



your partner in food safety

Safety Data Sheet

Issue Date: 28-Nov-2017

Revision Date: 18-Sep-2019

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Liquik 4

Other means of identification

SDS # BIR-029

Product Code I00136
UN/ID No UN1824

Recommended use of the chemical and restrictions on use

Recommended Use High alkaline general cleaning.

Details of the supplier of the safety data sheet

Supplier Address

Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027
www.birkocorp.com

Emergency Telephone Number

Company Phone Number Phone: 303-289-1090 or 1-800-525-0476

Emergency Telephone (24 hr) Fax: 303-289-1190
Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical state Liquid

Odor Detergent

Classification

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |

Signal Word**Danger****Hazard statements**

Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

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Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|---------------------------|------------|----------|
| Sodium hydroxide | 1310-73-2 | 10-20 |
| Alkylbenzenesulfonic Acid | 68584-22-5 | <5 |
| Methanol | 67-56-1 | <1 |
| Sodium chlorate | 7775-09-9 | <1 |
| Sodium carbonate | 497-19-8 | <1 |

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

First Aid Measures

| | |
|-----------------------|--|
| General Advice | Immediately call a poison center or doctor/physician. |
| Eye Contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. |
| Skin Contact | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician. |
| Ingestion | Rinse mouth. Do NOT induce vomiting. |

Most important symptoms and effects

| | |
|-----------------|--|
| Symptoms | Causes severe skin burns and eye damage. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

| | |
|---------------------------------------|-----------------|
| Unsuitable Extinguishing Media | Not determined. |
|---------------------------------------|-----------------|

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

| | |
|-----------------------------|--|
| Personal Precautions | Use personal protective equipment as required. |
|-----------------------------|--|

Environmental precautions**Methods and material for containment and cleaning up**

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Do not breathe dusts or mists. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------------|-------------------------------------|--|--|
| Sodium hydroxide 1310-73-2 | Ceiling: 2 mg/m ³ | TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³ | IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³ |
| Methanol 67-56-1 | STEL: 250 ppm TWA: 200 ppm S* | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S* | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------|-----------------------|----------------|
| Physical state | Liquid | | |
| Appearance | Clear liquid | Odor | Detergent |
| Color | Colorless | Odor Threshold | Not determined |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-----------------|---------------|-------------------------|
|-----------------|---------------|-------------------------|

| | |
|-------------------------------------|----------------|
| pH (1% Solution) | 12.4 |
| Melting Point/Freezing Point | Not determined |

| | |
|------------------------------------|-------|
| Boiling Point/Boiling Range | >220F |
|------------------------------------|-------|

| | |
|--------------------|----------------|
| Flash Point | Not determined |
|--------------------|----------------|

| | |
|-------------------------|----|
| Evaporation Rate | <1 |
|-------------------------|----|

| | |
|----------------------------------|-----------------------|
| Flammability (Solid, Gas) | Liquid-Not applicable |
|----------------------------------|-----------------------|

Flammability Limits in Air

| | |
|----------------------------------|----------------|
| Upper Flammability Limits | Not determined |
|----------------------------------|----------------|

| | |
|---------------------------------|----------------|
| Lower Flammability Limit | Not determined |
|---------------------------------|----------------|

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Vapor Pressure Not determined

Vapor Density Not determined

Specific Gravity 1.14

Water Solubility 100%

Solubility in other solvents Not determined

Partition Coefficient Not determined

Auto-ignition Temperature Not determined

Decomposition Temperature Not determined

Kinematic Viscosity Not determined

Dynamic Viscosity Not determined

Explosive Properties Not determined
Oxidizing Properties Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

