

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 30 Jul 2024

Print date: 31 Jul 2024

Version: 1



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Dampf- und Reinigungsdestillat Märklin / Trix / LGB

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

1.1. Product identifier

Trade name/designation:

Dampf- und Reinigungsdestillat Märklin / Trix / LGB

Other means of identification:

Detergens

Article No.:

02422, 02423, 414042

CAS No.:

246538-78-3

EC No.:

920-901-0

Additional information:

Product shape: substance

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

Use of the substance/mixture:

Vapour-and Cleaning agent

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Gebr. Märklin & Cie GmbH

Stuttgarter Str. 55-57

73033 Göppingen

Germany

Telephone: +49 7161 608 222

E-mail: service@maerklin.de

Website: www.maerklin.de

1.4. Emergency telephone number

Giftnotruf München, 24h: +49 89 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard (<i>Asp. Tox. 1</i>)	H304: May be fatal if swallowed and enters airways.	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS08

Health hazard

Signal word: Danger

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Hazard components for labelling:

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

Hazard statements for health hazards

H304 May be fatal if swallowed and enters airways.

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P102 Keep out of reach of children.

Precautionary statements Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Precautionary statements Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

Precautionary statements Storage

P405 Store locked up.

Precautionary statements Disposal

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Special rules for supplemental label elements for certain mixtures:

Tactile warning according to EN/ISO 11683.Child-resistant fastenings (EN/862/ISO 8317).

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 246538-78-3 EC No.: 920-901-0	Hydrocarbons, C11-C13, isoalkanes, <2% aromatics Asp. Tox. 1 (H304) Danger Acute Toxicity Estimate ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,200 - 2,500 mg/kg ATE (inhalation, vapour) 4,951 mg/L ATE (inhalation, dust/mist) 5,266 mg/L	100 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air.IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious but breathing normally, place in recovery position and seek medical advice.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing.

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After eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion:

Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Get immediate medical advice/attention.

Self-protection of the first aider:

Use personal protection equipment.

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

Pneumonia Pulmonary oedema

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

Treat symptomatically. Subsequent observance for pneumonia and lung oedema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Dry extinguishing powder, Foam, Water mist, Carbon dioxide (CO₂)

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

incendiary, In use, may form flammable/explosive vapour-air mixture.

Hazardous combustion products:

In case of fire: Gases/vapours, toxic Carbon monoxide, Carbon dioxide (CO₂),

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety. Provide adequate ventilation.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

Emergency procedures:

Remove all sources of ignition.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Suitable material for diluting or neutralizing:

Other information:

Take up mechanically, placing in appropriate containers for disposal.

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6.4. Reference to other sections

Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8).Vapours are heavier than air, spread along floors and form explosive mixtures with air.Avoid contact with skin, eyes and clothes.Avoid breathing vapours.

Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Requirements for storage rooms and vessels:

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight.

Storage class (TRGS 510, Germany): 10 – Combustible liquids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	Hydrocarbons, TRGS 900	① 300 mg/m³ ⑤ Mass fraction (wt %): 100

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material:NBR (Nitrile rubber) Breakthrough time:>480 min. Thickness of the glove material 0,4mm In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

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Respiratory protection:

Protection type: EN 14387 Filter type:A

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: colourless

Odour: faint

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	No data available		
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	188 – 210 °C		② Pre-supplier/manufacturer
Flash point	68 °C		② Pre-supplier/manufacturer
Evaporation rate	No data available		
Auto-ignition temperature	222 °C		② Pre-supplier/manufacturer
Upper/lower flammability or explosive limits	0.6 – 6.8 Vol-%		② Pre-supplier/manufacturer
Vapour pressure	0.4 hPa	20 °C	② Pre-supplier/manufacturer
Vapour density	5.7	20 °C	② Pre-supplier/manufacturer
Density	0.76 g/cm³	15 °C	② Pre-supplier/manufacturer
Bulk density	not applicable		
Water solubility	No data available		
Dynamic viscosity	No data available		
Kinematic viscosity	1.3 mm²/s	40 °C	② Pre-supplier/manufacturer

9.2. Other information

No further relevant information available.

9.2.1. Information with regard to physical hazard classes

Additional information:

No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidizing agent

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

10.5. Incompatible materials

Oxidizing agent

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10.6. Hazardous decomposition products

No known hazardous decomposition products. Thermal decomposition: Formation of: Carbon dioxide (CO₂)/CO

SECTION 11: Toxicological information

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

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS No.: 246538-78-3 EC No.: 920-901-0

LD₅₀ oral: >5,000 mg/kg (rat) OECD Guideline 401 (Acute Oral Toxicity)

LD₅₀ dermal: >2,200 - 2,500 mg/kg (rabbit)

LC₅₀ Acute inhalation toxicity (vapour): 4,951 mg/L (rat)

LC₅₀ Acute inhalation toxicity (dust/mist): 5,266 mg/L (rat)

Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation 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/irritation:

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

Respiratory or skin sensitisation:

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

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:

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

STOT-repeated exposure:

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard:

May be fatal if swallowed and enters airways.

Additional information:

No data available

11.2. Information on other hazards

Endocrine disrupting properties:

No further relevant information available.

SECTION 12: Ecological information

12.1. Toxicity

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS No.: 246538-78-3 EC No.: 920-901-0

LC₅₀: 1,000 mg/L (Fisch)

LC₅₀: 1,000 mg/L (Algen)

LC₅₀: 1,000 mg/L (Wasserfloh)

12.2. Persistence and degradability

No data available

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12.3. Bioaccumulative potential

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS No.: 246538-78-3 EC No.: 920-901-0

Log K_{OW}: ≤ 7.22

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS No.: 246538-78-3 EC No.: 920-901-0

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Endocrine disrupting properties

This substance identified as having endocrine disrupting properties according to Regulation (EU) 2018/605.

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

20 01 13 * Solvents

*: Evidence for disposal must be provided.

Waste code packaging

15 01 10 * packaging containing residues of or contaminated by dangerous substances

*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

No data available

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SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Observe employment restrictions according to the Act on the Protection of Mothers at Work, in Training and in Studies (Maternity Protection Act - MuSchG).

Contains no REACH Annex XIV substances. Contains no substance on the REACH candidate list.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 100 weight-%

15.1.2. National regulations

[DE] National regulations

Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Ziffer 1:

Grenzwerte für organische Stoffe nach 5.2.5 beachten.

Water hazard class

WGK:

1 - slightly hazardous to water

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DIN	German Institute for Standardization / German Industrial Standard
DNEL	derived no-effect level
EN	European Standard
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Standards Organisation
KG	body weight
LC ₅₀	Lethal (fatal) Concentration 50%
LD ₅₀	Lethal (fatal) Dose 50%
NFPA	National Fire Protection Association
OECD	Organisation for Economic Cooperation and Development
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

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16.3. Key literature references and sources for data

Substance name	Type	source of supply
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics CAS No.: 246538-78-3 EC No.: 920-901-0	Classification of the substance or mixture; LD ₅₀ oral; LD ₅₀ dermal	Source: European Chemicals Agency, http://echa.europa.eu/

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aspiration hazard (<i>Asp. Tox. 1</i>)	H304: May be fatal if swallowed and enters airways.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H304	May be fatal if swallowed and enters airways.

16.6. Training advice

No data available

16.7. Additional information

The information in sections 4 to 8 and 10 to 12 is partly not related to the use and proper and the proper use of the product (see instructions for use/technical /information), but to the release of larger quantities in case of accidents and irregularities. irregularities.