# SAFETY DATA SHEET

CLEAN STEEL I

## Section 1. Identification

**Product identifier** : CLEAN STEEL I

**Product code** : 20-10451, 1001200

**Product type** : Powder.

### Relevant identified uses of the substance or mixture and uses advised against

#### Identified uses

Industrial applications: Stain remover for stainless steel.

#### Uses advised against

This product is formulated to be diluted. Do not use undiluted. Read product label before using.

**Supplier's details** : Sani-Marc Inc.
42 rue de l'Artisan
Victoriaville, Qc
G6P 7E3
1-819-758-1541

**Emergency telephone number (with hours of operation)** : 1-800-361-7691 (8am - 5pm Monday to Thursday) (8am - 4pm Friday)

## Section 2. Hazard identification

**Classification of the substance or mixture** : SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
Health Hazards Not Otherwise Classified - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H314 - Causes severe skin burns and eye damage.
Causes digestive tract burns.

### Precautionary statements

**General** : Not applicable.

**Prevention** : P260 - Do not breathe dust or mist.
P264 - Wash thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves: Chemical-resistant, impervious gloves . Wear protective clothing: Recommended: safety apron. Wear eye or face protection: Recommended: Safety Glasses.

**Response** : P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.
P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

# Section 2. Hazard identification

P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P363 - Wash contaminated clothing before reuse.

**Storage** : P405 - Store locked up or keep under supervision.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** :

**Hazards not otherwise classified** : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

| Ingredient name | % (w/w) | CAS number |
|---|---|---|
| sodium hydrogensulphate | ≥80 | CAS: 7681-38-1 |
| potassium permanganate | ≥7 - ≤13 | CAS: 7722-64-7 |

**Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.**

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First-aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occur. Chemical burns must be treated promptly by a physician. Get medical attention if blistering occurs or redness persists.

**Inhalation** : Move victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Get medical attention if adverse health effects persist or are severe. Maintain an open airway.

**Skin contact** : Rinse with water. Flush contaminated skin with plenty of water. Remove contaminated clothing and wash it before reuse. Wash clothing before reuse. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Chemical burns must be treated promptly by a physician. Clean shoes thoroughly before reuse. Get medical attention if blistering occurs or redness persists.

**Ingestion** : Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Get medical attention if symptoms occur.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. May cause eye burn

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact** : May cause skin burns

# Section 4. First-aid measures

**Ingestion** : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

## Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action should be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing them, or wear gloves.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
sulfur oxides
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action should be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action should be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Eye/face protection** : If operating conditions cause high dust concentrations to be produced, use dust goggles. Continued or severe exposures might required to wear a face shield or chemical splash goggles. It is minimally suggested to wear safety glasses while using or handling this product.

**Hand protection** : It is suggested to wear chemical-reisitant gloves while using or handling this product.

**Body protection** : It is suggested to wear safety apron while using or handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : It is suggested to wear dust-protection mask for prolonged or intense exposures.

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

**Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

No specific data.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| potassium permanganate | **CA Saskatchewan Provincial (Canada, 4/2021) [Manganese and inorganic compounds]**<br>STEL 15 minutes: 0.6 mg/m³ (measured as Mn).<br>TWA 8 hours: 0.2 mg/m³ (measured as Mn).<br>**CA British Columbia Provincial (Canada, 9/2024) [manganese - elemental & inorganic compounds]** Repr.<br>TWA 8 hours: 0.1 mg/m³ (as Mn). Form: Inhalable.<br>TWA 8 hours: 0.02 mg/m³ (as Mn). Form: Respirable.<br>**CA Ontario Provincial (Canada, 6/2019) [Manganese elemental and inorganic compounds]**<br>TWA 8 hours: 0.2 mg/m³ (as Mn).<br>**CA Quebec Provincial (Canada, 2/2024) [Manganese- fumes, dusts and compounds]**<br>TWAEV 8 hours: 0.2 mg/m³ (as Mn). Form: inhalable aerosol fraction.<br>TWAEV 8 hours: 0.05 mg/m³ (as Mn). Form: respirable aerosol fraction.<br>**CA Alberta Provincial (Canada, 3/2023) [Manganese, elemental & inorganic compounds]**<br>OEL 8 hours: 0.2 mg/m³ (as Mn). |

### Biological exposure indices

No exposure indices known.

