Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS
665 Carbon Street
Billings, MT 59102
800-860-6272
www.homesciencetools.com

CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
1 703-741-5500 (from anywhere in the world).
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**LIMEWATER SOLUTION**
Synonyms	Calcium Hydroxide, Water Solution

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: None required
Target organs: None known

GHS Classification:
Eye irritation (Category 2B)

GHS Label information: **Hazard statement(s):**
H320: Causes eye irritation.

P**recautionary statement(s):**
P264: Wash hands thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) **-** Not Known
Physical hazards not otherwise classified (PHNOC) **-** Not Known

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	99.86%	231-791-2
Calcium hydroxide	1305-62-0	0.14%	215-137-3

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Calcium hydroxide	TWA: 5 mg/m^3	TWA: 5 mg/m^3 respirable fraction	TWA: 5 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: No odor.
Odor threshold: Data not available.
pH: 13.0
Melting / Freezing point: Approximately 0°C (32°F) (water)
Boiling point: Approximately 100°C (212°F) (water)
Flash point: Data not available

Evaporation rate (Water = 1): <1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 14 (water)
Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatibilities with other materials: Strong acids, fluorine.

Hazardous decomposition products: None known.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 7,340 mg/kg [Calcium hydroxide]
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: May cause irritation.
Eyes: May cause irritation.
Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: EW2800000 [Calcium hydroxide]

Section 12 Ecological Information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2016 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Calcium hydroxide	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS
665 Carbon Street
Billings, MT 59102
800-860-6272
www.homesciencetools.com

CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
1 703-741-5500 (from anywhere in the world).
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**IODINE-POTASSIUM IODIDE SOLUTION**
Synonyms	Iodine-Iodide / Iodine Solution / Iodine / Iodine Lugol's Dilute / Gram's Iodine Solution / Dilute Lugol's Solution

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: GHS07 / GHS09
Target organs: Thyroid, kidneys, endocrine system, skin, eyes, reproductive system, central nervous system.

GHS Classification:
Acute toxicity, dermal (Category 4)
Acute toxicity, inhalation (Category 4)
Aquatic toxicity, acute (Category 1)

GHS Label information: **Hazard statement(s):**
H312: Harmful in contact with skin.
H332: Harmful if inhaled.
H400: Very toxic to aquatic life.

Precautionary statement(s):
P261: Avoid breathing mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P312: Call a POISON CENTER or doctor if you feel unwell.
P362+P364: Take off contaminated clothing and wash it before reuse.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P391: Collect spillage.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) - Not Known
Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	95.10%	231-791-2
Potassium iodide	7681-11-0	3.05%	231-659-4
Iodine	7553-56-2	1.85%	231-442-4

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Harmful if inhaled.

EYE CONTACT: MAY CAUSE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: HARMFUL IN CONTACT WITH SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. Harmful in contact with skin.

Section 5 Fire Fighting Measures

Extinguishing Media: Use any media suitable for extinguishing supporting fire.

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling.

Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, mist or spray. Wash thoroughly after handling. Remove and wash clothing before reuse.

Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Iodine CAS # 7553-56-2	TWA: 0.01 ppm(IFV)/ STEL: 0.1 ppm(V)	STEL: C 0.1 ppm/C 1 mg/m^3	STEL: C 0.1 ppm/C 1 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Deep amber liquid.
Odor: Characteristic odor.
Odor threshold: Not applicable.
pH: Data not available.
Melting / Freezing point: ~ 0°C (~ 32°F) [water]
Boiling point: ~ 100°C (212°F) [water]
Flash point: Not flammable.

Evaporation rate (Water **= 1):** < 1
Flammability (solid/gas): Not applicable.
Explosion limits: Lower / Upper: Not applicable
Vapor pressure (mm Hg): 14 [water]
Vapor density (Air = 1): 0.7 [water]
Relative density (Specific gravity): 1.0 [water]
Solubility(ies): Complete in water.

Partition coefficient: (n-octanol / water): Not applicable
Auto-ignition temperature: Not applicable
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Stable under recommended storage conditions. Excessive temperatures which cause evaporation.

