registration number 000029202

Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone

+48 34 329 45 03 (8.00 - 15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to the regulation (EC) no 1272/2008.



Aerosol 1

GHS02 flame

H222-H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

¥2

GHS09 environment 2 H411 Toxic to aquatic life with long-lasting effects.

Aquatic Chronic 2

GHS07 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 GHS07 May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

2.2. Label elements

The product has been classified and labelled according to CLP regulation.

Hazard pictograms:

GHS02 GHS07 GHS09 Signal word: DANGER



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Components indicating hazard for labelling: Naphtha (petroleum), hydrotreated light. * Butan-2-one. *

Hazard statement:

- H222-H229 Extremely flammable aerosol. Pressurized container: may burst if heated.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- Toxic to aquatic life with long-lasting effects. H411

Precautionary statements:

- If medical advice is needed, have product container or label at hand. P101
- P102 Keep out of reach of children.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P210
- P211 Do not spray on an open flame or other ignition source.
- Pressurized container Do not pierce or burn, even after use. P251
- Do not breathe spray. P260
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/eye protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. *
- P302+P352 IF ON SKIN: Wash skin with plenty of water and soap.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P403 Store in a well ventilated place.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F
- Dispose of contents/container in accordance with local / regional / national / international regulations. P501

2.3. Other hazards

Results of PBT and vPvB assessment: PBT: Not applicable. * vPvB: Not applicable. *

Endocrine disrupting properties:* 78-93-3 butan-2-one: List II

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Description:

Mixture of biocatalysts with liquid propellant.

Substance name Concentration [% weight] Identification numbers Classification and labelling

Naphtha (petroleum), hydrotreated light* 25 - <50% CAS: 64742-49-0 EC number: 931-254-9 Reg. no: 01-2119484651-34 Flam. Liq. 2, H225, Asp. Tox. 1, H304, Aquatic Chronic 2, H411, Skin Irrit. 2, H315, STOT SE 3, H336.

Dimethyl ether 10 - < 25% CAS: 115-10-6 EINECS: 204-065-8 Reg. no.: 01-2119472128-37 Flam. Gas 1A, H220; Press. Gas (Liq.), H280.*

Butane (1,3 Butadiene <0,1%) 2.5 - < 10% CAS: 106-97-8 EINECS: 203-448-7 Reg. no.: 01-2119474691-32 Flam. Gas 1, H220; Press. Gas (Comp.), H280.*



Propane 2.5 - < 10% CAS: 74-98-6 EINECS: 200-827-9 Reg. no.: 01-2119486944-21 Flam. Gas 1A, H220; Press. Gas (Comp.), H280.*

Butan-2-one 2.5 - < 10% CAS: 78-93-3 EINECS: 201-159-0 Reg. no.: 01-2119457290-43 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066.*

Isobutane * 0.1 < 1% CAS: 75-28-5 EINECS: 200-857-2 Reg. no: 01-2119485395-27 Flam. Gas 1A, H220, Press. Gas (Comp.), H280.

Full text of hazard statements provided in section 16 of the Sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information: See section 11 of the Material Safety Data Sheet.

After inhalation: In case of loss of consciousness place and transport in stable recovery position. After contact with skin: Immediately wash with water and soap and rinse thoroughly. After contact with eyes: Rinse opened eye for several minutes under running water. After swallowing: Do not induce vomiting and call a doctor.

4.2. Most important symptoms both acute and delayed

No further relevant data available.

4.3. Indications of any immediate medical attention and special treatment needed No further relevant data available.

No further relevant data available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents: Water mist. Extinguishing powder. Carbon dioxide. Foam resistant to alcohol. Extinguishing media unsuitable due to safety considerations: Full jet of water.

5.2. Special hazards arising from the substance or mixture

No further relevant data available.

5.3. Advice for firefighters

Special protective equipment: Wear respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

Wear protective clothing. Move unprotected persons to a safe place.

6.2. Environmental precautions

Prevent from reaching sewage system or water courses. In the event of leakage into water course or sewage system inform competent authorities. Do not allow entering sewage system /surface water /ground water.

6.3. Methods and materials for containment and cleaning up

Ensure adequate ventilation. Do not wash with water or water based cleaning agents.

6.4. Reference to other sections

Information on safe handling: see section 7. Information on personal protective measures: see section 8. Information on disposal: see section 13.



SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Ensure good ventilation / exhaustion at the workplace. *

Information about fire and explosion protection:

Do not spray towards flames or over glowing material. Keep ignition sources away - do not smoke. Take precautionary measures against static discharges. Warning: Pressurized container. Protect from sunlight and temperatures over 50°C.

Do not open violently or burn even after use.

7.2. Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Keep cool. Observe regulations concerning the storage of pressurized gas tanks.

Information about common storage: Observe regulations concerning the storage of pressurized gas tanks.

Further information about storage conditions*: Store in well-sealed barrels in a cool and dry place. Protect against heat and direct sunlight.

7.3. Special end use (s)

No further relevant data available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

Components with limit values that require monitoring depending on the workplace:

115-10-6	dimethyl ether	MPC: 1000 mg/m ³		
106-97-8	butane (1,3 Butadiene <0,1%)	MPIC: 3000 mg/m ³	MPC: 1900 mg/m ³	
74-98-6	propane	MPC: 1800 mg/m ³		
78-93-3	butan-2-one	MPIC: 900 mg/m ³	MPC: 450 mg/m ³	skin*
75-28-5	isobutane*	TLV MPC: 1900 mg/m ³	800 ppm	
		Additional information in section	1 3 of this sheet.	

2-one	
DNEL Long term-systemic	31 mg/kg bw/day (Consumer)
DNEL Long term-systemic	412 mg/kg bw/day (Consumer)
	1161 mg/kg bw/day (Worker)
DNEL Long term-systemic	106 mg/m ³ (Consumer)
	600 mg/m ³ (Worker)
	DNEL Long term-systemic DNEL Long term-systemic

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

8.2. Exposure control

DNEL values

Technical control measures*: No further data, see section 7.

Personal protective measures:

General measures of protection and hygiene:

Keep away from foodstuffs, beverages and feed. Immediately take off all soaked and contaminated clothing. Wash hands before each break and at the end of work. Do not breathe gases/vapours/spray. Avoid contact with skin. Avoid contact with eyes and skin.

General ventilation. *

Respiratory protection*:

In case of insufficient ventilation use respiratory protection. Filter A2/P2.

Hands protection:

Use protective gloves to work with chemicals according to standard EN 374.



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Protective gloves. Gloves resistant to solvents. Selection of the glove material on consideration of the breakthrough times, rates of diffusion and degradation.

Penetration time of the glove material:

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 mixture consisting of several substances the resistance of the materials from which the gloves are made cannot be calculated in advance and should therefore be checked before use. Nitrile rubber.

Recommended thickness of the material: ≥ 0.5 mm

Penetration time of the glove material:

For continuous contact, it is recommended to use gloves with a tensile strength of not less than 240 minutes, with a penetration time of more than 480 minutes as priority. We recommend the same for short-term works or protection against splash. We understand that gloves that offer this level of protection may not be in stock. In this case, a shorter breakthrough time is acceptable, while maintaining the maintenance procedures and temporarily replacing the gloves.

The thickness of the glove is not a good measure of the glove's resistance to chemicals as it depends on the exact composition of the glove material.

Information about the penetration time of the substance should be obtained from the glove manufacturer and has to be observed.

Eye or face protection:



Protective glasses (EN-166). Tightly sealed protective glasses.

Body protection*:

Use protective clothing (EN-13034/6). It is recommended to use antistatic, chemical and oil-resistant clothing as well as safety shoes (EN1149; EN340 & EN ISO 13688; 13034-6). *

Environmental control*:

Use an appropriate container to prevent environmental contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information: Physical state: Colour: Odour: Odour threshold: pH:

Change of state: Melting /freezing point: Initial boiling point and boiling range: Flammability (solid, gas):

Explosion limits: Bottom: Top:

Flash point: Ignition temperature: Auto ignition point: Explosive properties:

Viscosity: Dynamic: Kinetic:

Solubility in/miscibility with: Water:

Aerosol* According to product name. * Characteristic * Not specified. * The mixture is non-polar / aprotic *

Not specified. -44.5°C Not applicable. *

1.1 Vol %* 18.6 Vol %

-97°C >200°C The product is not self-igniting. The product is not explosive, but may form explosive mixtures with the air

Not specified. ≤20.5 mm²/s, 40°C (L) *

Not miscible or difficult to mix.



