SAFETY DATA SHEET - BROWNELL'S MIX OR KIT PRODUCT

Stock Number: 082-200-000

Brownells Manganese Parkerizing Kit consisting of:
1) Atomized Steel (081-021-104)
2) Dicro-Clean 909 (082-005-008)
3) Manganese Parkerizing Solution (082-200-128)
4) Post Treatment (083-134-640)
**SAFETY DATA SHEET**

### 1. Identification

**Product identifier**  
ATOMIZED STEEL POWDER

**Other means of identification**

- **Product code**: 081-021-104
- **Recommended use**: Filler/Additive
- **Recommended restrictions**: Not available.

**Manufacturer/Importer/Supplier/Distributor information**

- **Manufacturer**: BROWNELLS, INC.
- **Address**: 200 South Front Street, Montezuma, Iowa 50171, United States
- **Telephone**: (641) 623-5401
- **Website**: www.brownells.com
- **E-mail**: Not available.
- **Emergency phone number**: INFOTRAC Registrant #79335, 24 hour Emergency Number, Domestic: (800) 457-4280, Foreign: +1(352) 323-3500

### 2. Hazard(s) identification

- **Physical hazards**: Not available.
- **Health hazards**: Not available.
- **Environmental hazards**: Not available.
- **OSHA defined hazards**: Not available.

**Label elements**

- **Hazard symbol**: Not available.
- **Signal word**: Not available.
- **Hazard statement**: Not available.

**Precautionary statement**

**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only with adequate ventilation. Do not get in eyes, on skin, or on clothing. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment.

**Response**

If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing. If on skin: Wash with plenty of soap and water. If in eyes: hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. If exposed or concerned: Get medical advice/attention. If swallowed, do NOT induce vomiting. Give victim water or milk. Call a physician or poison control center immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Storage**

Store in a dry place at an ambient temperature away from incompatible materials. Store locked up. Store indoors.

**Disposal**

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

**Hazard(s) not otherwise classified (HNOC)**

- Not available.

**Supplemental information**

- Not available.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRON</td>
<td></td>
<td>7439-89-6</td>
<td>100</td>
</tr>
</tbody>
</table>

#: This substance has workplace exposure limit(s).

vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Skin contact

Remove contaminated clothing. Wash with plenty of soap and water. If symptoms persist, get medical attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eye gently and thoroughly with plenty of water while holding the eyelid open for 15 minutes. Get medical attention if irritation develops and persists.

Ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Take off all contaminated clothing immediately.

General information

Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet (SDS) to the doctor in attendance. Take off contaminated clothing and shoes immediately.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol foam, carbon dioxide (CO2), dry chemical, foam, or water fog.

Unsuitable extinguishing media

Not available.

Specific hazards arising from the chemical

Decomposition byproducts and volatilization of organic components with potential for hazardous exposure may be produced if product is exposed to extreme heat. Finely divided dust in air and a source of ignition presents a possible risk of fire or explosion. Flammable mixtures in air may occur from fine powders.

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).

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

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

Hazardous combustion products

Metallic oxides.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Avoid inhalation of dust. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Avoid the generation of dusts during clean-up.

Clean up in accordance with all applicable regulations.

Large Spills: Sweep up and shovel into suitable containers for disposal.

Small Spills: Sweep up and shovel into suitable containers for disposal.

Environmental precautions

Avoid release to the environment. Prevent entry into drains or waterways.

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. Use care in handling/storage. Avoid breathing dust. Provide adequate ventilation. Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Remove contaminated clothes and wash separately before reuse. Observe good industrial hygiene practices. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store in a dry place at an ambient temperature away from incompatible materials. See Section 10 of the SDS for incompatible materials. Store locked up. Store indoors.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRON (CAS 7439-89-6)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total Dust</td>
</tr>
</tbody>
</table>

Biological limit values

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

Appropriate engineering controls

Good general ventilation should be sufficient to control airborne levels. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Synthetic or thick natural gloves.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

Dust mask, type N95 recommended.

Thermal hazards

Not available.