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Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

| | |
|---------------------|--------------------------|
| Eye Contact | Avoid contact with eyes. |
| Skin Contact | Avoid contact with skin. |
| Inhalation | Do not inhale. |
| Ingestion | Do not ingest. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|--------------------|------------------------|--|
| Sodium hydroxide 1310-73-2 | - | = 1350 mg/kg (Rabbit) | - |
| Alkylbenzenesulfonic Acid 68584-22-5 | = 775 mg/kg (Rat) | = 2000 mg/kg (Rabbit) | - |
| Methanol 67-56-1 | = 6200 mg/kg (Rat) | = 15800 mg/kg (Rabbit) | = 64000 ppm (Rat) 4 h = 22500 ppm (Rat) 8 h |
| Sodium carbonate 497-19-8 | = 4090 mg/kg (Rat) | - | = 2300 mg/m ³ (Rat) 2 h |

Information on physical, chemical and toxicological effects

| | |
|-----------------|--|
| Symptoms | Please see section 4 of this SDS for symptoms. |
|-----------------|--|

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | Causes severe skin burns. |
| Serious eye damage/eye irritation | Causes severe eye damage. |
| Carcinogenicity | Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

| | |
|--------------------------------------|-----------------|
| ATEmix (oral) | 13,548.00 mg/kg |
| ATEmix (dermal) | 10,216.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 177.26 mg/L |
| ATEmix (inhalation-vapor) | 1,061.00 mg/L |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---------------------------------------|---|---|
| Sodium hydroxide 1310-73-2 | | 45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static | |
| Alkylbenzenesulfonic Acid 68584-22-5 | | 3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static | 2.9: 48 h <i>Daphnia magna</i> mg/L EC50 |
| Methanol 67-56-1 | | 18 - 20: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 19500 - 20700: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 28200: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 13500 - 17600: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through | |
| Sodium carbonate 497-19-8 | 242: 120 h <i>Nitzschia</i> mg/L EC50 | 300: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 310 - 1220: 96 h <i>Pimephales promelas</i> mg/L LC50 static | 265: 48 h <i>Daphnia magna</i> mg/L EC50 |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|---|-----------------------|
| Alkylbenzenesulfonic Acid 68584-22-5 | 2 |
| Methanol 67-56-1 | -0.77 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------|------|-----------------------------------|------------------------|------------------------|
| Methanol 67-56-1 | | Included in waste stream: F039 | | U154 |

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|-------------------------------|-----------------------------------|
| Sodium hydroxide 1310-73-2 | Toxic Corrosive |
| Methanol 67-56-1 | Toxic Ignitable |
| Sodium carbonate 497-19-8 | Corrosive |

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No

UN1824

Proper Shipping Name Sodium hydroxide, solution
Hazard Class 8
Packing Group II

IATA

UN/ID No UN1824
Proper Shipping Name Sodium hydroxide, solution
Hazard Class 8
Packing Group II

IMDG

UN/ID No UN1824
Proper Shipping Name Sodium hydroxide, solution
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION**International Inventories**

| Chemical Name | TSCA | DSL/ND SL | EINECS/ ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------------------|------|--------------|-------------------|---------|-------|---------|-------|------|
| Sodium hydroxide | X | X | X | Present | X | Present | X | X |
| Alkylbenzenesulfonic Acid | X | X | X | Present | X | Present | X | X |
| Methanol | X | X | X | Present | X | Present | X | X |
| Sodium carbonate | X | X | X | Present | X | Present | X | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|-------------------------------|--------------------------|----------------|---|
| Sodium hydroxide 1310-73-2 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

| | | | |
|---------------------|---------|--|--|
| Methanol 67-56-1 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |
|---------------------|---------|--|--|

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium hydroxide | 1000 lb | | | X |

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|--------------------|---------------------------|
| Methanol - 67-56-1 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------|------------|---------------|--------------|
| Sodium hydroxide 1310-73-2 | X | X | X |
| Methanol 67-56-1 | X | X | X |

16. OTHER INFORMATION

| NFPA | Health Hazards | Flammability | Instability | Special Hazards |
|------|----------------|--------------|-------------|-----------------|
| | 2 | 0 | 2 | A |

| HMIS | Health Hazards | Flammability | Reactivity | Personal Protection |
|------|----------------|--------------|------------|---------------------|
| | 2 | 0 | 2 | J |

Issue Date: 28-Nov-2017
Revision Date: 18-Sep-2019
Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The

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information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet