

Safety Data Sheet

Issue Date: 31-Mar-2015 Revision Date: 09-Jul-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name Buckeye Eco E52

Other means of identification

SDS # BE-6052

Product Code 6052

Recommended use of the chemical and restrictions on use

Recommended Use Water based extraction carpet cleaner.

Details of the supplier of the safety data sheet

Supplier Address

Buckeye International, Inc. 2700 Wagner Place

Maryland Heights, MO 63043 USA

Emergency Telephone Number

Company Phone Number 314-291-1900

24 Hr Medical Emergency Phone: 1-800-303-0441

651-632-8956

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid Physical State Liquid Odor Fresh and clean fragrance

Classification

| Skin sensitization | Category 1 |
|-----------------------|-------------|
| Reproductive toxicity | Category 1B |

Signal Word Danger

Hazard Statements

May damage fertility or the unborn child May cause an allergic skin reaction



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

Unknown Acute Toxicity

3.04% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|--------------------|-----------|----------|
| Benzyl alcohol | 100-51-6 | 1-10 |
| EDTA | 60-00-4 | <5 |
| Borax | 1303-96-4 | <5 |
| Ammonium hydroxide | 1336-21-6 | <1 |
| Zinc oxide | 1314-13-2 | <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 If exposed or concerned: Get medical advice/attention.

Eye Contact Flush with cool water for 15 minutes. If irritation occurs, call a physician.

Skin Contact Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin

irritation occurs: Get medical advice/attention.

Inhalation Remove to fresh air.

Ingestion Give two large glasses of water. Do NOT induce vomiting. Never give anything by mouth to

an unconscious person. Call a physician.

Most important symptoms and effects

Symptoms May damage fertility or the unborn child. May cause an allergic skin reaction.

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.

Hazardous Combustion Products Oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

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.

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 Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow

floor to dry before allowing traffic.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Obtain special

instructions before use. Do not handle until all safety precautions have been read and

understood. Use personal protective equipment as required. Avoid breathing

dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of

the workplace. Wear protective gloves.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep container closed when not in use. Store at room temperature.

Incompatible Materials Do not mix with chlorinated detergents (bleach).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH | |
|---------------|-------------------------------------|--|----------------------------|--|
| Borax | STEL: 6 mg/m ³ inhalable | (vacated) TWA: 10 mg/m ³ | TWA: 5 mg/m ³ | |
| 1303-96-4 | fraction | fraction | | |
| | TWA: 2 mg/m³ inhalable fraction | | | |
| Caustic Soda | Ceiling: 2 mg/m ³ | TWA: 2 mg/m ³ | IDLH: 10 mg/m ³ | |
| 1310-73-2 | | (vacated) Ceiling: 2 mg/m ³ | | |

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|---------------------------------------|---|--|
| Zinc oxide | STEL: 10 mg/m ³ respirable | TWA: 5 mg/m ³ fume | IDLH: 500 mg/m ³ |
| 1314-13-2 | fraction | TWA: 15 mg/m ³ total dust | Ceiling: 15 mg/m ³ dust |
| | TWA: 2 mg/m ³ respirable | TWA: 5 mg/m ³ respirable | TWA: 5 mg/m ³ dust and fume |
| | fraction | fraction | STEL: 10 mg/m ³ fume |
| | | (vacated) TWA: 5 mg/m ³ fume | |
| | | (vacated) TWA: 10 mg/m ³ total | |
| | | dust | |
| | | (vacated) TWA: 5 mg/m ³ | |
| | | respirable fraction | |
| | | (vacated) STEL: 10 mg/m ³ fume | |

Appropriate engineering controls

Engineering Controls Maintain adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use splash goggles and face shield when eye contact may occur.

Skin and Body ProtectionWear rubber gloves or other impervious gloves. Footwear that keeps feet dry is suggested.

Respiratory Protection None under normal use conditions.

General Hygiene Considerations Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

Appearance Clear liquid Odor Fresh and clean

fragrance

Color Clear Odor Threshold Not determined

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

pH 9.35

Melting Point/Freezing Point Not determined

Boiling Point/Boiling Range 100 °C 212 °F

Flash Point None

Evaporation Rate 1.0 (Water = 1)

Flammability (Solid, Gas)
Upper Flammability Limits
Lower Flammability Limit
Vapor Pressure

Liquid-Not applicable
Not applicable
Not determined

Vapor Density Not determined Specific Gravity 1.04

Specific Gravity 1.04
Water Solubility Infinite

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

Density 1.04 gr/ml or 8.67 lbs/gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Incompatible Materials.

Incompatible Materials

Do not mix with chlorinated detergents (bleach).

Hazardous Decomposition Products

None known.