Incompatibilities with other materials: Metals or unsaturated organic compounds, ammonia solutions or alkaline solutions of ammonia salts. Will form explosive nitrogen iodides when reacted with gaseous ammonia.

Hazardous decomposition products: Toxic iodide fumes.

Section 11 Toxicological Information

Acute toxicity: Oral-Rat LD50: 14,000 mg/kg [Iodine CAS # 7553-56-2]
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Inhalation-rat 3.1 mg/m^3 / 24 hour / 13 weeks - continuous [Iodine CAS # 7553-56-2]
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Symptoms include cough, wheezing, and labored breathing. Symptoms may be delayed.
Ingestion: Causes abdominal pain, diarrhea, nausea, and vomiting. Ingestion of levels of 2-3 grams of iodine may cause death.
Skin: Contact may cause redness and pain.
Eyes: Contact causes watering of the eyes, redness and pain.
Signs and symptoms of exposure: Effects of short-term exposure: Lachrymator. The substance is severely irritating to the eyes and the respiratory tract, and is irritating to the skin. Inhalation of the vapor may cause asthma-like reactions. Inhalation of the vapor may cause lung edema. The effects may be delayed. Effects of long-term exposure: Repeated or prolonged contact may cause skin sensitization in rate cases. Repeated or prolonged inhalation exposure may cause asthma-like syndrome. The substance may have effects on the thyroid. Specific data not available for this mixture. Exercise appropriate procedures to minimize potential hazards..
Additional information: RTECS #: NN1575000 [Iodine CAS # 7553-56-2]

Section 12 Ecological Information

Toxicity to fish: Very toxic to aquatic life.
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2016 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Iodine	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Potassium iodide	Listed	Not listed	Not listed	Listed	Not listed	

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: February 27, 2018 **Supercedes:** February 22, 2018

Woeber MUSTARD Manufacturing Company
P.O. Box 388 • 1966 Commerce Circle • Springfield, Ohio 45501
Phone 937/323-6281 • 1-800/548-2929 • FAX 937/323-1679

Section 1: Identification

Product Identifier:	Vinegar (5% acidity)
Chemical Name:	Acetic Acid (CH3COOH)
CAS #:	64-19-7
Recommended Use:	Food
Manufacturer Name:	Woeber Mustard Mfg. Company
Address:	1966 Commerce Circle Springfield, OH 45501
Telephone:	1-800-548-2929
Emergency Number:	CHEMTREC: 1-800-424-9300

Section 2: Hazard(s) Identification

GHS Classification: Skin Corrosive 2, Eye Irritant 2A, Hazardous to aquatic environment

Signal Word : WARNING

Hazard Statements

H320: Causes eye irritation
H315: Causes skin irritation
H332: Harmful if inhaled
H402: Harmful to aquatic life

Precautionary Statements

P261: Avoid breathing fumes/mist/vapors/spray
P264: Wash exposed skin thoroughly after handling.
P280: Wear protective gloves to avoid prolonged exposure.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P273: Avoid release into the environment

Concentrated vapors irritating to eyes and respiratory tract, avoid inhalation. May cause minor skin irritation.

NFPA Scale-

NFPA SCALE (0-4)

HMIS Rating-

HMIS RATINGS (0-4)

Section 3: Composition/Information on Ingredients

Chemical Name	Amount	CAS Number
Acetic Acid	5%	64-19-7
Water	95%	7732-18-5

Section 4: First Aid Measures

Inhalation: If exposed to excessive levels of fumes, remove to fresh air.

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.

Skin Contact: If on skin; wash with plenty of soap and water. If skin irritation occurs, seek medical advice/attention. If on clothes; remove/take off all contaminated clothing. Rinse skin with soap and water.

Ingestion: Intended for ingestion, however if swallowed in large quantities, water may be consumed to dilute. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Section 5: Fire Fighting Measures

Flash Point: 40° C (104° F) closed cup (Acetic Acid)

Auto Ignition Temp.: 427° C (800° F) (Acetic Acid)

Flammable Limits in Air: 4.0% - 16% (Acetic Acid)

Extinguishing Media:

Water spray, foam CO2 or dry chemical. Water may be used to dilute spills and reduce flammability.

Hazards from Fire:

Toxic gasses and vapors may be released in a fire involving concentrated vinegars.

Section 6: Accidental Release Measures

Small Spill Procedure:

Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements. Water may be used to dilute.

Large Spill Procedure:

Contain spilled material. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Avoid runoff into storm sewers and ditches that lead to waterways. Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements.

Personal Protection:

Protect skin and eyes from exposure. Avoid breathing vapor.

Environmental Precautions:

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Section 7: Handling and Storage

Precautions for Handling:

Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Wash contaminated clothing before reusing.

Conditions for safe Storage:

Store in a cool, well ventilated place.

Section 8: Exposure Controls/Personal Protection

Permissible Exposure Limit (PEL):	10 ppm acetic acid
Threshold Limit Value (TLV):	10 ppm acetic acid
Short Term Exposure Limit (STEL):	15 ppm acetic acid
Recommended Exposure Limit (REL):	10 ppm acetic acid

Engineering Controls:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLV during the use of the product. Emergency shower and eye wash stations should be readily available.

Eye/Face Protection;

Wear safety glasses and/or face shield.

Skin Protection:

Rubber/neoprene gloves recommended. Rubber apron or other protective equipment as needed to reduce direct contact. (Concentrated vinegars only)

Respiratory Protection:

As required to prevent exposure to concentrations which exceed the PEL.

Thermal Hazards: None known

General Hygiene considerations:

Section 9: Physical and Chemical Properties

Physical State and Appearance:	Liquid
Odor:	Pungent, Vinegar-like
Color:	Colorless, Clear
Boiling Point:	100°C (212°F)
Freezing Point:	-2.22°C (28 °F)
PH:	2.6
Specific Gravity:	1.049 (Water = 1)
Vapor Pressure:	1.5 kPa @ 20°C
Solubility in Water:	Complete

Section 10: Stability and Reactivity

Reactivity/Stability:	The product is stable and non-reactive under normal conditions of use, storage and transport.
Incompatibilities:	Avoid strong oxidizing agents / bases
Polymerization:	Will not occur

Section 11: Toxicological Information

Routes of entry	Inhalation, ingestion and skin contact
Symptoms (acute)	Respiratory irritation
Delayed effects	No data available
Carcinogenicity	No evidence of a carcinogenic effect
Mutagenicity	No evidence of a mutagenicity effect
Teratogenicity	No evidence of a teratogenicity effect
Sensitization	No evidence of a sensitization effect
Reproductive	No evidence of a Reproductive effect

Section 12: Ecological Information

Ecotoxicity: Will biodegrade readily under aerobic and anaerobic conditions.

Section 13: Disposal Considerations

Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements.

Section 14: Transportation Information

Product Label:	Vinegar.
DOT Shipping Name:	Not applicable
Technical Shipping Name:	Not applicable
DOT Hazard Class:	Not applicable
UN Number:	Not applicable for vinegar containing less than 25% acetic acid, provided packaging complies with ADR Special Provision 647; UN2790 for vinegar containing more than 25% acetic acid
Product RQ (lbs):	Quantity containing the equivalent of 5000 lb of 100% acetic acid, (16,667 lb of vinegar containing 30% acetic acid)
DOT Label:	Not applicable

Section 15: Regulatory Information

Canadian Disclosure List:
Acetic Acid (64-19-7)

Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA):
Acetic Acid (64-19-7)

Food & Drug Administration (FDA)
Product is a GRAS (Generally Recognized as Safe) food ingredient.

