SAFETY DATA SHEET

1. Identification

Product identifier NitreBlue (TM) Bluing Salts, 10 lbs.

Other means of identification

Product code 082-090-019
Recommended use Metal finishing
Recommended restrictions Not available.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameBROWNELLS, INC.Address200 South Front Street

Montezuma, Iowa 50171

United States

Telephone (641) 623-5401 **E-mail** Not available.

Emergency phone

number

INFOTRAC Registrant #79335

24 hour Emergency Number, Domestic: (800) 457-4280 24 hour Emergency Number, Foreign: +1(352) 323-3500

2. Hazard(s) identification

Physical hazardsOxidizing solidsCategory 3Health hazardsAcute toxicity, oralCategory 3Acute toxicity, inhalationCategory 1Serious eye damage/eye irritationCategory 2A

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Hazardous to the aquatic environment,

long-term hazard Not available.

OSHA defined hazards

Label elements



Signal word Danger

Hazard statement May intensify fire; oxidizer. Toxic if swallowed. Toxic if inhaled. Causes serious eye damage.

Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Observe good industrial hygiene practices. Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Do not get in eyes, on skin, or on clothing. Wear protective gloves/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Category 3

Response In case of fire: Use appropriate media to extinguish. If swallowed: Immediately call a poison

center/doctor. Rinse mouth. Specific treatment (see this label). If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. Specific treatment is urgent (see this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Storage Store locked up. Store in a well-ventilated place. Store in a cool, dry place away from incompatible

materials. Keep container tightly closed.

Disposal Dispose of in accordance with current, applicable local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC)

Not available.

Hazard(s) not otherwise classified (HNOC)

Not available.

Supplemental information

13.25% of the mixture consists of component(s) of unknown acute oral toxicity. 44.25% of the mixture consists of component(s) of unknown acute inhalation toxicity. 1.75% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 1.75% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
POTASSIUM NITRATE		7757-79-1	25 - < 60
SODIUM NITRITE		7632-00-0	25 - < 60
SODIUM NITRATE		7631-99-4	1 - < 2.5
Other components below reportable I	evels		10 - < 20

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call

a poison center or doctor.

Skin contact Remove contaminated clothing. Immediately wash off with plenty of soap and water. Wash

contaminated clothing before reuse.

Eye contact Keep eye wide open while rinsing. Immediately flush eyes with plenty of water for at least 15

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub eyes. Get

medical attention immediately.

Ingestion Give victim two glasses of water. Never give anything by mouth to a victim who is unconscious or is

having convulsions. Rinse mouth thoroughly. Do not induce vomiting. Get medical attention

immediately.

Most important

symptoms/effects, acute and

delayed

Gastrointestinal discomfort. Moderate eye irritation. Eye damage. Inhalation of dust may cause shortness of breath, cough, sore throat, or tightness of the chest. Dusts may irritate the respiratory

tract, skin and eyes.

Indication of immediate medical attention and special

treatment needed General information Provide general supportive measures and treat symptomatically. Keep victim under observation.

Contact with combustible material may cause fire. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the

doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

media

Carbon dioxide (CO2). Dry chemical. Foam. Water Spray or Fog.

Not available.

Specific hazards arising from

the chemical

When a material is contaminated with the product, the material ignites easily and burns vigorously. Product is an oxidizer and promotes combustion. Run off water may cause environmental damage.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and NIOSH approved self-contained breathing apparatus (SCBA).

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Fire fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes.

Specific methods

Nitrogen oxides (NOx).

products

General fire hazards

Hazardous combustion

May cause fire or explosion; strong oxidizer. Contact with combustible material may cause fire.

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Keep away from clothing and other combustible materials. Ensure adequate ventilation. Do not breath dust/fume/gas/mist/vapors/spray. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Avoid contact with skin, eyes, and clothes. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the Safety Data Sheet for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Surfaces may become slippery after

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop the flow of material, if this is without risk. Avoid the generation of dusts during clean-up.

Clean up in accordance with all applicable regulations.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Clean surface thoroughly to remove residual contamination.

Large Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. Avoid the generation of dusts during clean-up. Avoid release to the environment. Avoid discharge into drains, waterways, sewers, or onto the ground. Runoff from fire control or dilution water may cause pollution. Do not contaminate water.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Observe good industrial hygiene practices. Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. See Section 8 of the safety data sheet (SDS) for Personal Protective Equipment. Do not ingest. Do not eat, drink or smoke when using the product. Wash hands thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Store in a cool, dry place away from incompatible materials. See Section 10 of the SDS for incompatible materials. Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. Wear chemical goggles and face shield.

Skin protection

Hand protection Wear protective gloves.

Other Avoid contact with skin and clothing. Wear suitable protective clothing with long sleeves.

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Respiratory protection Wear respirator with dust filter. Use a NIOSH/MSHA approved respirator if there is a risk of

exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using, do not eat, drink or smoke, Keep away from food and drink. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly.