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. Do not get in eyes, on skin, on clothing. When using, do not eat, drink or smoke. Keep away from food and drink.

9. Physical and chemical properties

Appearance

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Form</th>
<th>Color</th>
<th>Odor</th>
<th>Odor threshold</th>
<th>pH</th>
<th>Melting point/freezing point</th>
<th>Initial boiling point and boiling range</th>
<th>Flash point</th>
<th>Evaporation rate</th>
<th>Flammability (solid, gas)</th>
</tr>
</thead>
</table>
Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.
Vapor pressure
Not available.
Vapor density
Not available.
Relative density
Not available.
Solubility(ies)
Solubility (water)
Insoluble.
Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature
Not available.
Decomposition temperature
Not available.
Viscosity
Not available.
Other information
Specific gravity
2.4 - 3.2

10. Stability and reactivity
Reactivity
Not available.
Chemical stability
Material is stable under normal conditions.
Possibility of hazardous reactions
Will not occur under normal conditions.
Conditions to avoid
Contact with incompatible materials.
Incompatible materials
Strong oxidizing agents. Strong acids.
Hazardous decomposition products
Metallic oxides. Toxic byproducts may form when product is exposed to strong acids.

11. Toxicological information
Information on likely routes of exposure
Inhalation
Avoid breathing dust. Not expected to present a hazard in normal industrial use. Chronic lung irritation may result from prolonged or repeated overexposure.
Skin contact
Avoid contact with the skin. Transient irritation and redness maybe caused by prolonged contact with skin.
Eye contact
Avoid contact with eyes. Exposure may cause mechanical irritation to eyes. Exposure may cause tearing and redness.
Ingestion
Do not swallow/ingest. Swallowing small amounts (tablespoon or less) of material is not expected to present a hazard. Ingestion of significant amounts may cause intestinal upset.
Symptoms related to the physical, chemical and toxicological characteristics
Irritating to eyes, respiratory system and skin.

Information on toxicological effects
Acute toxicity
Swallowing small amounts (a tablespoonful) during normal use of product will not likely cause injury. Swallowing larger amounts may cause injury. Irritating to eyes, respiratory system and skin.
Skin corrosion/irritation
Transient irritation and redness.
Serious eye damage/eye irritation
Mechanical irritation.
Respiratory or skin sensitization
Respiratory sensitization
Not available.
Skin sensitization
Not available.
Germ cell mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Specific target organ toxicity - single exposure: Not available.
Specific target organ toxicity - repeated exposure: Not available.
Aspiration hazard: Not available.
Chronic effects: Chronic lung irritation may result from prolonged or repeated overexposure. Transient irritation and redness to the skin may result from prolonged contact.

12. Ecological information
Ecotoxicity: Not available.
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available.
Other adverse effects: Not available.

13. Disposal considerations
Disposal instructions: Dispose of in accordance with current, applicable local, state, and federal regulations.
Waste from residues / unused products: Not available.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information
DOT: Not regulated as dangerous goods.
IATA: Not regulated as dangerous goods.
IMDG: Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

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.
CERCLA/SARA Hazardous Substances - Not applicable.
SARA 304 Emergency release notification - Not regulated.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) - Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4) - Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories: Immediate Hazard - No, Delayed Hazard - No, Fire Hazard - No, Pressure Hazard - No, Reactivity Hazard - No.
SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312
Hazardous chemical
No
SARA 313 (TRI reporting)
Not regulated.

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
US, California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.
US, Massachusetts RTK - Substance List
Not regulated.
US, New Jersey Worker and Community Right-to-Know Act
Not listed.
US, Pennsylvania Worker and Community Right-to-Know Law
Not listed.
US, Rhode Island RTK
Not regulated.
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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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).

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

Issue date 12-30-2014
Version # 01
References
ACGIH
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
EPA: AQUIRE database
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

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
Product and Company Identification: Product Uses
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
SAFETY DATA SHEET

1. Identification

Product identifier: Dicro-Clean 909™

Other means of identification

Product code: 082-005-008

Recommended use: Gun parts cleaning agent

Recommended restrictions: Not available.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name: BROWNELS, INC.

