SECTION 1. MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification:

HEADLIGHT RESTORATION FOAM IN SPRAY

UFI: FVR2-305U-C007-AKG1

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

Surface cleaning.

1.3 Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

Tel.: +48 34 329 45 03 Fax: +48 34 320 12 16 UI. Łódzka 3 42-240 Rudniki, PL

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 EC Regulation 1272/2008 of 16 December 2008 on classification, labelling and packaging (CLP).



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS07

Skin Sens. 2 H317 May cause an allergic skin reaction.

2.2. Label elements

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

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

Hazard pictograms:





GHS02 Signal word: Danger.

GHS07

Components indicating hazard for labelling:

Methylisothiazolinone.

1,2-benzisothiazol-3(2H)-one.

Hazard statements:

Extremely flammable aerosol. Pressurised container: May burst if heated. H222-H229

H317 May cause an allergic skin reaction.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

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. P251 Pressurized container - Do not pierce or burn, even after use.

Do not breathe mist/vapours/spray. P260

P271 Use only outdoors or in a well-ventilated area. Wear protective gloves / eye protection. P280

P302+P352 IF ON SKIN: Wash skin with plenty of water and soap.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P410+P412 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Formation of explosive mixtures is possible in case of insufficient ventilation.



2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable. vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Mixture of biocatalysts with liquid propellant.

Hazardous components	Classification	H phrases	% weight
Butane (1,3 Butadiene <0,1%)	CAS: 106-97-8 EINECS: 203-448-7 Reg. no: 01-2119474691-32,	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	2.5-<10
propane	CAS: 74-98-6 EINECS: 200-827-9 Reg. no: 01-2119486944-21,	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	2.5-<10
Isobutane	CAS: 75-28-5 EINECS: 200-857-2 Reg. no: 01-2119485395-27,	Flam. Gas 1A, H220; Press. Gas (Comp.), H280.	0.1-<1
Propylene glycol Substance with the Community workplace exposure limit	CAS: 57-55-6 EINECS: 200-338-0 Reg. no: 01-2119456809-23,		0.1-<1
1,2-benzisothiazol-3(2H)-one	CAS: 2634-33-5 EINECS: 220-120-9	Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412 Specific concentration limit: Skin Sens. 1; H317: C ≥ 0.05 %	<0.05
Methylisothiazolinone.	CAS: 2682-20-4 EINECS: 220-239-6	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 2, H411; Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0,0015 %	≥ 0.0015-<0.025

Directive (EC) No. 648/2004 on detergents / Content labelling:

Aliphatic hydrocarbons ≥15 - <30%

Fragrances, preservatives (METHYLISOTHIAZOLINONE) <5%

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints. **After skin contact:** Generally the product does not irritate the skin.

After eye contact: Rinse opéned eye for several minutes under running water. **After swallowing**: Do not induce vomiting; call for medical help immediately.

4.2. Most important symptoms both acute and delayed

No further relevant information available.

4.3. Indications 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: Water mist, extinguishing powder, carbon dioxide, foam resistant to alcohol. Unsuitable extinguishing media: full jet of water.

5.2. Special hazards arising from the substance or mixture

No further relevant data available.

5.3. Advice for fire fighters

Special protective equipment: Wear respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

Wear protective clothing. Keep unprotected persons away.

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

Provide good ventilation / exhaustion in the workplace.

Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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 pressurised containers.

Information about storage in one common storage facility:

Observe official regulations on storing pressurised containers.

Further information about storage conditions:

Store in cool, dry conditions in well-sealed receptacles.

Protect from heat and direct sunlight.

7.3. Special end uses

No further relevant data available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

Recommendations regarding technical measures:

Provide good ventilation in the workplace.

8.1. Control parameters

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

106-97-8 butane (1,3 Butadiene <0,1%)

NDSCh: 3000 mg/m³ NDS

MPC: 1900 mg/m3

74-98-6 Propane

MPC: 1800 mg/m³ MPC

75-28-5 Isobutane

MPC: 1900 mg/m³, 800 ppm

Additioneel ingevuld obv klant voor Hfdst 3 SDS

57-55-6 Propylene glycol

MPC MPC: 100 mg/m³ vapours and inhalable fraction

Additional information:

The currently valid lists were used as basis.

8.2. Exposure control

Technical control measures

No further data; see section 7.

Individual protection measures, such as personal protective equipment:

General measures of protection and hygiene:

Keep away from foodstuffs, beverages and feed.

Wash hands before each break and at the end of work.

General ventilation.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation. Filter ABEK/P2.

Hands protection:

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





Solvent resistant gloves.
Selection of the glove material on consideration of the breakthrough times, rates of diffusion and 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 cannot be calculated in advance and has therefore to be checked prior to application. Nitrile rubber.

Recommended thickness of the material: ≥ 0.5 mm.

Penetration time of the glove material:

For continuous contact we recommend gloves with breakthrough time of at least 240 min. with the preference given to a breakthrough time greater than 480 min. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available. In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection:

Safety glasses

Tightly sealed goggles.

Body protection:

Use protective suit (EN-13034/6)

Full skin covering antistatic, chemical and oil resistant clothing and safety shoes (EN1149; EN340&EN ISO 13688; EN13034-6) are recommended.

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 Aerosol Colour: White Odour: ester

Odour threshold: Not determined. Melting point/freezing point: Undetermined.

Boiling point or initial boiling point and boiling range: -44.5°C Not applicable. Flammability:

Bottom and top explosion limit:

Bottom: 1.5 vol. % 10.9 vol. % Top: Flash point: -97°C 365°C Ignition temperature: Not determined.

Breakdown point: pH: 92

Viscosity:

Kinematic viscosity: Not determined.