Section 16: Other Information

Not Available

Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company

Members of :
American National Standards Institute
American Society for Testing and Materials
British Standards Institute
Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

TEST REPORT

NUMBER: HKGH00807390 S1

APPLICANT: TOYSMITH
5110 FRONTAGE ROADAUBURN,
WA98001
ATTN: BURKE WILLIAMS

DATE: Jan 14, 2009

THIS IS TO SUPERSEDE REPORT NO. HKGH00807390 DATED Jan 02, 2009

SAMPLE DESCRIPTION:
ONE (1) SUBMITTED SAMPLE SAID TO BE **FIZZY TINTS.**
COLOR : #10 RED.
****

TESTS CONDUCTED:
AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)
****

FOR AND ON BEHALF OF :
INTERTEK TESTING SERVICES HK LTD.

KAREN S.C. NG
GENERAL MANAGER

Intertek Testing Services Hong Kong Ltd.
2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2786 1903 Website: www.intertek.com

TEST REPORT NUMBER: HKGH00807390 S1

TESTS CONDUCTED

1 TOTAL LEAD (Pb) CONTENT

WITH REFERENCE TO US EPA METHOD 6010/6020, BY DRY ASHING AND ACID DIGESTION, FOLLOWED BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY DETERMINATION.

RESULT : 0.082 ppm

LIMIT : 7.5 ppm

REMARK : ppm = PARTS PER MILLION OR MILLIGRAMS PER KILOGRAM

THE ABOVE LIMIT WAS QUOTED FROM THE CONSENT JUDGEMENT NO. BC-352903 FOR COSMETIC PRODUCT BASED ON THE CALIFORNIA PROPOSITION 65.

DATE SAMPLE RECEIVED : DEC 18, 2008
TESTING PERIOD : DEC 22, 2008 TO DEC 24, 2008

****

END OF REPORT

Intertek Testing Services Hong Kong Ltd.
2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2786 1903 Website: www.intertek.com

Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company
Members of :
American National Standards Institute
American Society for Testing and Materials
British Standards Institute
Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

To: FACE ART INDUSTRIAL LIMITED Ref: FC-090-0311

Attention: W.S. LAM. Date: Jan 14, 2009

Re : Report Revision Notification

Intertek Testing Services Report Number HKGH00807390 Dated Jan 02, 2009

Please be informed that all the content recorded in the above captioned report will be void. This captioned report is now supersede by a revised Intertek Testing Services Report, HKGH00807390 S1

Thank you for your attention.

FOR AND ON BEHALF OF :
INTERTEK TESTING SERVICES HK LTD.

KAREN S.C. NG
GENERAL MANAGER

MSDS - Sodium Bicarbonate Baking Soda Tablets

Section 1. Product Identification

Synonyms: Sodium hydrogen carbonate; sodium acid carbonate; baking soda; bicarbonate of soda

Section 2. Product Identification

Sodium Bicarbonate Tablets
CAS Number: 144-55-8
Not hazardous under OSHA Standard CFR 1910.1200
Not a WHMIS controlled substance

Section 3. Hazards Identification

Tablets, can have residual dust
No odor
Not a fire hazard
No significant health or environmental effects associated with this material
WHMIS Rating: Health: 0 Fire: 0 Reactivity: 0

Potential Health Effects

Eye: Not an eye irritant

Skin Contact: Not a skin irritant

Ingestion: Material is practically non-toxic. Small amounts (1-2 tablespoons) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury (see Note in Section 8).

Inhalation: Not known

Sub-chronic Effects/Carcinogenicity: Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic. Only known sub-chronic effect is that of a marked systemic alkalosis. The material is not listed as a carcinogen or potential carcinogen by IARC, OSHA, ACGIH, NTP or NIOSH.

Section 4. First Aid Measures

Eyes: Check for and remove contacts. Flood eyes with clean flowing water, low pressure and lukewarm (not hot) if possible, occasionally lifting eyelids.

Ingestion: If large amounts of this material are swallowed, do not induce vomiting. Administer water if person is conscious. Never give anything by mouth to an unconscious person.

Note to Physician: Large doses may product\e systemic alkalosis and expansion in extra cellular fluid volume with oedema.

Section 5. Fire Fighting Measures

Flammable Properties

Flashpoint: Not combustible
Method Used: Not applicable

Flammable Limits

LFL: Not applicable
UFL: Not applicable

Extinguishing Media: Non- combustible material. Use extinguishing media appropriate for surrounding fire.