Address: 200 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 hazards: Not available.

Health hazards

Acute toxicity, oral Category 1

Acute toxicity, dermal Category 1

Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Specific target organ toxicity, single exposure Category 2 (nervous system)

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards

Hazardous to the aquatic environment, acute hazard Category 2

Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards: Not available.

Label elements

Signal word: Danger

Hazard statement: Fatal if swallowed. Fatal in contact with skin. Causes severe skin burns and eye damage. May cause respiratory irritation. May cause damage to organs (nervous system).

Precautionary statement

Prevention: Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response
If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Specific treatment (see this label).

Storage
Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
Not available.

Hazard(s) not otherwise classified (HNOC)
Not available.

Supplemental information
25.5% of the mixture consists of component(s) of unknown acute oral toxicity. 25.5% of the mixture consists of component(s) of unknown acute dermal toxicity. 25.5% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 25.5% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM METASILICATE</td>
<td></td>
<td>6834-92-0</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>TRISODIUM PHOSPHATE</td>
<td></td>
<td>7601-54-9</td>
<td>20 - &lt; 30</td>
</tr>
</tbody>
</table>

Other components below reportable levels
60 - < 70

*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. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing. Wash off with soap and water. Chemical burns must be treated by a physician. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. Causes serious eye damage. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed
Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

General information
Take off immediately all contaminated clothing. If you feel unwell, seek medical advice (show the label where possible). 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. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

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

Hazardous combustion products
Not available.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Wear appropriate protective clothing including gloves and face protection during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

Precautions for safe handling
Provide adequate ventilation. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wear appropriate personal protective equipment. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Keep container tightly closed. Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRISODIUM PHOSPHATE</td>
<td>STEL</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>(CAS 7601-54-9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles) and a face shield. Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
Chemical respirator with organic vapor cartridge and full facepiece. In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Wash hands after handling and before eating. 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. Keep away from food and drink.

9. Physical and chemical properties

Appearance
Physical state Solid.
Form Granular.
Color White.
Odor Not available.
Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling range Not available.
Flash point Not available.
Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits
Flammability limit - lower Not available.
Flammability limit - upper Not available.
Explosive limit - lower Not available.
Explosive limit - upper Not available.
Vapor pressure Not available.
Vapor density Not available.
Relative density Not available.
Solubility(ies)
Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Contact with incompatible materials.
Incompatible materials Strong acids. Chlorinated hydrocarbons. Leather. Wool. Some metals (e.g. aluminum, zinc, tin, brass, etc) May generate heat when mixed with water.
Hazardous decomposition products Not available.

11. Toxicological information
Information on likely routes of exposure
Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact | Fatal in contact with skin. Causes severe skin burns.
Eye contact | Causes serious eye damage.
Ingestion | Fatal if swallowed. Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics | Burning pain and severe corrosive skin damage. Causes serious eye damage. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity | Fatal if swallowed. Fatal in contact with skin. May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicro-Clean 909 ™</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
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<tr>
<td>LD50</td>
<td>Rabbit</td>
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<tr>
<td>Inhalation</td>
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<td>LD50</td>
<td>Rat</td>
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<td>Oral</td>
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<tr>
<td>LD50</td>
<td>Mouse</td>
<td>12000 mg/kg estimated</td>
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<tr>
<td>Rat</td>
<td>23.9103 mg/kg estimated</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM METASILICATE (CAS 6834-92-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>2400 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>1280 mg/kg</td>
<td></td>
</tr>
<tr>
<td>TRISODIUM PHOSPHATE (CAS 7601-54-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>2 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2.16 mg/l, 1 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.8 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation | Causes severe skin burns and eye damage.
Serious eye damage/eye irritation | Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization | Due to partial or complete lack of data the classification is not possible.
Skin sensitization | Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity | Due to partial or complete lack of data the classification is not possible.
Carcinogenicity | Due to partial or complete lack of data the classification is not possible.
Reproductive toxicity | Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity | May cause respiratory irritation.
- single exposure | |
Specific target organ toxicity | Due to partial or complete lack of data the classification is not possible.
- repeated exposure | |
Aspiration hazard | Due to partial or complete lack of data the classification is not possible.
Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicro-Clean 909 ™</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>55.3537 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1633.7014 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Waste from residues / unused products
Not available.

