MATERIAL SAFETY DATA SHEET

MK 66

burnusHYCHEM GmbH, D-36396 Steinau, Germany Revision date: 11.05.2000; Print date: 8.12.2005

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1. Identification of the substance/preparation and company

Product name: MK 66

Producer: burnusHYCHEM GmbH, Karl-Winnacker-Str. 22,

D-36396 Steinau, Germany, phone: +49-6663-976-0

Information desk: burnus GmbH, phone: +49-6151-873699

Emergency phone no.: Beratungsstelle für Vergiftungen, Universitätsklinikum Mainz

Phone: +49-6131-19240

2. Composition / information on ingredients

Hazardous Ingredients:

CAS-No.	Description according to EC-Guideline	Content	Unit	Symbol	R-Phrases
10213-79-3	Disodiumtrioxosilicate pentahydrate	30	%	С	34-37
497-19-8	sodium carbonate	30	%	X,	36
69011-35-5	fatty-alcohol ethoxylate	<5	%	Xn	22-41
69011-35-5	fatty-alcohol ethoxylate	<5	%	X _i	41
	non-ionic surfactants	<5	%		

3. Hazards identification

Product irritates skin and mucous membranes, in case of eye contact danger of serious eye damages. Leaking product causes damages to waters due to up salting and general pollution.

4. First aid measures

After inhalation: Fresh air, seek medical advice.

After contact with skin: Remove contaminated clothing, wash skin with plenty of water and

rub off with mild acid such as vinegar or lemon juice.

After contact with eyes: Immediately flush eyes with plenty of water, holding eyelids apart.

Obtain medical advice.

After ingestion: Do not induce vomiting - danger of suffocation due to foam

aspiration. Seek medical advice.

5. Fire-fighting measures

Suitable extinguishing media: Adjust to environment.

Unsuitable extinguishing materials due to safety reasons: Not applicable.

Particular dangers due to the substance, its combustion products or released gases:

Thermal decomposition into carbon monoxide, carbon dioxide and organic fission products.

Special protective equipment for fire-fighters: Wear tightly closed protection suit and self-contained breathing apparatus. Equipment has to withstand alkalis.

6. Accidental release measures

Personal precautions: Refer to point no. 8 "Exposure controls/personal protective equipment".

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Environmental precautions and methods for cleaning up: Do not discharge into the drains/surface waters/groundwater, collect mechanically, rinse limited spillage with plenty of water. Do not reuse spilled product.

Additional information: None

7. Handling and storage

Handling:

Advice on safe handling: Keep container tightly closed and in a cool place; refer to general precautions when handling chemicals.

Protective measures against fire and explosions: Do not store with easily inflammable materials.

Storage:

Requirements for storage rooms and vessels: Care for appropriate ventilation and deaeration. Do not store container at more than 40 °C.

Advice on storage compatibility: Refer to "Protective measures against fire and explosions"

Further information on storage conditions: Avoid contaminations.

Storage class according to VCI:

8. Exposure controls / personal protection

Additional advice on system design: Not available. Refer to point no. 7 "Handling and storage".

Ingredients with exposure limits relevant to employment (TRGS 900 Germany): Not relevant.

Personal protective equipment:

<u>General protective and hygienic measures:</u> Avoid skin and eye contact, do not eat, drink or smoke during work, use precautionary skin protection. Exhaust dust while pouring into another container.

Breathing protection: Use particle filter when dust occurs.

Hand protection: Protective rubber or PVC gloves.

Eye protection: Tight goggles or eye/face protection.

Body protection: Protective clothing (rubber or PVC).

9. Physical and chemical properties

Appearance:

Shape: powder Colour: white Odour: none

Safety-relevant data:

Melting point:

Boiling point:

Flash point:

pH-value (10 g/l H₂O); (at T=20°C):

Flammability:

Ignition temperature:

not available
not applicable
not applicable
not applicable
not applicable
not applicable

Oxidizing properties: > 60 °C emission of O₂

Explosive properties: not applicable Explosive limits: lower: not applicable

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not applicable upper:

Additional data:

Density (at T=20°C): 970 g/l Solubility in water (at T=20°C): soluble Vapour pressure (at T=20°C): not applicable Relative vapour density (air=1): not applicable Partition coefficient (n-octanol/water): not applicable Viscosity (at T=20°C): not applicable

Solvent separation examination: not applicable

Solvent content: not applicable Evaporation number: not applicable

10. Stability and reactivity

Conditions to avoid: Do not store over 40 °C.

Materials to avoid: Easily inflammable materials and acids (formation of carbon dioxide).

Hazardous decomposition products: In case of fire – refer to point no. 5.

Additional information: > 60°C product deoxidises.

11. Toxicological information

Acute toxicity data: No data available. Human experiences: No data available.

Additional toxicological information: No data available.

12. Ecological information

Information on elimination (persistence / degradability):

At least 90 % elimination grade for washing active substances, according to German Detergent and Cleanser Law (WRMG). Inorganic ingredients are not biodegradable.

Behaviour in environmental compartments: No data available.

Ecotoxic effects:

LC 50 48h 175 mg Bor/l (Gold orfen) sodium perborate tetrahydrate

Perborate contained in the product decomposes into metaborate and oxygen.

Additional ecological information:

COD-value (chemical oxygen demand): 225 mg O₂/l $C=0.1 \% in H_2O$

13. Advice on disposal

Disposal of material and not-cleaned containers should be in accordance with local legislation.

Classification according to European catalogue for waste material:

07 06 01 aqueous washing liquids and stock solutions (used).

14. Transport information

overland transportation (GGVS/ADR, GGVE/RID, GGVBinsch/ADNR):

8 (C6) ADR/RID: UN-No: 3262 Packing group

Desciption: corrosive solid, basic inorganic, n.o.s. (disodiumtrioxosilicate)

Marine transport (GGVSee/IMDG-Code):

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IMDG-Code: 8 UN number: 3262 Packaging group: III EMS number: F-A, S-B MFAG: 705 IMDG-Code page: 8

Marine pollutant: no

Proper technical name: Disodiumtrioxosilicate

Air Transport(ICAO-TI/IATA-DGR):

Class: 8 UN/ID-no.: 3262 Packing group: III Proper shipping name: corrosive solid, basic inorganic, n.o.s. (disodiumtrioxosilicate)

15. Regulatory information

Labelling according to EEC-guidelines:

Symbol: C - corrosive

Hazard determining component for labelling: not relevant

R(isk) phrase(s): 34 causes chemical burns

S(afety) phrase(s): 26 In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice.

36/37/39 use protection clothing, protective gloves and safety goggles

in case of feeling sick, seek medical advice

product and packaging need to be disposed as hazardous waste

Special labelling: none National regularity instructions:

Employment restriction according to § 15 b German GefStoffV: yes

Storage restriction according to § 24 German GefStoffV: yes

Referenced in Annex II German Störfallverordnung: not relevant

Classification according to German VbF: not relevant

German TA Luft, Annex E: not relevant
German water risk class: WGK 1

Additional regularities, prohibitions and decrees: Refer to leaflet ZH 1/-229 of the trade association of the

chemical industry.

16. Other information

Above information represent the state of our nowadays knowledge and may not be considered as contract affirmations of product properties. These data are not allowed to be changed or transferred to other products. Duplication in unaltered form is allowed.

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