

SAFETY DATA SHEET



according to Commission Regulation (EU) 2020/878 as amended

HARTOL H-40 Liquid Key 500 ml

Creation date 23rd September 2024
Revision date Version 1

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

- 1.1. Product identifier**
Substance / mixture HARTOL H-40 Liquid Key 500 ml
UFI mixture
W1MW-R032-E00W-J176
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
A multi-purpose derusting preparation in aerosol.
Main intended use
PC-TEC-11 Lubricants, greases, release agents
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Distributor
Name or trade name HARTOL
Address Verkhniy Val St, 30, Kijow, 04071
Ukraine
Phone +38 044 33 44 556
E-mail info@hartol.us
Competent person responsible for the safety data sheet
Name HARTOL
E-mail info@hartol.us
- 1.4. Emergency telephone number**
112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Aerosol 1, H222, H229

Most serious adverse physico-chemical effects

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

- 2.2. Label elements**

Hazard pictogram



Signal word

Danger

Hazardous substances

butane
propane

Hazard statements

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

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.

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P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501 Dispose of container according to applicable regulations.

Supplemental information

EUH208 Contains Sulfonic acids, petroleum, barium salts. May produce an allergic reaction.

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance that meets the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	butane	>20.8- <25.9	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	1, 2, 3
Index: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9	propane	>8.1-<11.1	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	2, 3
CAS: 61790-48-5 EC: 263-140-3	Sulfonic acids, petroleum, barium salts	>0.53- <0.83	Skin Sens. 1B, H317	

Notes

- Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
- Note U (Table 3): When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned:

Press. Gas (Comp.)
Press. Gas (Liq.)
Press. Gas (Ref. Liq.)
Press. Gas (Diss.)

Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

- A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

not available

If inhaled

Under normal circumstances there is no threat. Move exposed person to fresh air. If breathing is difficult, give oxygen if possible, or assisted ventilation. Obtain medical assistance if breathing remains difficult.

If on skin

Wipe the product (eg. with a paper towel) and wash with plenty of soap and water. Remove contaminated clothes. In case of skin irritation - seek medical advice. Wash contaminated clothing before reuse. When using high pressure equipment, penetration into the skin is possible. In this case, immediately provide medical care to the victim.

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If in eyes

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

If swallowed

Rinse mouth and give plenty of water to drink. Call a doctor immediately.

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

If inhaled

not available

If on skin

Prolonged contact may cause redness and irritation of the skin.

If in eyes

May cause redness and transient pain

If swallowed

not available

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

Do not give anything by mouth to an unconscious person. The physician should refer to the safety data sheet. Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry chemical powder, alcohol-resistant foam, carbon dioxide, water spray.

Unsuitable extinguishing media

Jet water. Water may be used to cool and protect exposed tanks.

5.2. Special hazards arising from the substance or mixture

Flammable. Decomposition products may contain the following materials: carbon oxides, sulphur dioxides, toxic and irritant fumes. Containers exposed to high temperatures may explode.

5.3. Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Use water spray to knock down fire fumes if possible. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. In industrial conditions (in production) apply protective clothing and gloves. Do not inhale fumes. Secure the sink basins. Avoid direct contact with the mixture. Do not drink, eat or smoke during use. Inform surroundings about accident. Remove from the danger area all persons not involved in the liquidation of consequences of the accident. If necessary, inform the competent authorities. Pair one of the components may be spread across the floor to a remote ignition sources. Vapors should be dispersed streams of water.

Refer to protective measures listed in Sections 8.

Note: The released product may cause a slip or fall.

6.2. Environmental precautions

Stop leak if without risk. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Small spill: Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container.

Large spill: Stop leak if without risk. Do not release runoff from fire to drains or watercourses. For large spills, use a pump. Do not use sparking tools. Absorb the residue with inert material (e.g. dry sand or earth) and place in a chemical waste container. Dispose of via a licensed waste disposal contractor.

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6.4. Reference to other sections

See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas, do not inhale the vapors. In the production to avoid contact with eyes and skin. Do not eat, drink or smoke during use. Eliminate sources of ignition. Wash hands during breaks and after work. Do not allow the spilled product, especially when large surfaces of the body. Immediately remove contaminated clothing and wash before reuse. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Store in well-ventilated area, at room temperature. Keep away from sources of ignition. Keep container tightly closed and properly labeled.

Keep away from strong oxidizers

Storage temperature

min 10 °C, max 40 °C

7.3. Specific end use(s)

Refer to the technical specifications of the product.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

Germany

TRGS 900

Substance name (component)	Type	Value
butane (CAS: 106-97-8)	8h	2400 mg/m ³
	8h	1000 ppm
	Short	9600 mg/m ³
	Short	4000 ppm
propane (CAS: 74-98-6)	8h	1800 mg/m ³
	8h	1000 ppm
	Short	7200 mg/m ³
	Short	4000 ppm

8.2. Exposure controls

Non-volatile product, do not require special ventilation. General ventilation should be sufficient to control worker exposure. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory. Wash contaminated clothing before reusing.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes or mists (EN 166).

Skin protection

Hand protection: oil-resistant gloves recommended to prevent skin made of NBR, PVC or neoprene rubber (EN 374). Breakthrough time : min. 480 min.

Body protection: recommended protective clothing / coat and oil resistant anti slip boots.

Respiratory protection

Under normal conditions protection is not required. In case of handling hot product and with inadequate ventilation use mask with universal filter (EN 143).

Thermal hazard

not available

Environmental exposure controls

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless, yellow
color intensity	light
Odour	characteristic for hydrocarbons
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	highly flammable
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-soluble (in water)
Kinematic viscosity	>20.5 mm ² /s at 40 °C
Solubility in water	insoluble
Solubility	soluble in most organic solvents
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	3.5-4.5
Density and/or relative density	
Density	0.8 g/cm ³ at 15 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	aerosol dispenser: spray aerosol

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is not reactive under normal conditions of use and storage.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions do not occur.

10.4. Conditions to avoid

High temperatures, open flames and other ignition sources.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, the product does not undergo hazardous decomposition.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

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Acute toxicity

Based on the available data, the criteria for classification of the mixture are not met. Data for the components of the mixture are not available.

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Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	ATE	787526 mg/kg				Calculation of value

Skin corrosion/irritation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Serious eye damage/irritation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Respiratory or skin sensitisation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Germ cell mutagenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - single exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - repeated exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

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12.2. Persistence and degradability

No data are available for either the mixture or the components.

12.3. Bioaccumulative potential

No data are available for either the mixture or the components.

12.4. Mobility in soil

No data are available for either the mixture or the components.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not dispose the product with household waste, do not empty into drains. Do not allow contamination of groundwater and surface water.

Contaminated packaging (after a thorough emptying) should be treated as household waste

Packaging: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste management legislation

Decision 2000/532/EC establishing a list of wastes, as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.

Law on the placing on the market, return and high-quality recycling of packaging (Packaging Act - VerpackG) of June 9th, 2021, valid from January 1st, 2022.

Ordinance on the European List of Waste (German Waste Catalogue Ordinance -Verordnung über das Europäische Abfallverzeichnis - AVV).

Waste type code

16 03 06 organic wastes other than those mentioned in 16 03 05

Packaging waste type code

15 01 04 metallic packaging

SECTION 14: Transport information

14.1. UN number or ID number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not available

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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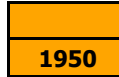
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Additional information

Hazard identification No.



UN number

5F

Classification code

2.1

Safety signs

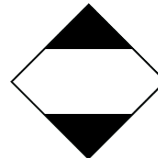


Road transport - ADR

Limited quantities

1 L

Sign



Tunnel restriction code

(D)

SECTION 15: Regulatory information

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

- Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures (CLP)
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Regulation of the Minister of Entrepreneurship and Technology of 10 May 2019 repealing the regulation on the essential requirements for personal protective equipment (Journal of Laws of 2016, item 966)
- Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286)
- Regulation of the Minister of Climate of January 2, 2020 on the catalog of waste (Journal of Laws 2020, item 10)
- Regulation of the Minister of Health of 2 February 2011 on testing and measurement of factors harmful to health in the working environment (Journal of Laws 2011.33.166)
- Regulation of the Minister of Health of 30 December 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal of Laws 2005 No. 11 item 86)
- Act of 14 December 2012 on waste (Journal of Laws 2013 item 21)
- Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws of 2013, item 888)
- Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws 2011 No. 63 item 322) as amended.
- COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Commission Regulation (EU) 2017/2100 of September 4, 2017. laying down scientific criteria for the determination of endocrine-disrupting properties pursuant to Regulation (EU) No 528/2012 of the European Parliament and of the Council
- Commission Regulation (EU) 2018/605 of April 19, 2018. amending Annex II to Regulation (EC) No 1107/2009 by establishing scientific criteria for the determination of endocrine-disrupting properties.

15.2. Chemical safety assessment

A chemical safety assessment is not required.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

EUH208 Contains Sulfonic acids, petroleum, barium salts. May produce an allergic reaction.
H220 Extremely flammable gas.

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H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H317	May cause an allergic skin reaction.

Guidelines for safe handling used in the safety data sheet

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.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501	Dispose of container to according to applicable regulations.

Other important information about human health protection

not available

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
Aerosol	Aerosol
AGW	Occupational Exposure Limits
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
Flam. Gas	Flammable gas
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
log Kow	Octanol-water partition coefficient
MAK	Maximum workplace concentration
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
ppm	Parts per million
Press. Gas	Gases under pressure
Press. Gas (Comp.)	Gas under pressure: compressed gas
Press. Gas (Diss.)	Gas under pressure: dissolved gas
Press. Gas (Liq.)	Gas under pressure: liquefied gas
Press. Gas (Ref. Liq.)	Gas under pressure: refrigerated liquefied gas
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
Skin Sens.	Skin sensitization
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations

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UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very persistent and very bioaccumulative

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.