



RFID-Systeme
Etikettiersysteme
Strichcode-Technik
Spezialmaschinenbau
Software-Engineering
Tel. +49 4195 99 75-0
Fax +49 4195 12 65
www.Logopak.com

(00) 340382230000000009

Oil

Safety Data Sheet

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : E589-AE4 hebro Multiplus

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

Use of the Sub-
stance/Mixture : Creeping and fine oil

1.3 Details of the supplier of the safety data sheet

Company : hebro chemie GmbH
Rostocker Str. 40
41199 Mönchengladbach
Contact person : Wolfgang Schaffers
Telephone : +49 (0) 2166 6009-0
Telefax : +49 (0) 2166 6009-99
Contact person product safety : Abteilung Produktsicherheit
E-mail address : info-produktsicherheit@gmx.de

1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:
+49 (0) 361 730 730

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)

| | |
|-------------------------------|--|
| Extremely flammable | R12: Extremely flammable. |
| Dangerous for the environment | R53: May cause long-term adverse effects in the aquatic environment. |
| | R66: Repeated exposure may cause skin dryness or cracking. |

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

Hazard pictograms :



Extremely flammable

R-phrases(s) :

R12
R53
R66

Extremely flammable.
May cause long-term adverse effects in the aquatic environment.
Repeated exposure may cause skin dryness or cracking.

S-phrases(s) :

S23
S28
S29/56
S51

Do not breathe spray.
After contact with skin, wash immediately with plenty of water.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Use only in well-ventilated areas.

Special labelling of certain mixtures :

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Keep away from sources of ignition - No smoking.
Keep away from children.

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

3. Composition/information on ingredients

3.1 Substances

Identification: E589-AE4 hebro Multiplus

3.2 Mixtures

Chemical nature : Penetrating oil based on highly purified hydrocarbons additive with lubricant components

Hazardous components

| Chemical Name | CAS-No. EC-No. Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|--------------------|--|--------------------------------|--|----------------------|
| Alkanes, C9-12-iso | 90622-57-4 | R10 | Asp. Tox. 1; | >= 25 - < 50 |

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

| | | | | |
|-----------------|-----------------------|--------------------------|---|---------------|
| | 292-459-0 | Xn; R65 R66 N; R53 | H304 Aquatic Chronic 4; H413 Flam. Liq. 3; H226 | |
| Propane | 74-98-6 200-827-9 | F+; R12 | Flam. Gas 1; H220 Press. Gas | >= 2.5 - < 10 |
| Isobutane | 75-28-5 200-857-2 | F+; R12 Nota C | Flam. Gas 1; H220 Press. Gas | >= 2.5 - < 10 |
| WEL substance : | | | | |
| Butane | 106-97-8 203-448-7 | F+; R12 Nota C | Flam. Gas 1; H220 Press. Gas | >= 2.5 - < 10 |

Remarks : WEL substance

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.
For the full text of the Notas mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : Provide fresh air.
Keep patient warm and at rest.
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.
After contact with skin, wash immediately with plenty of soap and water.
- In case of eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

If swallowed : Seek medical advice.
: Call a physician immediately.
Keep at rest.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Erythema

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.
For specialist advice physicians should contact the Poisons
Information Service.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry powder
Water spray jet

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Carbon monoxide
nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Use water spray to cool unopened containers.
Suppress (knock down) gases/vapours/mists with a water spray jet.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Do not breathe vapours, aerosols.

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Do not empty into drains.
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See chapter 8 and 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep away from open flames, hot surfaces and sources of ignition.
Take precautionary measures against static discharges.
Avoid contact with skin and eyes.
Do not breathe vapours or spray mist.
When using do not eat, drink or smoke.
For personal protection see section 8.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Follow the water regulations.
Keep only in the original container in a cool, well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place.
Keep away from heat.
Keep away from sources of ignition - No smoking.
Keep at temperatures between - 7°C and 40°C.

Advice on common storage : Incompatible with oxidizing agents.

