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

Printing date: 11.05.2023
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Version number 2.0 (replaces version 1.0)

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

1.1 Product identifier
Identification of the substance/preparation: Maschinenpfleger

UFI: 5D0E-EH2Y-Y30N-CKUH

1.2 Relevant identified uses of the substance or mixture and uses advised against
Application of the substance / the mixture Cleaning material/ Detergent
Uses advised against No further relevant information available.

1.3 Details of the supplier of the safety data sheet
Company/undertaking identification:
ORO-Produkte Marketing International GmbH
Im Hengstfeld 47
D-32657 Lemgo
phone +49 (0)5261 28893-0, fax +49 (0)5261 28893-48
Further information obtainable from:
Quality Assurance Department
E-mail: info@oro-marketing.de, www.oro-marketing.de

1.4 Emergency telephone number:
Tel. +49 (0)5261 28893-0 (during office hours, Mon-Fri 8 a.m. - 4 p.m.)

SECTION 2: Hazards identification

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


GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

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 GHS07
Signal word Warning
Hazard statements
H319 Causes serious eye irritation.
Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P280	Wear eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

Additional information:

Regulation (EC) No 648/2004 on detergents / Labelling for contents	
non-ionic surfactants	<5%

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

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Identification of the substance/preparation: frisch-aktiv Maschinenpfleger

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vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Cleansing agent

Dangerous components:		
CAS: 5949-29-1 EC number: 691-328-9 Reg.nr.: 01-2119457026-42	Citric acid Eye Irrit. 2, H319	≥5-<10%
CAS: 68439-51-0	Alcohols, C12-14, ethoxylated, propoxylated Aquatic Chronic 3, H412	≥2,5-<5%
CAS: 64-18-6 EINECS: 200-579-1 Reg.nr.: 01-2119491174-37	Formic acid Flam. Liq. 3, H226; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 10 % ≤ C < 90 % Skin Irrit. 2; H315: 2 % ≤ C < 10 % Eye Irrit. 2; H319: 2 % ≤ C < 10 %	≥1-<2%

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: If skin irritation continues, consult a doctor.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing:
Rinse out mouth and then drink plenty of water.
Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed Causes serious eye irritation.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
Danger of forming toxic pyrolysis products.
Carbon oxides (COx)

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Identification of the substance/preparation: frisch-aktiv Maschinenpfleger

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5.3 Advice for firefighters
Protective equipment:
Wear fully protective suit.
Wear self-contained respiratory protective device.
Additional information
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid contact with the eyes.

6.2 Environmental precautions:
Prevent from spreading (e.g. by damming-in or oil barriers).
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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
Observe information on the label and follow instructions for use.
See Section 8 for information on personal protection equipment.
Avoid contact with the eyes.
Information about fire - and explosion protection:
No special precautions are necessary if used correctly.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility:
Store away from foodstuffs.
Observe the notes from TRGS 510 regarding joint storage of hazardous substances.
Further information about storage conditions:
Protect from heat and direct sunlight.
Keep out of reach of children.
Storage class: 10-13

7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limit values:	
CAS: 64-18-6 Formic acid	
AGW (Germany)	Long-term value: 9,5 mg/m³, 5 ppm 2(I);DFG, EU, Y

DNELs		
CAS: 64-18-6 Formic acid		
Inhalative	Systemic effect, long-term exposure	3 mg/m³ (General population) 9,5 mg/m³ (Workers)
	Local effect, long-term exposure	3 mg/m³ (General population) 9,5 mg/m³ (Workers)

PNECs	
CAS: 5949-29-1 Citric acid	
Water	0,44 mg/l (Fresh water) 0,044 mg/l (Marine water)
Sewage treatment plant (STP)	1.000 mg/l (Microorganisms)
Sediment	34,6 mg/kg dw (Fresh water) 3,46 mg/kg dw (Marine water)
Soil	33,1 mg/kg soil dw (Soil)
CAS: 64-18-6 Formic acid	
Water	2 mg/l (Fresh water) 0,2 mg/l (Marine water)
Sewage treatment plant (STP)	7,2 mg/l (unspecified)
Sediment	13,4 mg/kg dw (Fresh water) 1,34 mg/kg dw (Marine water)
Soil	1,5 mg/kg soil dw (BOD)

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

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.
General protective and hygienic measures: Wash hands before breaks and at the end of work.
Respiratory protection: Filter A-P1
Hand protection
After use of gloves apply skin-cleaning agents and skin cosmetics.
Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.
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.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
Butyl rubber, BR
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 can not be calculated in advance and has therefore to

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be checked prior to the application.
Penetration time of glove material
Value for the permeation: Level 6
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the permanent contact gloves made of the following materials are suitable:
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0,5 mm
Value for the permeation: Level 6
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
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 can not be calculated in advance and has therefore to be checked prior to the application.
Eye/face protection Safety goggles according to EN 166 (i.e. goggles with side shields)
Body protection: Not required.
Environmental exposure controls Follow instructions for use, dosage and waste disposal.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Fluid
Colour:	Clear
Odour:	Recognisable
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20 °C	>2-3
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not relevant Not determined.
Density and/or relative density	
Density at 20 °C:	1,041 g/cm³
Relative density	Not determined.
Vapour density	Not relevant Not determined.