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n-octanol/water partition coefficient:	Not specified.
Vapour pressure at 20 °C:	3000 hPa *
Density or relative density: Density at 20°C: Relative density Vapour density Evaporation rate	0.707 g/cm ³ * Not specified. Not specified. Not applicable.
Solvent content: Organic solvents:	83.1%.
Solids content:	16.8% *
Change of state: Evaporation rate:	Not applicable. *
9.2. Other information	
Information on the physical hazard classes: Explosives: Flammable gases: Aerosols:	none* none* Extremely flammable aerosol. Pressurized container. May burst if heated. *
Oxidizing gases: Pressurized gases: Flammable liquids: Flammable solids: Self-reactive substances and mixtures:	none* none* none* none* none* none*
Pyrophoric liquids: Pyrophoric solids: Self-heating substances and mixtures: Substances and mixtures which emit flammable gases in contact with water:	none* none* none* none*
Oxidizing liquids: Oxidizing solids: Organic peroxides: Substances corrosive to metals:	none* none* none* none *
Desensitised explosives:	none *

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No further relevant data available.

10.2. Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used as intended.

10.3. Possibility of hazardous reactions

Hazardous reactions unknown.

10.4. Conditions to be avoided

No further relevant data available.

10.5. Incompatible materials

No further relevant data available.

10.6. Hazardous decomposition products

Hazardous decomposition products unknown.

SEKCJA 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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

a) Acute toxicity

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



Relevant classified LD/LC50 values:

64742-49-	0 Naphtha (petroleum)	, hydrotreated light*
Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rabbit)
Inhalation	LC50(4h)	>10000 mg/l (rat)

78-93-3 buta	n-2-one	
Oral	LD50	> 2193 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
		5000 mg/kg (rabbit)

b) Skin corrosion/irritation

Causes skin irritation.

c) Serious eye damage/eye irritation

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

d) Allergic effect on airways or skin

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

e) Mutagenic effect on germ cells

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

f) Carcinogenicity

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

g) Harmful effect on reproduction

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

h) Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

i) Specific target organ toxicity – repeated exposure Based on available data, the classification criteria are not met.

j) Aspiration hazard

May be fatal if swallowed and enters airways.

k) Information on other hazards*:

Endocrine disrupting properties: 78-93-3 butan-2-one List II

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity: 64742- 49 -0 Naphtha (petroleum), hydrotreated light* LD50 >2 mg/l (fish)

78-93-3 butan-2-one LC50 / 96 h 2993 mg/l EC50 / 48 h 308 mg/l

(Pimephales promelas) (Daphnia magna)

12.2. Persistence and degradability Not easily biodegradable. *

12.3. Bioaccumulative potential No further relevant data available.

12.4. Mobility in soil

No further relevant data available*.

12.5. Results of PBT and vPvB assessment*

PBT: Not applicable. vPvB: Not applicable.

12.6. Other hazardous effects*

See section 11 for information on endocrine disrupting properties.



Other hazardous effects: Warning: Poisonous to fish.

Further ecological information (general information): Water hazard class 2 (Self-assessment): hazardous to water. Do not allow the product to reach ground water, surface water or sewage system. Dangerous to drinking water if even small guantities leak into the ground. Poisonous to fish and plankton in water reservoirs. Poisonous to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation: Must not be disposed together with household garbage. Prevent from reaching sewage system.

Contaminated packaging: Recommendation: Dispose of according to applicable regulations.

European waste catalogue*: 20 01 13* Solvents 15 01 04 Metallic packaging HP3 Flammable Irritating - causing skin irritation and eye damage. HP4 HP5 Specific Target Organ Toxicity (STOT) or aspiration hazard **HP14** Ecotoxic.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number ADR, ADN, IMDG, IATA

UN1950

MARINE POLLUTANT

AEROSOLS, flammable

UN1950 AEROSOLS, ENVIRONMENTALY HAZARDOUS

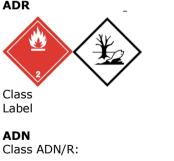
AEROSOLS (PENTANES, Hydrocarbons, C6, isoalkanes, <5% n-hexane) *

14.2. UN proper shipping name ADR, ADN IMDG

ΙΑΤΑ

14.3. Transport hazard class (-es)





2 5F gases 2.1

2 5F



Class Label 2.1



2.1 gases*



14.4. Packaging group ADR, IMDG, IATA

none

14.5. Environmental hazards

The product contains substances hazardous to the environment: pentane *

Marine pollutants: Yes. Symbol (fish and tree).

