

perma-tec GmbH & Co. KG
97717 Euerdorf

Date printed 25.03.2015, Revision 12.08.2014

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

1.1 Product identifier

perma CLASSIC / FUTURA

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

1.2.1 Relevant uses

Lubrication system

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company perma-tec GmbH & Co. KG
Hammelburger Straße 21
97717 Euerdorf / GERMANY
Phone (049) 09704-609-0
Fax (049) 09704-609-50
Homepage www.perma-tec.com
E-mail info@perma-tec.com

Address enquiries to

Technical information info@perma-tec.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +49 (0) 9704-609-0 (Mo-Th 8:00-16:30, Fr 8:00-12:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2: H319 Causes serious eye irritation.
Acute Tox. 4: H302 Harmful if swallowed.

2.2 Label elements

This product is defined as an "article" based on OSHA definition of an article (c). Therefore, this product is exempt from requirements of the Hazard Communication Standard, 29 CFR1910.1200 (HCS 2012), hence a Safety-Data-Sheet is not required in accordance to HCS2012 (b)(6) and the sheets are supplied as a service. This Safety-Data-Sheet contains valuable information critical to the safe handling and proper use of the product.

2.3 Other hazards

Physico-chemical hazards The structural design prevents release of the hazardous media contained therein when the unit is used for its intended purpose.

Human health dangers The contained dangerous materials are not freely available with foreseeable use.

Environmental hazards The contained dangerous materials are not freely available with foreseeable use.

Other hazards No particular hazards known.

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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a article.

Range [%]	Substance
40 -< 60	Ethylene glycol
	CAS: 107-21-1
	GHS/CLP: Acute Tox. 4: H302
1 - <10	Citric acid
	CAS: 77-92-9,
	GHS/CLP: Eye Irrit. 2: H319
1 - <5	N-(2-hydroxyethyl)-ethylene diamintriacetic acid, trisodium salt
	CAS: 139-89-9,
	GHS/CLP: Eye Irrit. 2: H319

Comment on component parts

The concentrations of the ingredients are valid for gas generation cell. They are not for the complete system.
The structural design prevents release of the hazardous media contained therein when the unit is used for its intended purpose.
Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Measures are only valid for damaged lubrication systems.

Inhalation

not applicable

Skin contact

In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion

not applicable

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used

none

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.
Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.
Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2 Environmental precautions

not applicable

6.3 Methods and material for containment and cleaning up

Take up residues with absorbent material (e.g. sand, sawdust, generalpurpose binder, diatomaceous earth).
Take up mechanically.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures necessary if used correctly.

Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

No special measures necessary.

Protect from heat/overheating.
Store in a dry place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (US)

Range [%]	Substance
40 -< 60	Ethylene glycol
	CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1
	: 100 mg/m ³ , ACGIH (Ceiling (aerosol only))

Ingredients with occupational exposure limits to be monitored (EU)

Range [%]	Substance / EC LIMIT VALUES
40 -< 60	Ethylene glycol
	CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1
	: 20 ppm, 52 mg/m ³ , H
	: 40 ppm, 104 mg/m ³

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8.2 Exposure controls

Additional advice on system design	not applicable
Eye protection	safety glasses
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. Butyl rubber, >120 min (EN 374).
Skin protection	not applicable Measures are only valid for damaged lubrication systems. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.
Respiratory protection	not applicable
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	not determined

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	capsule
Color	not determined
Odor	not determined
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not determined
Boiling point [°C]	not determined
Flash point [°C]	not applicable
Flammability [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	not applicable
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

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10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Hydrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
not determined,

Range [%]	Substance
40 -< 60	Ethylene glycol, CAS: 107-21-1 LD50, oral, Rat: > 2000 mg/kg (IUCLID).
1 - <10	Citric acid, CAS: 77-92-9 LD50, oral, Rat: 6730 mg/kg (Lit.).