Contaminated packaging
Not available.

14. Transport information

DOT
UN number: UN3262
UN proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (sodium metasilicate, trisodium phosphate)
Transport hazard class(es): Class 8
Subsidiary risk: -
Packing group: III
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IATA
UN number: UN3262
UN proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (sodium metasilicate, trisodium phosphate)
Transport hazard class(es): Class 8
Subsidiary risk: -
Packing group: III
Environmental hazards: No.
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft: Forbidden.
Cargo aircraft only: Forbidden.

IMDG
UN number: UN3262
UN proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (sodium metasilicate, trisodium phosphate)
Transport hazard class(es): Class 8
Subsidiary risk: -
Packing group: III
Environmental hazards: Marine pollutant: No.
Read safety instructions, SDS and emergency procedures before handling. Special precautions for user Not established. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4) TRISODIUM PHOSPHATE (CAS 7601-54-9) 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 - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.

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

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

Not listed.

**US. Massachusetts RTK - Substance List**

TRISODIUM PHOSPHATE (CAS 7601-54-9)

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

TRISODIUM PHOSPHATE (CAS 7601-54-9)

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

TRISODIUM PHOSPHATE (CAS 7601-54-9)

**US. Rhode Island RTK**

TRISODIUM PHOSPHATE (CAS 7601-54-9)

**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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*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).

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

**Issue date**  
04-29-2015

**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.
SAFETY DATA SHEET

1. Identification

Product identifier: MANGANESE PARKERIZING SOLUTION, 1 GALLON

Other means of identification
- SDS number: 082-200-128
- Product code: 082-200-128

Recommended use: Gun finish coating.

Recommended restrictions: Not available.

Manufacturer/Importer/Supplier/Distributor information
- Company name: BROWNELLS, INC.
- Address: 200 South Front Street, Montezuma, IA 50171, US
- 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

Not available.

Physical hazards
- Skin corrosion/irritation: Category 1

Health hazards
- Serious eye damage/eye irritation: Category 1
- Sensitization, respiratory: Category 1
- Sensitization, skin: Category 1
- Carcinogenicity: Category 1A
- Reproductive toxicity: Category 1
- Specific target organ toxicity, repeated exposure: Category 2

OSHA hazard(s)
- Not available.

Label elements

Signal word: Danger

Hazard statement: May intensify fire; oxidizer. Causes severe skin burns and eye damage. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement
- Prevention: Do not handle until all safety precautions have been read and understood. Take any precaution to avoid mixing with combustibles. Do not breathe mist or vapor. In case of inadequate ventilation wear respiratory protection. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Wash thoroughly after handling.
- Response: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes, immediately flush eyes with plenty of water for at least 15 minutes. Do NOT induce vomiting. Get medical attention immediately. In case of fire: Use appropriate media for extinction.
Storage

Store in accordance with local, state, and federal regulations. Keep in a cool, well-ventilated place. For safe storage, store at or above 40 °F (4.4 °C). Store in a tightly closed container away from incompatible materials.

Disposal

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

Environmental hazards

Hazardous to the aquatic environment, acute hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3

Supplemental information

Hazard statement

Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1)</td>
<td>18718-07-5</td>
<td>10 - &lt; 30</td>
<td></td>
</tr>
<tr>
<td>PHOSPHORIC ACID</td>
<td>7664-38-2</td>
<td>5 - &lt; 10</td>
<td></td>
</tr>
<tr>
<td>MANGANESE NITRATE</td>
<td>10377-66-9</td>
<td>1 - &lt; 5</td>
<td></td>
</tr>
<tr>
<td>IRON SULPHATE</td>
<td>7720-78-7</td>
<td>0.1 - &lt; 1</td>
<td></td>
</tr>
<tr>
<td>NICKEL NITRATE (2+ SALT)</td>
<td>13138-45-9</td>
<td>0.1&lt; 1</td>
<td></td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>60 - &lt; 70</td>
<td></td>
</tr>
</tbody>
</table>

#: This substance has workplace exposure limit(s).
*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. Oxygen or artificial respiration if needed. Get medical attention if symptoms persist. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Skin contact

Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion

Get medical attention immediately. Do not induce vomiting. Give one or two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause allergic skin reaction. May cause allergic respiratory reaction. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet (SDS) to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Use any media suitable for the surrounding fires.

Unsuitable extinguishing media

Not available.

Specific hazards arising from the chemical

Decomposes with heat to produce oxides of nitrogen. Irritating and toxic gases or fumes may be released during a fire.
Special protective equipment and precautions for firefighters
In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. This product is an aqueous mixture which will not burn.

Fire-fighting equipment/instructions
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, and rubber boots. Wear positive pressure self-contained breathing apparatus (SCBA).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material. Avoid contact with skin, eyes, and clothes. Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and materials for containment and cleaning up
Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Clean up in accordance with all applicable regulations.

Large Spills: Absorb spill with vermiculite or other inert material. Shovel the material into waste container. Avoid dust formation.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

Environmental precautions
Avoid release to the environment. Do not contaminate water. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Avoid prolonged exposure. Avoid contact with eyes, skin, and clothing. Avoid breathing mists or aerosols of this product. Do not take internally. Avoid contact during pregnancy/while nursing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Avoid release to the environment. Do not empty into drains. Do not mix this product with material which contain AMINES; NITROSAMINE may be formed.

Conditions for safe storage, including any incompatibilities
For safe storage, store at or above 40 °F (4.4 °C). Keep in a cool, well-ventilated place. Store in a tightly closed container away from incompatible materials (see Section 10 of the SDS for incompatible materials). Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGANESE NITRATE (CAS 10377-66-9)</td>
<td>Ceiling</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1) (CAS 18718-07-5)</td>
<td>Ceiling</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGANESE NITRATE (CAS 10377-66-9)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1) (CAS 18718-07-5)</td>
<td>TWA</td>
<td>0.02 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGANESE NITRATE (CAS 10377-66-9)</td>
<td>STEL</td>
<td>3 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td>1 mg/m³</td>
<td>Fume.</td>
</tr>
</tbody>
</table>
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1) (CAS 18718-07-5)</td>
<td>STEL</td>
<td>3 mg/m3</td>
<td>Fume.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Fume.</td>
</tr>
</tbody>
</table>

**Biological limit values**
No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**
Not available.

**Appropriate engineering controls**
Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  Do not get in eyes. Chemical goggles and face shield are recommended.

- **Skin protection**
  - **Hand protection**
    Use chemical resistant and impermeable gloves made of neoprene or nitrile. Prolonged contact with chemical requires gloves to be tested to determine suitability.
  - **Other**
    Do not get this material in your eyes, on your skin, or on your clothing. Use of impervious boots and apron are recommended.

- **Respiratory protection**
  Do not breathe dust/fume/gas/mist/vapors/spray. If ventilation is not sufficient to effectively prevent buildup of aerosols or mists, appropriate NIOSH/MSHA respiratory protection must be provided. A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever work place conditions warrant a respirator’s use.

- **Thermal hazards**
  Not available.

- **General hygiene considerations**
  Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

9. **Physical and chemical properties**

**Appearance**
- **Physical state**
  Liquid.
- **Form**
  Liquid.
- **Color**
  Green.
- **Odor**
  Bland.
- **Odor threshold**
  Not available.
- **pH**
  < 1
- **Melting point/freezing point**
  Not available.
- **Initial boiling point and boiling range**
  > 210 °F (> 98.89 °C) Calculated.
- **Flash point**
  320.00 °F (160.00 °C)
- **Evaporation rate**
  Not available.
- **Flammability (solid, gas)**
  Not available.