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9.2 Other information	
Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Water:	86,1 %
VOC (EC)	<2 % 1,88 %
Change in condition	
Evaporation rate	Not determined.

Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used and stored according to specifications.
Conditions to avoid: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid Protect from heat and direct sunlight.

10.5 Incompatible materials:
Reacts with reducing agents.
strong alkalis
strong oxidising agents

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Identification of the substance/preparation: frisch-aktiv Maschinenpfleger

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10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Maleic anhydride

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:		
Oral	ATE_{mix}	>5.000 mg/kg (calculated value)
Inhalative	ATE_{mix}	>20 mg/l (calculated value)

CAS: 5949-29-1 Citric acid		
Oral	LD_{50}	5.400 mg/kg/bw (Mouse)
Dermal	LD_{50}	>2.000 mg/kg/bw (Rat)
Inhalative	ATE	>5 (unspecified)

CAS: 64-18-6 Formic acid		
Oral	LD_{50}	730 mg/kg/bw (Rat) (OECD 401)
Dermal	LD_{50}	>2.000 mg/kg/bw (Rat) (OECD 402)
Inhalative	LC_{50}/4h	7,85 mg/l (Rat) (OECD 403)

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

Information on likely routes of exposure
Ingestion:
Nausea
Inhalation:
No further relevant information available.
Skin Contact:
Prolonged or repeated skin contact may lead to degreasing effects on skin.
Eye Contact:
Causes serious eye irritation.

11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

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SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
Based on available data, the classification criteria are not met.

CAS: 5949-29-1 Citric acid	
LC_{50}/96h	440-760 mg/l (Fish) (OECD 203)
EC_{50}/72h	120 mg/l (Daphnia magna)
NOEC	425 mg/l (Algae)
CAS: 64-18-6 Formic acid	
EC_{50}/48h	365 mg/l (Daphnia magna) (OECD 202)
EC_{50}/72h	1.000 mg/l (Algae)
EC_{50}/96h	130 mg/l (Danio rerio) (OECD 203)
NOEC/21d	100 mg/l (Daphnia magna) (OECD 211)

General information: Not known to be hazardous to water.

12.2 Persistence and degradability	
CAS: 5949-29-1 Citric acid	
Biodegradability	97 % (28d) (OECD 301 B)
CAS: 68439-51-0 Alcohols, C12-14, ethoxylated, propoxylated	
Biodegradability	>60 % (28d) (OECD 301 F)
CAS: 64-18-6 Formic acid	
Biodegradability	82-92 % (28d) (OECD 301 B)

12.3 Bioaccumulative potential	
CAS: 64-18-6 Formic acid	
Bioaccumulation potential	<3 log K_{OW} (unspecified)

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects
Behaviour in sewage processing plants:
Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. Before allowing large quantities to be fed into sewage plants, obtain the approval of the responsible authorities.
Other information:
General information:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow to reach ground water/water course. Do not allow undiluted product or large quantities of it to reach sewage system.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue	
20 01 29*	detergents containing hazardous substances
15 01 02	plastic packaging

Uncleaned packaging:
Recommendation:
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number **ADR/RID, ADN, IMDG, IATA**	Void
14.2 UN proper shipping name **ADR/RID, ADN, IMDG, IATA**	Void
14.3 Transport hazard class(es) **ADR/RID, ADN, IMDG, IATA** **Class**	Void
14.4 Packing group **ADR/RID, IMDG, IATA**	Void
14.5 Environmental hazards: **Marine pollutant:**	No
14.6 Special precautions for user	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	Void

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SECTION 15: Regulatory information

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

Labelling according to EC guidelines: .

Directive 2012/18/EU Not applicable
Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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Regulation (EU) No 649/2012

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is 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 ingredients is listed.

National regulations:

Other regulations, limitations and prohibitive regulations
Other regulations (EC): Directive 98/24/EEC
Other regulations (EC): Regulation (EC) No 648/2004
Other regulations (DE): WRMG. WHG, AwVS
TRGS 400, 401, 500, 510, 555, 900

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Training hints Make sure that users are appropriately informed, instructed and trained.

Classification according to Regulation (EC) No 1272/2008 Calculation method:
Department issuing SDS:
Quality Assurance Department
E-mail: info@oro-marketing.de, www.oro-marketing.de
Version number of previous version: 1.0

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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative
EC50: effective concentration, 50 percent
OECD: Organization for Economic Co-operation and Development
ADN: Accord européen relativ au transport international des marchandises dangereuses par voie de navigation intérieure
IBC: Intermediate bulk container
MARPOL: Marine Pollution
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources Safety data sheet for raw materials, eur-lex.europa.eu, echa.europa.eu

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