Serious eye damage/irritation not determined

Skin corrosion/irritation not determined

Respiratory or skin sensitisation not determined

Specific target organ toxicity — single exposure not determined

Specific target organ toxicity — repeated exposure not determined

Mutagenicity not determined

Reproduction toxicity not determined

Carcinogenicity not determined

General remarks The contained ingredients can be harmful to humans, but are hermetically enclosed in article and can not be released.

Toxicological data of complete product are not available.

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

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SECTION 12: Ecological information

12.1 Toxicity

Product
not determined,

Range [%]	Substance
40 -< 60	Ethylene glycol, CAS: 107-21-1
	LC50, (96h), Oncorhynchus mykiss: > 18500 mg/l.
	EC50, (24h), Daphnia magna: 74000 mg/l.
	LC50, (48h), fish: < 1 mg/l.
1 - <10	Citric acid, CAS: 77-92-9
	Pseudomonas putida: IC5: > 10000 mg/l/16h (Lit.).
	Scenedesmus quadricauda (alga): IC5: 640 mg/l/7d (Lit.).
	LC50, (96h), Leuciscus idus: 440-760 mg/l (IUCLID).
	EC50, (72h), Daphnia magna: ca. 120 mg/l (IUCLID).

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not applicable
Biological degradability	not applicable

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Ecological data of complete product are not available.

The contained ingredients can be harmful for the environment, but they are hermetically enclosed in article and can not be released.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

Product Dispose of as hazardous waste.
For recycling, consult manufacturer.

Contaminated packaging Packaging that cannot be cleaned should be disposed of as for product.
Untampered packaging may be taken for recycling.

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SECTION 14: Transport

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"
DOT Road Shipment Information (49 CFR) NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

National regulations

	29 CFR 1910.1200 (HCS-2012); OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65 This product is not classified as hazardous under SARA 302.
- SARA, 302	
- SARA, 311	This product does not contain any ingredients regulated under this list.
- SARA, 313	This product does not contain any ingredients regulated under this list.
- CA Proposition 65	No chemical substances in this material are named on the California P65 list.
- TSCA	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

Transport-regulations

DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

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16.2 Ratings

HMIS Ratings

HEALTH	1	1 - Slight Hazard
FLAMMABILITY	1	1 - Slight Hazard
REACTIVITY	2	2 - Moderate Hazard
PERSONAL PROTECTION	X	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

1
1 1
IRR

TOP, FLAMMABILITY: 1 - Slight Hazard
LEFT, HEALTH: 1 - Slight Hazard RIGHT, REACTIVITY: 1 - Slight Hazard
BOTTOM, SPECIAL NOTICE: IRR - Irritant

Modified position

16.3 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route;
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure;
CAS = Chemical Abstracts Service;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
CFR = Code of Federal Regulations;
CPR = Controlled Products Regulations;
DMEL = Derived Minimum Effect Level;
DNEL = Derived No Effect Level;
DOT = Department of Transportation;
EC50 = Median effective concentration;
EPA = Environmental Protection Agency;
GHS = Globally Harmonized System of Classification and Labelling of Chemicals;
IATA = International Air Transport Association;
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
IC50 = Inhibition concentration, 50%;
IMDG = International Maritime Code for Dangerous Goods;
IARC = International Agency of Research on Cancer;
IATA = International Air Transport Association;
TSCA = Toxic Substance Control Act;
HMIS = Hazardous Materials Identification System;
NFPA = National Fire Protection Association;
NIOSH = National Institute for Occupational Safety and Health;
OSHA = Occupational Safety and Health Administration;
LC50 = Lethal concentration, 50%;
LD50 = Median lethal dose, 50%;
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
PBT = Persistent, Bioaccumulative and Toxic substance;
PNEC = Predicted No-Effect Concentration;
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
SARA = Superfund Amendments and Reauthorization Act;
TLV®/TWA = Threshold limit value – time-weighted average;
TLV®STEL = Threshold limit value – short-time exposure limit;
VOC = Volatile Organic Compounds;
vPvB = very Persistent and very Bioaccumulative;

16.4 Other information

Customs Tariff	not determined
Classification procedure	Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method) Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification)
Modified position	none

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