**Upper/lower flammability or explosive limits**
- **Flammability limit - lower (%)**
  Not available.
- **Flammability limit - upper (%)**
  Not available.
- **Explosive limit - lower (%)**
  Not available.
- **Explosive limit - upper (%)**
  Not available.
- **Vapor pressure**
  Not available.
- **Vapor density**
  Not available.
- **Relative density**
  Not available.
- **Solubility(ies)**
  100 %
- **Partition coefficient (n-octanol/water)**
  Not available.
- **Auto-ignition temperature**
  Not available.
10. Stability and reactivity

Reactivity Not available.
Chemical stability Stable at normal conditions.
Possibility of hazardous reactions Will not occur.
Conditions to avoid Do not mix this product with material which contain amines; nitrosamine may be formed.
Incompatible materials This product may react with strong alkalis.
Hazardous decomposition products Decomposes with heat to produce oxides of nitrogen. Irritating and toxic gases or fumes may be released during a fire.

11. Toxicological information

Information on likely routes of exposure

Ingestion Do not ingest. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Components of the product may be absorbed into the body by ingestion.

Inhalation Do not breathe mist/vapors/liquid/spray. Prolonged inhalation may be harmful. May cause severe respiratory irritation or burns.

Skin contact Do not get this material in contact with skin. Contact with liquid may produce severe skin irritation including redness, inflammation and chemical burns. An allergic skin sensitization reaction may be caused by exposure to a nickel compound.

Eye contact Do not get this material in contact with eyes. Severely irritating to eyes. May cause irreversible eye damage including burns and blindness.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result. Phosphoric acid, manganese (2+) salt (2:1) causes health and target organ effects to the lung, nervous system, irritant, behavioral, developmental, kidney, respiratory, mutagen, blood, or reproductive. Phosphoric acid causes health and target organ effects of irritation or corrosion. Manganese nitrate causes health and target organ effects to the kidney, lung, developmental, behavioral, reproductive, cardiac, vascular, irritant, nervous system, liver, blood, respiratory, or mutagen. Iron sulphate causes health and target organ effects to the immune system, liver, developmental, some evidence of carcinogenicity, allergen, reproductive, central nervous system, sensory, irritant, corrosive, vascular mutagen, kidney, blood, cardiac, respiratory, or lung. Nickel nitrate (2+ salt) causes health and target organ effects to the kidney, lung, cardiac, vascular, corrosive, irritant, mutagen, liver, central nervous system, metabolic, or gastrointestinal.

Information on toxicological effects

Acute toxicity Causes burns to the skin, eyes, and respiratory system. Causes eye damage.
Skin corrosion/irritation Causes severe irritation and burns to the skin.
Serious eye damage/eye irritation Causes severe eye burns. Causes serious eye damage.
Respiratory sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization Irritating to skin. May cause an allergic skin reaction.
Germ cell mutagenicity Not available.
Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

NICKEL NITRATE (2+ SALT) (CAS 13138-45-9) 1 Carcinogenic to humans.

NTP Report on Carcinogens

NICKEL NITRATE (2+ SALT) (CAS 13138-45-9)

Reproductive toxicity May damage fertility or the unborn child.
Specific target organ toxicity - single exposure Not available.
Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard Not available.
Chronic effects

Hazardous by OSHA criteria. Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

Further information

Not available.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects. Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Not available.

Other adverse effects

Not available.

13. Disposal considerations

Disposal instructions

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

Local disposal regulations

Not available.

Hazardous waste code

Not available.

Waste from residues / unused products

Not available.

Contaminated packaging

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

14. Transport information

DOT

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN1805</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Phosphoric acid solution</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary class(es)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Packing group</td>
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<tr>
<td>Special precautions for user</td>
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IATA

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<tr>
<td>Subsidiary class(es)</td>
<td>-</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
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<td>ERG Code</td>
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IMDG

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<td>-</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
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<tr>
<td>Environmental hazards</td>
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<tr>
<td>Marine pollutant</td>
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<td>EmS</td>
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<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
15. Regulatory information

US federal regulations
All components are on the U.S. EPA TSCA Inventory List.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not on regulatory list.