Special labelling (ADR): Symbol (fish and tree).

14.6. Special precautions for users

Warning: gases Kemler's code: EMS number: Stowage Code

Segregation Code

F-D,S-U SW1 Protected from sources of heat. SW2 Clear of living quarters. *

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 Convention and the IBC Code Not applicable. *

Transport/ further information:

ADR Excepted quantities (EQ)

Tunnel restriction code

IMDG

Limited quantities (LQ) Excepted quantities (EQ)

UN "Model Regulation":

Code: E0 Not permitted as Excepted Quantity D

1L Code: E0 Not permitted as Excepted Quantity UN 1950 AEROSOLS, 2.1, ENVIRONMENTALY HAZARDOUS

SECTION 15: REGULATORY INFORMATION

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

Directive 2012/18/EU Dangerous components- ANNEX I None of the components is listed

Seveso category P3a FLAMMABLE AEROSOLS E2 Hazardous to the aquatic environment

Qualifying quantity (tonnes) for the application of lower-tier requirements $150\ t$ Qualifying quantity (tonnes) for the application of upper-tier requirements $500\ t$

Regulation (EC) no 1907/2006 ANNEX XVII Restriction conditions: 3

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment– ANNEX II None of the components are listed. *

Regulation (EU) 2019/1148 Annex II - Explosives precursors subject to restrictions (Upper Limit Value for the purposes of issuing permits pursuant to art. 5 sec. 3) None of the components are listed. *

Annex II - Explosives precursors subject to notification None of the components are listed. *

Regulation (EC) No 273/2004 on drug precursors 78-93-3 butan-2-one*

Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors 78-93-3 butan-2-one *



National regulations:

Employment Limitation Tips *: Class 75

Share in % 75-<100

VOC-CH VOC-EU Danish MAL Code 5-3 83.20 % * 587.2 g/l *

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge; however it does not definitively define the production characteristics and cannot be used as a justification for valid contracts.

Full text of hazard statements mentioned in section 2 - 15 of the Sheet:

H220	Extremely flammable gas.
H225	Flammable liquid and vapour.
H280	Contains gas under pressure: may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long-lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking. *

Classification according to the regulation (EC) no 1272/2008.

PHYSICAL AND CHEMICAL PROPERTIES: The classification is based on the results of the mixtures tested. *

Health hazard. Environmental hazards: method of classification of mixtures on the basis of mixture components (sum formula). *

Explanation of abbreviations and acronyms:

ADR	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
IMDG	International Maritime Code for Dangerous Goods.
IATA	International Air Transport Association.
GHS	Globally Harmonised System of Classification and Labelling of Chemicals.
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
CAS	Chemical Abstracts Service (division of the American Chemical Society).
MAL-Code	Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards,
	Denmark).
DNEL	Derived No-Effect Level (REACH).
LC50	Lethal concentration, 50 percent.
LD50	Lethal dose, 50 percent.
PBT	Persistent, Bioaccumulative and Toxic.
vPvB	very Persistent and very Bioaccumulative.
Flam. Gas 1	Flammable gases – Category 1.
Aerosol 1	Aerosols – Category 1.
Press. Gas (Comp.)	Gases under pressure - Compressed gas. *
Press. Gas (Liq.)	Gases under pressure - Liquefied gas. *
Flam. Liq. 2	Flammable liquids – Category 2.
Skin Irrit. 2	Skin corrosion/irritation – Category 2.
Eye Irrit. 2	Serious eye damage/eye irritation – Category 2.
STOT SE 3	Specific target organ toxicity (single exposure) – Category 3.
Asp. Tox. 1	Aspiration hazard, Category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment - long-term hazard to the aquatic environment – Category 2.

Changes in the sheet marked with the * symbol:

Sections 1.1, 2.2, 2.3, 3.2, 7.1, 7.2, 8.1, 8.2, 9.1, 9.2, 11.1, 12.1, 12.2, 12.4, 12.5, 12.6, 13.1, 14.3, 14.5, 14.6, 14.7, 15.1, 16. General update.

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