Fire Fighting Instructions: Carbon Dioxide may be generated making necessary the use of a self contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear). Carbon dioxide is an asphyxiant at levels over 5% w/w. Sodium oxide, another thermal decomposition product existing at temperatures above 156F is a respiratory, eye and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.
Unusual Fire and Explosion Hazards: Not known

Section 6. Accidental Release Measures

Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

Section 7. Handling and Storage

Store in cool, dry areas and away from incompatible substances (see section 10).
Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.

Section 8. Exposure Controls/Personal Protection

Respiratory Protection: Dust mask required if total dust level exceeds 10 mg/m3

Protective Gloves: General purpose for handling dry product. Impervious gloves when working with solutions.

Eye Protection: Safety glasses when handling bulk material or when dusts are generated
Other Protective Clothing or Equipment: Full cover clothing. Apron where splashing may occur when working with solutions.

Section 9. Physical and Chemical Properties

Appearance: Tablets
Odor: None
Physical State: Solid
pH as is: Not applicable
pH (1% Soln. w/v): 8.2
Vapor Pressure: Not applicable
Vapor Density: Not applicable
Boiling Point: Not applicable
Freezing/Melting Point: Not applicable
Solubility in Water: 8.6 g/100 ml @ 68F
Specific Gravity (Water = 1): 2.2
Apparent Density: (g/cc): Approximately 1
% Volatile: Not applicable
Volatile Organic Compounds: Not applicable
Molecular Weight: 84.02

Section 10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Temperatures above 65C (150F)

Incompatibility with Other Materials: Reacts with acids to yield carbon dioxide. Also may yield free caustic in presence of lime dust. (CaO) and moisture (i.e. water, perspiration).

Hazardous Decomposition Products: Heating above 100C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Avoid inhalation, eye and skin contact with sodium oxide.

Hazardous Polymerization: Not applicable

Section 11. Toxicological Information

Eye Effects: The material was minimally irritating to unwashed eyes and practically non irritating to washed eyes (rabbit).

Skin Effects: Not a skin irritant or dermally toxic. Not a contact sensitizer

Acute Oral Effects: Acute Oral- rat LD = 7.3 g/kg

Acute Inhalation: Lc50 (rat) > 4.74 mg/1

Section 12. Ecological Information

Aquatic Toxicity: Daphids - EC50 = 4100 mg/1 Bluegill - LC50 = 7100 mg/1 Rainbow Trout - LC50 = mg/1
Persistence: This product is not expected to persist in the environment
Bio Accumulation: This product is not expected to bio-accumulate

Section 13. Disposal Considerations

Bury in a secured landfill in accordance with all local, state and federal environmental regulations. Empty containers may be incinerated or discarded as general trash.

Section 14 Transportation Information

D.O.T. Shipping Name: Not regulated
Technical Shipping Name: Sodium Bicarbonate
D.O.T. Hazard Class: None

Section 15. Regulatory Information

Clean Air Act Section 611: Material neither contains nor is it manufactured with ozone depleting substances (ODS).
Federal Water Pollution Control Act (40 CDR 401,15): Material contains no intentionally added or detectable (contaminant) levels of EPA priority toxic pollutants.
Food and Drug Administration: Generally Recognized As Safe (GRAS) direct food additive (21 CFR 184.1736)
OSHA: Not hazardous under 29 CFR 1910.1200
RCRA: Not a hazardous material or a hazardous waste by listing or characteristic

Disclaimer

This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. We make no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or combination with any other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS
665 Carbon Street
Billings, MT 59102
800-860-6272
www.homesciencetools.com

CHEMTREC 24 Hour Emergency USA
Phone Number (800) 424-9300
1 703-741-5500 (from anywhere in the world).
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**ETHYL ALCOHOL, DENATURED, 95%**
Synonyms	Ethanol, Denatured, 95%

Section 2 Hazards Identification

Signal word: DANGER
Pictograms: GHS02 / GHS06 / GHS07 / GHS08
Target organs: Eyes, Central nervous system, Liver, Kidneys.