CERCLA Hazardous Substance List (40 CFR 302.4)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Sulphate (CAS 7720-78-7)</td>
<td>LISTED</td>
</tr>
<tr>
<td>Manganese Nitrate (CAS 10377-66-9)</td>
<td>LISTED</td>
</tr>
<tr>
<td>Phosphoric Acid (CAS 7664-38-2)</td>
<td>LISTED</td>
</tr>
<tr>
<td>Phosphoric Acid, Manganese(2+) Salt (2:1) (CAS 18718-07-5)</td>
<td>LISTED</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

<table>
<thead>
<tr>
<th>Hazard categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Hazard - Yes</td>
</tr>
<tr>
<td>Delayed Hazard - Yes</td>
</tr>
<tr>
<td>Fire Hazard - No</td>
</tr>
<tr>
<td>Pressure Hazard - No</td>
</tr>
<tr>
<td>Reactivity Hazard - No</td>
</tr>
</tbody>
</table>

SARA 302 Extremely hazardous substance No
SARA 311/312 Hazardous chemical No

Other federal regulations

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

<table>
<thead>
<tr>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese Nitrate (CAS 10377-66-9)</td>
</tr>
<tr>
<td>Nickel Nitrate (2+ Salt) (CAS 13138-45-9)</td>
</tr>
<tr>
<td>Phosphoric Acid, Manganese(2+) Salt (2:1) (CAS 18718-07-5)</td>
</tr>
</tbody>
</table>

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
Not listed.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
Not regulated.

DEA Exempt Chemical Mixtures Code Number
Not regulated.

Food and Drug Administration (FDA)
Not regulated.
Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
WARNING: This product contains a chemical known to the State of California to cause cancer. 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. Massachusetts RTK - Substance List
IRON SULPHATE (CAS 7770-78-7)
NICKEL NITRATE (2+ SALT) (CAS 13138-45-9)
PHOSPHORIC ACID (CAS 7664-38-2)

US. New Jersey Worker and Community Right-to-Know Act
MANGANESE NITRATE (CAS 10377-66-9) 500 LBS
NICKEL NITRATE (2+ SALT) (CAS 13138-45-9) 500 LBS
PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1) (CAS 18718-07-5) 500 LBS

US. Pennsylvania RTK - Hazardous Substances
IRON SULPHATE (CAS 7770-78-7)
NICKEL NITRATE (2+ SALT) (CAS 13138-45-9)
PHOSPHORIC ACID (CAS 7664-38-2)

US. Rhode Island RTK
IRON SULPHATE (CAS 7770-78-7)
MANGANESE NITRATE (CAS 10377-66-9)
PHOSPHORIC ACID (CAS 7664-38-2)
PHOSPHORIC ACID, MANGANESE(2+) SALT (2:1) (CAS 18718-07-5) 500 LBS

US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
NICKEL NITRATE (2+ SALT) (CAS 13138-45-9)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
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<td>Canada</td>
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<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
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<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
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<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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

Issue date 06-19-2014
Revision date 06-19-2014
Version # 02
Further information Not available.
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 Product and Company Identification: Alternate Trade Names
1. Identification

Product identifier Post Treatment (5 gallon)

Other means of identification
Product code 083-134-640

Recommended use Rust preventative and mild solvent

Manufacturer/Importer/Supplier/Distributor information
Manufacturer
Company name BROWNELLS, INC.
Address 200 South Front Street
Montezuma, Iowa 50171
United States

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

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Germ cell mutagenicity Category 1B
Carcinogenicity Category 1A
Aspiration hazard Category 1

Environmental hazards Not available.

OSHA defined hazards Not available.

Label elements

Signal word Danger

Hazard statement Flammable liquid and vapor. May cause genetic defects. May cause cancer. May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection.

Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. If swallowed: Call a poison center/physician immediately. Do NOT induce vomiting.

