Material Safety Data Sheet Printed: 08.11,2004 Revised: 03.11,2004

Lithofin MN Power-Clean

1 Identification of substance:

Product details:

Trade name: Lithofin MN Builders' Clean
Application of the substance / the preparation Cleaning agent/ Cleaner

Distributor: GranQuartz, L. P. P.O. Box 2206

Tucker, GA 30085-2206/USA

Information Department:

see above

Emergency Information: information department

24-Hour Emergency Telephone Number:

1-800-255-3924 (USA & Canada) or 813-248-0565

2 Composition/Data on components:

Chemical characterization Description: Alkaline cleaner

Dangerous components:

111-76-2 2-butoxyethanol 2.5-10 % RTECS: KJ 8575000 87-63-0 propan-2-ol 2.5-10 % RTECS: NT 8050000 497-19-8 sodium carbonate 2.5-10 % 68131-39-5 isolridecanolethoxylal 2.5-10 % Fatty alcohol ethoxylated < 2.5 %

TSCA

7732-18-5 water, distilled, conductivity or of similar purity

111-76-2 2-butoxyethanol 67-63-0 propan-2-ol 497-19-8 sodium carbonale 102-71-6 2,2',2"-nitrilotriethanol 527-07-1 sodium giuconate

28348-53-0 sodium cumenesulphonate

3 Hazards identification

Hazard description: Corrosive

Information pertaining to particular dangers for man and environment

Causes bums.

Classification system Classification based on pH-value

NFPA ratings (scale 0-4)

Health = 1 Fire = 0 Reactivity = 0 Special: Alk

4 First aid measures

General Information

immediately remove any clothing soiled by the product.

After inhalation

In case of complaints which may be caused by vapours supply fresh air and call for a doctor.

After skin contact

Take-off and remove wetted clothing, shoes and stocking immediately.

Rinse affected parts of the body with plenty of water.

tramediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

After eye contact

First check the victim for contact lenses and remove if present.

Filmse the eyas with open eyelids for 10 - 15 minutes with water. Then consult an eye specialist

Immediately.

After swallowing

Do not induce vomiting

Drink plenty of water, but never give anything to an unconscious person.

Seek medical treatment.

Information for doctor

Treatment

Symptomatic treatment

In cases of irritation to the lungs, initial treatment with Dexametason metered aerosol.

5 Fire fighting measures

Sultable extinguishing agents

The product is not combustible and does not support combustion.

Use fire fighting measures that suit the environment.

Special hazards caused by the material, its products of combustion or resulting gases;

No hazards known

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately, it must not enter the sewage system.

6 Accidental release measures

Person-related safety precautions:

Ensure adequate ventilation

Wear protective clothing.

Keep unprotected persons away.

Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, gawdust).

Use neutralizing agent.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

7 Handling and storage

Handling

Information for safe handling:

Use only in well ventilated areas.

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Avoid contact with eyes and skin.

Avoid Inhalation of vapours.

Prevent formation of aerosols.

Only use alkali-resistant equipment.

Information about protection against explosions and fires:

No special measures required.

Storage

Requirements to be met by storerooms and receptacles:

Store receptacles tightly closed at a cool and dry place with sufficient ventilation

Store only in the original receptacle.

Provide alkali-resistant floor.

information about storage in one common storage facility;

Store away from foodstuffs.

Store away from feed.

Do not store together with acids.

Further information about storage conditions:

Keep receptacle tightly sealed.

8 Exposure controls and personal protection

Additional information about design of technical systems:

No further data; see Item 7.

Components with limit values that require monitoring at the workplace:

111-76-2 2-butoxyethanol

PEL: 240 mg/m³, 50 ppm

Skin

FIEL: 24 mg/m3, 5 ppm

Skin

TLV: 97 mg/m3, 20 ppm

67-63-0 propan-2-of

PEL: 980 mg/m², 400 ppm

REL: short-term value: 1225 mg/m³, 500 ppm

iong-term value: 980 mg/m², 400 ppm

LV: short-term value: 984 mg/m³, 400 ppm

long-term value: 492 mg/m3, 200 ppm

Additional Information:

The fats that were valid during the creation were used as basis.