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

**Eye/face protection** : If operating conditions cause high dust concentrations to be produced, use dust goggles. Continued or severe exposures might required to wear a face shield or chemical splash goggles. It is minimally suggested to wear safety glasses while using or handling this product.

### Skin protection

**Hand protection** : It is suggested to wear chemical-reisitant gloves while using or handling this product.

**Body protection** : It is suggested to wear safety apron while using or handling this product.

## Section 8. Exposure controls/personal protection

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : It is suggested to wear dust-protection mask for prolonged or intense exposures.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**

**Physical state** : Solid. [Powder.]

**Color** : Purple. White.

**Odor** : Odorless.

**Odor threshold** : Not available.

**pH** : 1.4 [Conc. (% w/w): 1%]

**Melting point/freezing point** : Not available.

**Boiling point or initial boiling point and boiling range** : Not available.

**Flash point** : [Product does not sustain combustion.]

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Not applicable.

**Vapor pressure** : Not available.

**Relative vapor density** : Not applicable.

**Relative density** : Not available.

**Solubility(ies)** :

| Media | Result |
|---|---|
| cold water | Easily soluble |
| hot water | Easily soluble |

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

**Particle characteristics**

**Median particle size** : Not available.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

# Section 10. Stability and reactivity

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| sodium hydrogensulphate | LD50 Oral | Rat | 2490 mg/kg | - |
| potassium permanganate | LD50 Oral | Rat | 750 mg/kg | - |

### Irritation/Corrosion

Not available.

### Respiratory or skin sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | IARC | NTP | ACGIH |
|---|---|---|---|
| sodium hydrogensulphate | 3 | - | - |
| potassium permanganate | - | - | A4 |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Dermal, Inhalation, Eyes.
Routes of entry not anticipated: Oral.

### Potential acute health effects

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes. May cause eye burn

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact** : May cause skin burns

**Ingestion** : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

# Section 11. Toxicological information

**Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

**Ingestion** : Adverse symptoms may include the following:
stomach pains

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| CLEAN STEEL I | 7500.0 | N/A | N/A | N/A | N/A |
| sodium hydrogensulphate | 2490 | N/A | N/A | N/A | N/A |
| potassium permanganate | 750 | N/A | N/A | N/A | N/A |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| sodium hydrogensulphate | Acute EC50 190 mg/l | Daphnia - *Daphnia magna* | 48 hours |
| potassium permanganate | Acute EC50 2.96 mg/dm3 Fresh water | Algae - *Scenedesmus quadricauda* | 72 hours |
| | Acute EC50 990 µg/l Fresh water | Crustaceans - *Crangonyx pseudogracilis* - Adult | 48 hours |
| | Acute EC50 0.084 ppm Fresh water | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 0.354 mg/l Fresh water | Fish - *Ictalurus punctatus* - Juvenile (Fledgling, Hatchling, | 96 hours |

## Section 12. Ecological information

| | | | |
|---|---|---|---|
| | Chronic NOEC 0.196 µg/l Fresh water | Weanling)<br>Fish - *Ictalurus punctatus* - Adult | 4 weeks |

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

Not available.

**Mobility in soil**

**Soil/Water partition coefficient** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | TDG Classification |
|---|---|
| **UN number** | UN1759 |
| **UN proper shipping name** | UN 1759 CORROSIVE SOLID N.O.S (potassium permanganate) |
| **Transport hazard class (es)** | 8  |
| **Packing group** | III |
| **Environmental hazards** | Yes. |

**Additional information**

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).
The marine pollutant mark is not required when transported by road or rail.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

# Section 14. Transport information

**Transport in bulk according to IMO instruments** : Not available.

# Section 15. Regulatory information

## Canadian lists

**Canadian NPRI** : The following components are listed: manganese (and its compounds)

**CEPA Toxic substances** : None of the components are listed.

## Montreal Protocol

Not listed.

## Inventory list

**Canada** : All components are listed or exempted.

**United States** : All components are active or exempted.

# Section 16. Other information

## History

**Date of printing** : 2026-08-05

**Date of issue/Date of revision** : 2026-08-05

**Date of previous issue** : 2024-09-24

**Version** : 0.02

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

## Procedure used to derive the classification

| Classification | Justification |
|---|---|
| SKIN CORROSION - Category 1 | On basis of test data |
| SERIOUS EYE DAMAGE - Category 1 | On basis of test data |
| Health Hazards Not Otherwise Classified - Category 1 | On basis of test data |

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**