Storage Store in a well-ventilated place. Keep cool. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
Not available.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPHTHA (PETROLEUM), HYDROTREATED HEAVY</td>
<td></td>
<td>64742-48-9</td>
<td>80 - &lt; 90</td>
</tr>
<tr>
<td>NAPHTHA (PETROLEUM), HEAVY ALKYLATE</td>
<td></td>
<td>64741-65-7</td>
<td>10 - &lt; 20</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed
Keep victim under observation. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

General information
IF exposed or concerned: Get medical advice/attention. 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
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

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

Hazardous combustion products
Not available.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.
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. Provide adequate ventilation. Use personal protective equipment as required. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

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
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

Other
Use of an imperious apron is recommended.

Respiratory protection
Chemical respirator with organic vapor cartridge and full facepiece.

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.

9. Physical and chemical properties

Appearance
Physical state
Liquid.
Form
Liquid.
Color
Not available.
Odor
Mild, petroleum odor.
Odor threshold
Not available.
pH
Not available.
Melting point/freezing point
Not available.
Initial boiling point and boiling range
Not available.
Flash point
120.0 °F (48.9 °C) Closed Cup
Evaporation rate
< 0.2 BuAc = 1 estimated
Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.

Vapor pressure
Not available.
Vapor density
Not available.
Relative density
0.759
Solubility(ies)

Solubility (water)  Negligible
Partition coefficient (n-octanol/water)  Not available.
Auto-ignition temperature  Not available.
Decomposition temperature  Not available.
Viscosity  Not available.

Other information

Flammability class  Combustible II estimated

10. Stability and reactivity

Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Material is stable under normal conditions.
Possibility of hazardous reactions  No dangerous reaction known under conditions of normal use.
Conditions to avoid  Contact with incompatible materials.
Incompatible materials  Strong oxidizing agents.
Hazardous decomposition products  No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation  No adverse effects due to inhalation are expected.
Skin contact  No adverse effects due to skin contact are expected.
Eye contact  Direct contact with eyes may cause temporary irritation.
Ingestion  Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics  Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity  Not available.
Skin corrosion/irritation  Due to partial or complete lack of data the classification is not possible.
Serious eye damage/eye irritation  Due to partial or complete lack of data the classification is not possible.
Respiratory or skin sensitization

Respiratory sensitization  Due to partial or complete lack of data the classification is not possible.
Skin sensitization  Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity  May cause genetic defects.
Carcinogenicity  May cause cancer.
Reproductive toxicity  Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure  Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure  Due to partial or complete lack of data the classification is not possible.
Aspiration hazard  If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.

Chronic effects  Not available.

12. Ecological information

Ecotoxicity  The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability  No data is available on the degradability of this product.
Bioaccumulative potential  No data available.
Mobility in soil  No data available.
13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Flammable liquids, n.o.s. (Naphtha)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Class: 3, Subsidiary risk: -, Label(s): 3, Packing group: III</td>
</tr>
</tbody>
</table>

| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | B1, B52, IB3, T4, TP1, TP29 |
| Packaging exceptions | 150 |
| Packaging non bulk | 203 |
| Packaging bulk | 242 |

IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1993</th>
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</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Flammable liquid, n.o.s. (Naphtha)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Class: 3, Subsidiary risk: -, Packing group: III</td>
</tr>
</tbody>
</table>

| Environmental hazards | No. |
| ERG Code | 3L |

| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | Passenger and cargo aircraft: Allowed. Cargo aircraft only: Allowed. |

IMDG

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Class: 3, Subsidiary risk: -, Packing group: III</td>
</tr>
</tbody>
</table>

| Environmental hazards | No. |
| Marine pollutant | F-E, S-E |

| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established. |

Material name: Post Treatment (5 gallon)
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. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**
Not listed.

**SARA 304 Emergency release notification**
Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - Yes
  - Pressure Hazard - No
  - Reactivity Hazard - No

- **SARA 302 Extremely hazardous substance**
  Not listed.

- **SARA 311/312 Hazardous chemical**
  No

- **SARA 313 (TRI reporting)**
  Not regulated.

**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**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

- **US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**
  Not listed.
US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
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<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
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<td>Canada</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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).

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

Issue date: 11-20-2014

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 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.