

MATERIAL SAFETY DATA SHEET

Page 1/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

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

1.1 Product identifier

Trade name **Pentosin CHF 202**

Article number: 1403900

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

No further relevant information available.

Application of the substance / the mixture Central Hydraulic Fluid

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Deutsche Pentosin-Werke GmbH
Industriestraße 35-53
D-22880 Wedel
Germany
Phone ++49 4103 9134-0
Fax ++49 4103 9134-71

US Distributor
Fuchs Lubricants Co.
17050 Lathrop Avenue
Harvey, IL 60426
(708) 333-8900
(800) 255-3924 24 hrs Emergency

Informing department:

Safety / Health / Environment
msds-info@pentosin.com

1.4 Emergency telephone number: +49 4103 91 34-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC void

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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, GHS08

Signal word Danger

Hazard-determining components of labelling:

1-Decene, dimer, hydrogenated
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based

(Contd. on page 2)

GB

MATERIAL SAFETY DATA SHEET

Page 2/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 1)

Naph.-basisches Solvent Raffinat, hydriert

· **Hazard statements**

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

· **Precautionary statements**

P261 Avoid breathing spray.

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Contains Ethanol, 2,2'-iminobis-, N-tallow alkylderivs.. May produce an allergic reaction.

· **2.3 Other hazards**

The product evidently does not contain any organically bonded halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **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 severely hydrogenated solvent neutral oils, synthetic hydrocarbons and additives.

· **Dangerous components:**

CAS: 72623-86-0 EINECS: 276-737-9	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based ⚠ Asp. Tox. 1, H304	25-50%
CAS: 8042-47-5 EINECS: 232-455-8	Naph.-basisches Solvent Raffinat, hydriert ⚠ Xn R65 ⚠ Asp. Tox. 1, H304	< 20%
CAS: 68649-11-6 NLP: 500-228-5	1-Decene, dimer, hydrogenated ⚠ Xn R20-65 ⚠ Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H332	< 20%
CAS: 1809-19-4 EINECS: 217-316-1	dibutyl phosphonate ⚠ Xi R38-41; ⚠ N R51/53 ⚠ Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315	< 0.5%
CAS: 61791-44-4 EINECS: 263-177-5	Ethanol, 2,2'-iminobis-, N-tallow alkylderivs. ⚠ C R34; ⚠ Xn R22; ⚠ Xi R43 R52/53 ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317; ⚠ Aquatic Chronic 3, H412	< 0.5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

GB

(Contd. on page 3)

MATERIAL SAFETY DATA SHEET

Page 3/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 2)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
 - **After inhaling** Supply fresh air; consult doctor in case of symptoms.
 - **After skin contact** The product is generally no skin irritant.
 - **After eye contact** Rinse opened eye for several minutes under running water.
 - **After swallowing** Seek immediate medical advice.
- **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, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
 - **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
 - **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, 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**
 - No dangerous materials are released.
 - See Section 7 for information on safe handling
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and containers:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Storage class** 10 (VCI Germany)
- **7.3 Specific end use(s)** No further relevant information available.

GB

(Contd. on page 4)

MATERIAL SAFETY DATA SHEET

Page 4/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Use skin protection cream for preventive skin protection.
- **Breathing equipment:** Not necessary if room is well ventilated.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
Under normal working conditions: Butyl rubber, NBR or PVC, regularly change!
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.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Protective goggles recommended during refilling.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- Form:** Fluid
- Colour:** Dark green
- **Smell:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
- Melting point/Melting range:** -54 °C (ISO 3016)
- Boiling point/Boiling range:** > 200 °C (GC)
- **Flash point:** 154 °C (DIN EN ISO 2592)
- **Inflammability (solid, gaseous)** Not applicable.
- **Ignition temperature:** 245 °C (DIN 51794)
- **Decomposition temperature:** Not determined.

(Contd. on page 5)

GB

MATERIAL SAFETY DATA SHEET

Page 5/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 4)

· Self-inflammability:	<i>Product is not self-igniting.</i>
· Danger of explosion:	<i>Product is not explosive.</i>
· Critical values for explosion:	
Lower:	0.5 Vol %
Upper:	5.0 Vol %
· Steam pressure at 20 °C:	0.1 hPa
· Density at 20 °C	0.836 g/cm ³ (DIN EN ISO 12185)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not determined.
· Segregation coefficient (n-octanole/water):	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic at 20 °C:	48 mm ² /s (DIN EN ISO 3104)
· Solvent content:	
Organic solvents:	0.0 %
· 9.2 Other information	<i>No further relevant information available.</i>

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Conditions to be avoided:** *No decomposition if used and stored 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:** *strong oxidizing agents*
- **10.6 Hazardous decomposition products:** *None*

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

8042-47-5 Naph.-basisches Solvent Raffinat, hydriert

Oral LD50 >5000 mg/kg (rat)

Dermal LD50 >3000 mg/kg (rab)

- **Primary irritant effect:**
- **on the skin:** *No irritant effect.*
- **on the eye:** *No irritant effect.*

(Contd. on page 6)

MATERIAL SAFETY DATA SHEET

Page 6/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 5)

· **Sensitisation:** See Note Section 2

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies 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**

· **European waste catalogue**

13 00 00	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
13 01 00	waste hydraulic oils
13 01 10*	mineral based non-chlorinated hydraulic oils

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|------|
| · 14.1 UN-Number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |

(Contd. on page 7)

MATERIAL SAFETY DATA SHEET

Page 7/8

according to 1907/2006/EC, Article 31

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 6)

- | | |
|---|---|
| · 14.6 Special precautions for user | <i>Not applicable.</i> |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | <i>Not applicable.</i> |
| · Transport/Additional information: | <i>No dangerous goods in accordance with the above orders</i> |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H302 Harmful if swallowed.
 - H304 May be fatal if swallowed and enters airways.
 - H314 Causes severe skin burns and eye damage.
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H318 Causes serious eye damage.
 - H332 Harmful if inhaled.
 - H411 Toxic to aquatic life with long lasting effects.
 - H412 Harmful to aquatic life with long lasting effects.
- **R20 Harmful by inhalation.**
- **R22 Harmful if swallowed.**
- **R34 Causes burns.**
- **R38 Irritating to skin.**
- **R41 Risk of serious damage to eyes.**
- **R43 May cause sensitisation by skin contact.**
- **R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**
- **R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**
- **R65 Harmful: may cause lung damage if swallowed.**
- **Department issuing data specification sheet:** Safety / Health / Environment
- **Contact:** Dr.G.Lukaschek
- **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)
 - 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

(Contd. on page 8)

MATERIAL SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 8/8

Printing date 04.11.2014

Version number 10

Revision: 03.11.2014

Trade name Pentosin CHF 202

(Contd. of page 7)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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

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