GHS Classification:
Flammable liquid (Category 2)
Acute toxicity, oral (Category 3)
Acute toxicity, dermal (Category 3)
Acute toxicity, inhalation (Category 3)
Eye irritation (Category 2B)
STOT-SE (Category 2)
STOT-SE (Category 3)

GHS Label information: **Hazard statement:**
H225: Highly flammable liquid and vapour.
H301: Toxic if swallowed.
H311: Toxic in contact with skin.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H336: May cause drowsiness or dizziness.
H371: May cause damage to organs.

Precautionary statement:
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233+P235: Keep container tightly closed. Keep cool.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P311: IF exposed or concerned: Call a POISON CENTER or doctor.
P337+P313: If eye irritation persists: Get medical attention.
P361+P364: Take off immediately all contaminated clothing and wash it before reuse.
P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.
P403+P405: Store in a well-ventilated place. Store locked up.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) - Not Known
Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Ethyl alcohol	64-17-5	80.75 - 81.51%	200-578-6
Isopropyl alcohol	67-63-0	8.55%	200-661-7
Water	7732-18-5	5.00%	231-791-2
Methanol	67-56-1	3.80 - 4.08%	200-659-6
Methyl isobutyl ketone	108-10-1	0.85 - 0.95%	203-550-1

Section 4 First Aid Measures

INGESTION: TOXIC IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: TOXIC IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: TOXIC IN CONTACT WITH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Ethanol	STEL: 1000 ppm / 1880 mg/m^3(A3)	TWA: 1000 ppm / 1900 mg/m^3	TWA: 1000 ppm / 1900 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: Mild characteristic odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: -114°C (-173°F)*
Boiling point: 74-80°C (165.2-176°F)*
Flash point: 5°C (41°F)*

Evaporation rate (Butyl acetate **= 1):** Ca 2*
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: 4.0%(V) / 20.0%(V)*
Vapor pressure (mm Hg): Ca 50 @ 20°C*
Vapor density (Air = 1): Ca 1.5*
Relative density (Specific gravity): 0.7919-0.7955°C @ 60/60°F*
Solubility(ies): Soluble in water.

Partition coefficient: (n-octanol / water): Low Pow: -.32*
Auto-ignition temperature: 400°C (752°F)*
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

*[Ethanol]

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Strong oxidizers, inorganic acids and halogens.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 7060 mg/kg ; Inhalation-rat LC50: 124.7 mg/l/4hours [Ethanol]
Skin corrosion/irritation: Skin-rabbit - Slight irritant.
Serious eye damage/irritation: Eyes-rabbit - Severe irritant.
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans. [Isopropanol]
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
CA Prop 65: ⚠ WARNING! : This product can expose you to chemicals including Methanol and Methyl isobutyl ketone, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
Reproductive toxicity: Data not available
STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation may cause dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat.
Ingestion: Ingestion causes dizziness, drowsiness, decreased reaction, euphoria, nausea, vomiting, staggering gait and coma.
Skin: Contact with skin causes irritation defatting on prolonged contact.
Eyes: Contact with eyes may cause blindness.
Signs and symptoms of exposure: See Potential health effects above.
Additional information: RTECS #: KQ6300000 [Ethanol]

Section 12 Ecological Information

Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg/l/24 hours [Ethanol]
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Ethanol, 99.8% pure]
Toxicity to algae: Chlorella pyrenoidosa (Algae), EC50 = 9,310 mg/l/growth rate [Ethanol, absolute]
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN1170 **Shipping name:** Ethanol
Hazard class: 3 **Packing group:** II **Reportable Quantity:** 5,000 lbs (2270 kg) **Marine pollutant:** No
Exceptions: Limited quantity equal to or less than 1 L **2016 ERG Guide #** 127

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Ethanol	Listed	Not listed	D001	Listed	Not listed	⚠ WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.
Methanol	Listed	5,000 lbs.	U154	Listed	Not listed	
Isopropanol	Listed	Not listed	Not listed	Listed	Not listed	

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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