

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 11.08.2017

Version number 10

Revision: 11.08.2017

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

- **1.1 Product identifier**
- Trade name: **HERP-LT-MWIR-BK-11 400 ML**
- Article number: ZCU001
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- Sector of Use
 - SU21 Consumer uses: Private households / general public / consumers
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Product category PC9a Coatings and paints, thinners, paint removers
- Process category
 - PROC7 Industrial spraying
 - PROC11 Non industrial spraying
- Environmental release category
 - ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
 - ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
- Application of the substance / the mixture Spray varnish
- **1.3 Details of the supplier of the safety data sheet**
- Manufacturer/Supplier:
 - Západočeská univerzita v Plzni
 - Univerzitní 8
 - 306 14 Plzeň, CZ
 - Tel: +420 377 634 719
 - Fax: +420 377 634 702
 - Identifikační číslo: 497 77 513
 - e-mail: info@labir.cz
- Further information obtainable from: Department Product Safety
- **1.4 Emergency telephone number:** Tel: +420 224 919 293 (+420 224 915 402)

SECTION 2: Hazards identification

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



GHS02 flame

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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **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

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Trade name: LABIR® PAINT RAL 9005 MATT DEEP BLACK HERP-LT-MWIR-BK-11 400 ML

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· **Signal word** Danger· **Hazard-determining components of labelling:**

acetone
n-butyl acetate
butan-1-ol
propan-2-ol

· **Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P102 Keep out of reach of children.
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 spray.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local regulations.

· **Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49-xxxx	acetone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether Flam. Gas 1, H220 Press. Gas C, H280	20-25%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29-xxxx	n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336	12.5-20%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	5-10%

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CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32-xxxx	butane ----- Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27-xxxx	isobutane ----- Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6 Reg.nr.: 01-2119484630-38-xxxx	butan-1-ol ----- Flam. Liq. 3, H226 Eye Dam. 1, H318 Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335-H336	1-2.5%
CAS: 9004-70-0	nitrocellulose solutions, with not more than 12.6% nitrogen, by dry mass, and not more than 55% nitrocellulose ----- Flam. Sol. 1, H228	1-2.5%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ----- Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	1-2.5%

· **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**
- **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 opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep away from ignition sources.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.

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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.
- **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 packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:**67-64-1 acetone**

WEL Short-term value: 3620 mg/m³, 1500 ppm
Long-term value: 1210 mg/m³, 500 ppm

115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm
Long-term value: 766 mg/m³, 400 ppm

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm
Long-term value: 724 mg/m³, 150 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

106-97-8 butane

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

71-36-3 butan-1-ol

WEL Short-term value: 154 mg/m³, 50 ppm
Sk

67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

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

· **8.2 Exposure controls**

· **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.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**

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.

· **Material of gloves** Not required.

· **Penetration time of glove material** Not required.

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: Black

· **Odour:** Solvent-like

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Not applicable, as aerosol.

· **Flash point:** <0 °C (<32 °F)
Not applicable, as aerosol.

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 240 °C (464 °F)

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

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

· **Explosion limits:**

Lower: 1.2 Vol %

Upper: 26.2 Vol %

· **Vapour pressure at 20 °C (68 °F):** 4000 hPa (3000 mm Hg)

· **Density at 20 °C (68 °F):** 0.741 g/cm³ (6.184 lbs/gal)

· **Relative density** Not determined.

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· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	91.4 %
· EU-VOC:	678.8 g/l
· EU-VOC in %:	91.43 %
· Water:	0.3 %
· Solids content:	8.2 %
· 9.2 Other information	No further relevant information available.

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: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50 / 4 h	39 mg/m ³ (rat)

115-10-6 dimethyl ether

Inhalative	LC50 / 4h	309 mg/l (rat)
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123-86-4 n-butyl acetate

Oral	LD50	10770 mg/kg (rat)
Dermal	LD50	>17600 mg/kg (rabbit)
Inhalative	LC50 / 4 h	>21.0 mg/m ³ (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8532 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50 / 4 h	35.7 mg/m ³ (rat)

106-97-8 butane

Inhalative	LC50 / 4 h	658000 mg/m ³ (rat)
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71-36-3 butan-1-ol

Oral	LD50	2292 mg/kg (rat)
Dermal	LD50	3430 mg/kg (rabbit)
Inhalative	LC50 / 4 h	17.76 mg/m3 (rat)

67-63-0 propan-2-ol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50 / 4 h	30 mg/m3 (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **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.

SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:****67-64-1 acetone**

EC50 / 48 h	8800 mg/l (daphnia magna)
LC50 / 48 h	2262 mg/l (daphnia magna)
LC50 / 96 h (static)	5540 mg/l (fish)

123-86-4 n-butyl acetate

EC50 / 48 h	44 mg/l (daphnia magna)
EC50 / 96 h	320 mg/l (algae)
LC50 / 24 h	205 mg/l (daphnia magna)
LC50 / 96 h	18 mg/l (Pimephales promelas)

108-65-6 2-methoxy-1-methylethyl acetate

EC50	408 mg/l (daphnia magna)
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71-36-3 butan-1-ol

EC50 / 48 h	1328 mg/l (daphnia magna)
EC50 / 72 h	8500 mg/l (algae)
LC50 / 96 h	1376 mg/l (Pimephales promelas)

67-63-0 propan-2-ol

EC50 / 48 h	13299 mg/l (daphnia magna)
LC50 / 96 h (dynamic)	4200 mg/l (fish)

- **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.

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- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
15 01 04	metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Non contaminated packagings may be recycled.

SECTION 14: Transport information

- | | |
|---|---------------------|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1950 |
| · 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 |
| · 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. |
| · Danger code (Kemler): | - |

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· 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.
· Segregation Code	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 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· 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.
- **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
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.

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

- **Department issuing SDS:** R&D legislation and regulatory advisor

- **Contact:** QHSE Department

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

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 C: Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Sol. 1: Flammable solids – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- *** Data compared to the previous version altered.**