9. Physical and chemical properties

Appearance

Solid. **Physical state** Powder. **Form** Color Pink.

Odor Not available. **Odor threshold** Not available. Not available. рH 297 °F (147.22 °C) Melting point/freezing point

Initial boiling point and

boiling range

Not available.

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

upper (%)

Flammability limit -

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Not available. Vapor pressure Vapor density Not available.

Relative density < 1.4 at 59 degrees Fahrenheit

Solubility(ies)

Solubility (water) Soluble in water. Not available. **Partition coefficient**

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature Viscosity** Not available.

10. Stability and reactivity

Reactivity Not available.

Chemical stability Stable under normal temperature conditions. **Possibility of hazardous** Hazardous polymerization does not occur.

reactions

Conditions to avoid Prevent contamination or contact with secondary amines. Excessive heat. Contact with incompatible

materials.

Incompatible materials Combustible material. Cyanides. Strong reducing agents. When sodium nitrite in the presence of

secondary amines may form carcinogenic and hazardous nitrosamines.

Hazardous decomposition

products

Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation Do not breathe dust/fume/gas/mist/vapors/spray. Toxic if inhaled. Inhalation of dust may cause

shortness of breath, cough, sore throat, or tightness of the chest. Dusts may irritate the

respiratory tract.

Skin contact Do not get this material in contact with skin. Dust or powder may irritate the skin.

Eye contact Do not get this material in contact with eyes. Causes serious eye damage. Moderate eye irritation.

Dust may irritate the eyes.

Ingestion Do not swallow or taste. Toxic if swallowed. Gastrointestinal discomfort

Symptoms related to the physical, chemical and toxicological characteristics

Gastrointestinal discomfort. Moderate eye irritation. Eye damage. Inhalation of dust may cause

shortness of breath, cough, sore throat, or tightness of the chest. Dusts may irritate the

respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Toxic if swallowed. Toxic if inhaled. Causes serious eye damage.

Skin corrosion/irritation Dust or powder may irritate the skin.

Serious eye damage/eye

Moderately irritating to the eyes. Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Not available.

Germ cell mutagenicity Not available.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity Not available. **Specific target organ toxicity** Not available.

- single exposure

Specific target organ toxicity Not available.

- repeated exposure

Aspiration hazard Not available.

Chronic effects May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Persistence and degradability Not available. Bioaccumulative potential Not available.

Mobility in soil Due to water solubility, will likely be mobile in the environment.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructionsDispose of in accordance with current, applicable local, state, and federal regulations.

Waste from residues / Not available.

unused products

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN3087

UN proper shipping name Oxidizing Solid, Toxic, N.O.S. (POTASSIUM NITRATE, SODIUM NITRITE)

Transport hazard class(es) Class5.1

Subsidiary risk 6.1 Packing group III

Special precautions for

user

for Read safety instructions, SDS and emergency procedures before handling.

ERG number 141

IATA

UN number UN3087

UN proper shipping name Oxidizing Solid, Toxic, N.O.S. (POTASSIUM NITRATE, SODIUM NITRITE)

Transport hazard class(es)

Class 5.1
Subsidiary risk 6.1
Packing group III
Environmental hazards No.

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

user

Other information

Passenger and cargo A

aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN3087

UN proper shipping name Oxidizing Solid, Toxic, N.O.S. (POTASSIUM NITRATE, SODIUM NITRITE)

Transport hazard class(es)

Class 5.1
Subsidiary risk 6.1
Packing group III
Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

usei

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

DOT





15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

SODIUM NITRITE (CAS 7632-00-0)

1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

SODIUM NITRITE (CAS 7632-00-0)

Listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

> Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
POTASSIUM NITRATE	7757-79-1	25 - < 60	
SODIUM NITRITE	7632-00-0	25 - < 60	
SODIUM NITRATE	7631-99-4	1 - < 2.5	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is

not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

POTASSIUM NITRATE (CAS 7757-79-1) SODIUM NITRATE (CAS 7631-99-4) SODIUM NITRITE (CAS 7632-00-0)

US. New Jersey Worker and Community Right-to-Know Act

POTASSIUM NITRATE (CAS 7757-79-1) SODIUM NITRATE (CAS 7631-99-4) SODIUM NITRITE (CAS 7632-00-0)

US. Pennsylvania Worker and Community Right-to-Know Law

POTASSIUM NITRATE (CAS 7757-79-1) SODIUM NITRATE (CAS 7631-99-4) SODIUM NITRITE (CAS 7632-00-0)

US. Rhode Island RTK

POTASSIUM NITRATE (CAS 7757-79-1) SODIUM NITRATE (CAS 7631-99-4)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

16. Other information, including date of preparation or last revision

Issue date 11-07-2017

Version # 01

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 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.

Revision Information This document has undergone significant changes and should be reviewed in its entirety.

Material name: NitreBlue (TM) Bluing Salts, 10 lbs. 1440 Version #: 01 Issue date: 11-07-2017

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).