7.3 Specific end uses

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

Specific use(s) : Creeping and fine oil

8. Exposure controls/personal protection

8.1 Control parameters

| Components | CAS-No. | Value | Control parameters | Update | Basis |
|---------------------|---|-------|------------------------------------|------------|---------|
| Butane | 106-97-8 | TWA | 600 ppm 1,450 mg/m ³ | 2007-08-01 | GB EH40 |
| Further information | : Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene | | | | |
| | 106-97-8 | STEL | 750 ppm 1,810 mg/m ³ | 2007-08-01 | GB EH40 |
| Further information | : Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene | | | | |

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Eye protection : Safety glasses with side-shields

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

Skin and body protection : Protective suit
Protective measures : Follow the skin protection plan.

Environmental exposure controls

General advice : Do not empty into drains.
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol
Colour : colourless
Odour : odourless
Flash point : < 1 °C
Ignition temperature : 230 °C
Lower explosion limit : 0.6 %(V)
Upper explosion limit : 6.5 %(V)

pH : not applicable

Density : 0.73 g/cm³
at 20 °C
Method: DIN 51757

Water solubility : insoluble

9.2 Other information

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

10. Stability and reactivity

10.1 Reactivity

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Skin irritation : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Serious eye damage/eye irritation

Eye irritation : The liquid splashed in the eyes may cause irritation and reversible damage.

Respiratory or skin sensitization

Sensitisation : This information is not available.

Carcinogenicity

Remarks : Not classifiable as a human carcinogen.

Further information

: According to many years of experience, there are no known harmful effects when handled properly. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

12. Ecological information

12.1 Toxicity

Toxicity to fish : no data available

12.2 Persistence and degradability

Biodegradability : no data available

12.3 Bioaccumulative potential

Bioaccumulation : no data available

12.4 Mobility in soil

Mobility : no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Additional ecological information : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

13. Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
Do not let product enter drains.
Do not dispose of with domestic refuse.

Packaging : Do not dispose of with domestic refuse.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : 160504 gases in pressure containers (including halons) containing dangerous substances

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

14. Transport information

ADR

UN number : 1950
UN proper shipping name : AEROSOLS
Transport hazard class(es) : 2
Classification Code : 5F
Packing instruction (LQ) : LQ2
Labels : 2.1
Tunnel restriction code : (D),
Environmentally hazardous : no

IATA

UN number : 1950
Description of the goods : AEROSOLS,FLAMMABLE
Class : 2.1
Labels : 2.1

Packing instruction (cargo
aircraft) : 203

IATA_C

Environmentally hazardous : no

IATA_P

Environmentally hazardous : no

IMDG

UN number : 1950
Description of the goods : AEROSOLS
Class : 2.1
Labels : 2.1
EmS Number 1 : F-D
EmS Number 2 : S-U
Marine pollutant : no

RID

UN number : 1950
Description of the goods : AEROSOLS
Transport hazard class(es) : 2
Classification Code : 5F
Hazard identification No : 23
Labels : 2.1
Packing instruction (LQ) : LQ2
Environmentally hazardous : no

15. Regulatory information

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

E589-AE4 hebro Multiplus

Version: 1.5

Revision Date 17.02.2012

Print Date 18.02.2012

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws. Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

| | |
|-----|---|
| R10 | Flammable. |
| R12 | Extremely flammable. |
| R53 | May cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R66 | Repeated exposure may cause skin dryness or cracking. |

Full text of H-Statements referred to under sections 2 and 3.

| | |
|------|---|
| H220 | Extremely flammable gas. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H413 | May cause long lasting harmful effects to aquatic life. |

Full text of Notas referred to under section 3

| | |
|--------|--|
| Nota C | Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In Annex I, a general designation of the following type is sometimes used: "xylenol". In this case the manufacturer or any other person who markets such a substance must state on the label whether the substance is a specific isomer (a) or a mixture of isomers (b). Example: (a) 2,4-dimethylphenol (b) xyleneol (mixture of isomers). |
|--------|--|

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.