7.500 - 10.500 Brookfield sp3 6 rpm 4.000 - 6000 Brookfield sp3 12 rpm Dynamic:

Solubility:

Water: Not miscible or difficult to mix.

n-octanol/water partition coefficient (log

value): Not determined. Vapour pressure: Not determined. Density and/or relative density:

Density at 20°C: 1.942 g/cm3 Relative density: Not determined. Vapour density: Not determined.

9.2. Other information

Appearance:

Form: Aerosol

Important information on protection of health and environment, and on safety: Auto ignition point: Product is not self-igniting.

Product is not explosive. However, formation of explosive air/vapour mixtures are Explosive properties:

possible.

Solvent content:

Organic solvents: < 29.3 % Water: 46.6%.

HEADLIGHT RESTORATION FOAM IN SPRAY

Solids content: 10.0 %

Change of state:

Evaporation rate: Not applicable.

Information on the physical hazard classes:

Explosives none Flammable gases none

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

Oxidizing gases: None. Gases under pressure: None. Flammable liquids: None. Flammable solids: None. Self-reactive substances and mixtures: None Pyrophoric liquids: None. Pyrophoric solids: None. Self-heating substances and mixtures: none

Substances and mixtures, which emit flammable

gases in contact with water: None. Oxidizing liquids: None. Oxidizing solids: None. Organic peroxides: None. Substances corrosive to metals: 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.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity:

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

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Allergic effect on airways or skin: May cause an allergic skin reaction.

Mutagenic effect on germ cells: Based on available data, the classification criteria are not met.

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

Harmful effect on reproduction: Based on available data, the classification criteria are not met.

STOT- single exposure: Based on available data, the classification criteria are not met. STOT- repeated exposure: Based on available data, the classification criteria are not met.

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

11.2. Information on other hazards

Endocrine disrupting properties:

556-67-2 octamethylcyclotetrasiloxane List II; III

541-02-6 Decamethylcyclopentasiloxaan List II

540-97-6 Dodecamethyl cyclohexasiloxane List II

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:

No further relevant data available.



12.2. Persistence and degradability

It is 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. Endocrine disrupting properties

See section 11 for information on endocrine disrupting properties.

12.7. Other hazardous effects

Further ecological information:

General information:

Water hazard class 1 (in Self-assessment): slightly hazardous to water.

Do not allow undiluted product or large quantities of the product to enter groundwater, surface water 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:

HP3 Flammable

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number:

ADR, ADN, IMDG, IATA UN1950

14.2. Proper shipping name

ADR, ADN UN1950 AEROSOLS

IMDG AEROSOLS

IATA AEROSOLS, flammable

14.3. Class/ Classification code

ADR:

Class: 2 5F Gases **Label** 2.1



ADN

Class ADN/R: 2 5F

IMDG:

Class 2.1 gases

Label 2.1



IATA:

Class 2.1 gases





14.4. Packaging group

None.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for users

Warning: gases.

Hazard identification number (Kemler code):

EMS Number:

F-D,S-U

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above

1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from"

Segregation Code: SG69 For AEROSOLS with a m 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. Sea transport in bulk in accordance with IMO instruments

Not applicable.

Transport/Additional information:

ADR

Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

Tunnel restriction code

Limited quantities (LQ) 1L

Excepted quantities (ÉQ)

Code: E0

Not permitted as Excepted Quantity

UN "Model Regulation": UN 1950 AEROSOLS, 2.1,

D

SECTION 15: REGULATORY INFORMATION

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

Directive 2012/18/EU:

Indicated dangerous components- ANNEX I None of the components are listed.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the components are listed.

Seveso category

P3a FLAMMABLE AEROSOLS

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

REGULÁTION (EC) No 1907/2006 ANNEX XVII Restriction conditions: 3

DIRECTIVE 2011/65/EU 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 I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the components are listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the components are listed.

Regulation (EC) No 273/2004 on drug precursors

None of the components are 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 components are listed.

National regulations: Breakdown regulations:

Class share % Wasser 25-<50 NK 25-<50

VOC-CH 10,31 % VOC-EU < 276,4 g/l Danish MAL Code 3-1

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.

Relative phrases:

Extremely flammable gas. H220

H280 Contains gas under pressure: may explode if heated.

H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Harmful in contact with skin.

H314 Causes serious skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eve damage.

Fatal if inhaled. H330

H400 Very toxic to aquatic life.

Toxic to aquatic life with long-lasting effects. H411 Harmful to aquatic life with long-lasting effects. H412

Causes respiratory corrosion. EUH071

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

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.

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. H280

H304

H312 Harmful in contact with skin. H315 Causes skin irritation.

H319 Causes eye irritation. H332 Harmful if inhaled.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure. H373

Very toxic to aquatic life. H400

Very toxic to aquatic life with long-lasting effects. H410 Toxic to aquatic life with long-lasting effects. H411

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 hazards, Environmental hazards: The method of classification of mixtures based on the constituents of the mixture (sum formula).

Explanation of abbreviations and acronyms:

ADR: Accord relatif au transport international 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 labelling concerning inhalation hazards, Denmark

PBT: Persistent, Bioaccumulative and Toxic

very Persistent and very Bioaccumulative

Flam. Gas 1A: Flammable Gases - Category 1A

Aerosol 1: Aerosols - Category 1

Press. Gas (Comp.): Gases under pressure - Compressed gas

Acute Tox. 3: Acute toxicity - Category 3 Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 2: Acute toxicity - Category 2

Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitization - Category 1

Skin Sens. 1A: Skin sensitization - Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute hazard to the aquatic environment - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term hazard to the aquatic environment - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term hazard to the aquatic environment - Category 3

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