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 |
|---|--|-------------------------|-----------------------|
| Benzyl alcohol 100-51-6 | = 1230 mg/kg (Rat) | = 2 g/kg (Rabbit) | = 8.8 mg/L (Rat)4 h |
| Sodium diisopropylnaphtalene sulphonate 1322-93-6 | = 1350 mg/kg (Rat) | = 4200 mg/kg (Rabbit) | - |
| EDTA 60-00-4 | = 1700 mg/kg (Rat) | - | - |
| Borax 1303-96-4 | = 3493 mg/kg (Rat) = 2660 mg/kg (Rat) | > 10000 mg/kg (Rabbit) | - |
| Caustic Soda 1310-73-2 | - | = 1350 mg/kg (Rabbit) | - |
| Ammonium hydroxide 1336-21-6 | = 350 mg/kg (Rat) | - | <u>-</u> |
| Dilsopropylnaphthalene 38640-62-9 | = 3900 mg/kg (Rat) | > 4500 mg/kg (Rat) | > 5.64 mg/L (Rat) 4 h |
| Zinc oxide 1314-13-2 | > 5000 mg/kg (Rat) | - | - |

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

Sensitization May cause an allergic skin reaction.

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity May damage fertility or the unborn child.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 3.04% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--------------------------------------|---|---|--|--|
| Benzyl alcohol 100-51-6 | 35: 3 h Anabaena variabilis mg/L EC50 | 460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static | EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min | 23: 48 h water flea mg/L EC50 |
| EDTA 60-00-4 | 1.01: 72 h Desmodesmus subspicatus mg/L EC50 | 34 - 62: 96 h Lepomis macrochirus mg/L LC50 static 44.2 - 76.5: 96 h Pimephales promelas mg/L LC50 static | | 113: 48 h Daphnia magna mg/L EC50 Static |
| Caustic Soda 1310-73-2 | | 45.4: 96 h Oncorhynchus mykiss mg/L LC50 static | | |
| Ammonium hydroxide 1336-21-6 | | 8.2: 96 h Pimephales promelas mg/L LC50 | | 0.66: 48 h water flea mg/L EC50 0.66: 48 h Daphnia pulex mg/L EC50 |
| Dilsopropylnaphthalene 38640-62-9 | | 1000: 96 h Cyprinus carpio mg/L LC50 static 1000: 96 h Oryzias latipes mg/L LC50 static | | 2.3: 24 h Daphnia magna mg/L EC50 |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|------------------------|-----------------------|
| Benzyl alcohol | 1.1 |
| 100-51-6 | |
| Dilsopropylnaphthalene | >4 |
| 38640-62-9 | |

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.

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|--------------------|-----------------------------------|
| Borax | Toxic |
| 1303-96-4 | |
| Caustic Soda | Toxic |
| 1310-73-2 | Corrosive |
| Ammonium hydroxide | Toxic |
| 1336-21-6 | Corrosive |
| Zinc oxide | Toxic |
| 1314-13-2 | |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u>

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--------------------|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Benzyl alcohol | Present | Χ | | Present | | Present | Χ | Present | Χ | Χ |
| EDTA | Present | Х | | Present | | Present | Х | Present | Х | Х |
| Borax | Present | Χ | | | | Present | Χ | Present | Χ | Х |
| Ammonium hydroxide | Present | Х | | Present | | Present | Х | Present | Х | Х |
| Zinc oxide | Present | Х | | Present | | Present | Х | Present | Х | Х |

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

Page 7/9

US Federal Regulations

CERCLA

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|--------------------|--------------------------|----------------|--------------------------|
| EDTA | 5000 lb | | RQ 5000 lb final RQ |
| 60-00-4 | | | RQ 2270 kg final RQ |
| Caustic Soda | 1000 lb | | RQ 1000 lb final RQ |
| 1310-73-2 | | | RQ 454 kg final RQ |
| Ammonium hydroxide | 1000 lb | | RQ 1000 lb final RQ |
| 1336-21-6 | | | RQ 454 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 | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous |
|--------------------|------------------|------------------------|---------------------------|-----------------|
| | Quantities | | | Substances |
| EDTA | 5000 lb | | | Х |
| Caustic Soda | 1000 lb | | | Χ |
| Ammonium hydroxide | 1000 lb | | | Х |
| Zinc oxide | | X | | |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------|------------|---------------|--------------|
| Benzyl alcohol 100-51-6 | | X | Х |
| EDTA 60-00-4 | Χ | X | X |
| Borax 1303-96-4 | Х | X | Х |
| Caustic Soda 1310-73-2 | Χ | X | X |
| Ammonium hydroxide 1336-21-6 | Х | Х | Х |
| Zinc oxide 1314-13-2 | X | X | X |

16. OTHER INFORMATION

NFPA Health Hazards Flammability Instability Special Hazards

0 Not determined

HMISHealth HazardsFlammabilityPhysical HazardsPersonal ProtectionNot determinedNot determinedNot determinedNot determined

Issue Date:31-Mar-2015Revision Date:09-Jul-2015Revision 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 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

Page 9/9