Personal protective equipment

General protective and hygienic measures

Keep away from loodstuffs, beverages and feed.

immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Provide eye wash facility.

If larger quantities are handled provide emergency showers.

The usual protective measures based on the application have to be followed.

All protective equipment used shall be according to 29 CFR.1910 Subpart I Personal Protective

Equipment

Breathing equipment:

Not necessary if room is well-ventilated.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88,2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Protection of hands:

Alkali-resistant gloves

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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

After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves

The selection of the suitable gloves tices not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eve protection: Tightly sealed goggles.

Body protection: Alkali-resistant protective clothing

9 Physical and chemical properties:

General Information

Form: Liquid

Color: Colorless, clear

Odor: Pleasant

Value/Range Unit Method

Change in condition

Melting point/Melting range:

undetermined > 90 ° C

Bolling point/Bolling range:

Flash point:

>65 °C

Auto igniting:

Product is not selfigriting.

Danger of explosion:

Product does not present an explosion hazard.

Density:

at 20°C ~ 1.1 g/cm3

Solubility in / Miscibility with Water:

Fully miscible

pH-value:

at 20°C 10-13 in delivery state

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Materials to be avoided: Acids

Oangarous reactions No dangerous reactions known

Dangerous products of decomposition:

No dangerous decomposition products known

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

No toxicity data are available for the product itself.

Primary irritant effect:

on the skin:

Caustic effects on mucous membranes and respiratory tract possible.

on the eye: Caustic effect

Sensitization: No sensitizing effects known.

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Additional toxicological information:

The product was classified as corrosive, because the pH-value is $< \approx 2$ or > = 11.5, it is taken for granted that a pH-value of < = 2 or > = 11.5 will lead to the same results as experimental tests with corrosive substances do. Swallowing may lead to a strong caustic effect on mouth, throat and stomach.

12 Ecological information:

Ecotoxical effects:

Acquatic toxicity:

Presently there are no ecotoxicological values available. Remark: Harmful effects possible due to shift of pH value.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

Product:

Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal according to instructions of local authorities.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Non contaminated packaging can be used for recycling.

14 Transport Information

DOT regulations:

Hazard class:

Identification number:

UN1719

Packing group: 111 Proper shipping name (technical name):

CAUSTIC ALKALI LIQUID, N.O.S. (sodium carbonate)

Land transport ADR/RID (cross-border)

ADR/RID clase:

8 (C5) Corrosive substances

Danger code (Kemier):

80

UN-Number:

1719

Packaging group:

Ш

Label

Description of goods:

1719 CAUSTIC ALKALI LIQUID, N.O.S. (sodium carbonate)

Maritime transport IMDG:

IMDG Class:

UN Number:

1719 8

Label Packaging group:

Ш

EMS Number:

F-A,S-B

Marine pollutant:

Νø

Propper shipping name:

CAUSTIC ALKALI LIQUID, N.O.S. (sodium carbonate)

Air transport ICAQ-TI and IATA-DGR:

ICAO/IATA CISSS:

UNID Number:

Label

1719

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Packaging group:

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Propper shipping name:

CAUSTIC ALKALI LIQUID, N.O.S. (sodium carbonate)

15 Regulations

Cancerogenity categories

EPA (Environmental Protection Agency)

void

IARC (International Agency for Research on Cancer)

67-63-0 propan-2-ol: 3

102-71-6 2,2',2"-nitrilotriethanol: 3

diethanolamine: 3

NTP (National Toxicology Program)

void

TLV (Threshold Limit Value established by ACGIH)

void

MAK (German Maximum Workplace Concentration)

void

NIOSH-Ca (National Institute for Occupational Safety and Health)

void

OSHA-Ca (Occupational Safety & Health Administration)

void

Markings according to EU guidelines:

Code letter and hazard designation of product; Corrosive

Risk phrases: Causes burns.

Safety phrases:

Keep locked up and out of the reach of children.

When using do not eat or drink.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

If swallowed, rinse mouth with water (only if the person is conscious)

Regulation or reporting requirements USA

Sara section 355

not listed

Sara section 313

67-63-0 propan-2-ol

Prop. 65 - Cancer

not listed

Prop. 65 - Repr. tox.

not listed

16 Other Information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department Issuing MSDS:

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