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Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 14.07.2010 Revision: 14.07.2010

1 Identification of substance

Product details

Trade name 4-n-Butylphenol Stock number: A12812, L06769

Alfa Aesar GmbH & Co.KG Manufacturer/Supplier:

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department. Informing department: Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

C Corrosive

Information pertaining to particular dangers for man and environment GHS label elements

R 34 Causes burns.

Danger

Prevention: Response:

H314 - Causes severe skin burns and eye damage.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Storage: Disposal:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) Identification number(s):

4-n-Butylphenol (CAS# 1638-22-8): 100%

EINECS Number: 216-672-5

4 First aid measures

General information

Instantly remove any clothing soiled by the product.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice. After inhalation

Instantly wash with water and soap and rinse thoroughly. After skin contact

Seek immediate medical advice. Rinse opened eye for several minutes under running water. Then consult doctor. After eye contact

After swallowing Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents

Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire Carbon monoxide and carbon dioxide
Wear self-contained breathing apparatus.

Protective equipment: Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.

Measures for environmental protection:

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

Additional information:

Handling

Information for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against

explosions and fires:

Keep ignition sources away - Do not smoke.

Storage Requirements to be met by storerooms and

Information about storage in one common

storage facility: Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

8 Exposure controls and personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace: Additional information:

Not required. No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

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Breathing equipment: Protection of hands: Material of gloves

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Use breathing protection with high concentrations.

Check protective gloves prior to each use for their proper condition.

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.

Eye protection:

Safety glasses
Tightly sealed safety glasses.

Full face protection
Face protection
Protective work clothing. **Body protection:**

9 Physical and chemical properties:

General Information

Form: Liquid Colour: Colourless Light brown Smell: Nŏt determined

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Not determined Flash point: Not determined

Ignition temperature: Not determined **Decomposition temperature:** Not determined

Danger of explosion: Product is not explosive

Critical values for explosion:

Lower: Upper: Not determined Not determined Steam pressure: Not determined 0.976 g/cm³ Density at 20°C

Solubility in / Miscibility with

Not miscible or difficult to mix Water

10 Stability and reactivity

Thermal decomposition / conditions to be

avoided: Materials to be avoided: Dangerous reactions

Oxidizing agents No dangerous reactions known Carbon monoxide and carbon dioxide

Dangerous products of decomposition:

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

Corrosive effect on skin and mucous membranes. Irritant for skin and mucous membranes. Strong corrosive effect. Irritant effect. on the eve:

Sensitization: Other information (about experimental

toxicology):
Additional toxicological information:

Tumorigenic effects have been observed on tests with laboratory animals.

No sensitizing effect known.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus

No decomposition if used and stored according to specifications.

and stomach.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or

ACGIH.

12 Ecological information:

Additional ecological information:

General notes:

Generally not hazardous for water.

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation Consult state, local or national regulations for proper disposal.

Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.

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

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class: Kemler Number: 8 (C3) Corrosive substances.

3145 III **UN-Number:** Packaging group:

8 3145 ALKYLPHENOLS, LIQUID, N.O.S. (4-n-Butylphenol) LQ7 Label

Designation of goods: Limited quantities (LQ) Transport category

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Trade name 4-n-Butylphenol

Tunnel restriction code Ε

Maritime transport IMDG/GGVSea:

8 3145 8 III IMDG/GGVSea Class: UN Number: Label Packaging group: Marine pollutant: Correct technical name:

ALKYLPHENOLS, LIQUID, N.O.S.

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 8 3145 Label 8 III

Packaging group: Correct technical name: ÄLKYLPHENOLS, LIQUID, N.O.S

UN "Model Regulation": UN3145, ALKYLPHENOLS, LIQUID, N.O.S., 8, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Corrosive

Risk phrases: 34 Causes burns.

Safety phrases: 20 When using do not eat or drink.

when using do not eat or drink.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
This material and its container must be disposed of as hazardous waste. 45 60

National regulations

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use:

Generally not hazardous for water. Water hazard class:

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet:

Abbreviations and acronyms:

Health, Safety and Environmental Department.

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Zachariah Holt

ADR: Accord européen sur le transport 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)

MDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

GB