

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Twinkle Stainless Steel Cleaner

**Other means of identification**

**Product Code** 525417

**Recommended use** General Purpose Cleaner

**Recommended restrictions** None known.

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

**Manufacturer**

**Company name** Malco Products, Inc.

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Barberton, OH 44203  
United States

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**Contact person** Technical Department

**Emergency phone number** Phone 1-800-424-9300

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1

**Health hazards** Aspiration hazard Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. May be fatal if swallowed and enters airways.

**Precautionary statement**

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

**Response** If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.

**Storage** Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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

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

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                               | Common name and synonyms | CAS number | %         |
|---|--------------------------|------------|-----------|
| Distillates (Petroleum), Hydrotreated Light |                          | 64742-47-8 | 10 - < 20 |
| N-butane                                    |                          | 106-97-8   | 5 - < 10  |

| Chemical name                            | Common name and synonyms | CAS number | %         |
|--|--------------------------|------------|-----------|
| Propane                                  |                          | 74-98-6    | 5 - < 10  |
| Other components below reportable levels |                          |            | 70 - < 80 |

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

#### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.  |
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.  |
| <b>Eye contact</b>  | Rinse with water. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>  | 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. |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Aspiration may cause pulmonary edema and pneumonitis.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  |

#### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Powder. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO <sub>2</sub> ).   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.  |
| <b>General fire hazards</b>  | Extremely flammable aerosol. Combustible.   |

#### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.   |

## 7. Handling and storage

### Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

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

| Components            | Type | Value                  |
|-----------------------|------|------------------------|
| Propane (CAS 74-98-6) | PEL  | 1800 mg/m3<br>1000 ppm |

#### US. ACGIH Threshold Limit Values

| Components              | Type | Value    |
|-------------------------|------|----------|
| N-butane (CAS 106-97-8) | STEL | 1000 ppm |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Components              | Type | Value                  |
|-------------------------|------|------------------------|
| N-butane (CAS 106-97-8) | TWA  | 1900 mg/m3<br>800 ppm  |
| Propane (CAS 74-98-6)   | TWA  | 1800 mg/m3<br>1000 ppm |

### 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** Face shield is recommended. Wear safety glasses with side shields (or goggles).

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

##### Other

Wear suitable protective clothing.

##### Respiratory protection

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

##### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using do not smoke. 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

Clear.

### Physical state

Liquid.

### Form

Aerosol.

### Color

Brown.

### Odor

Solvent.

|   |                                 |
|---|---------------------------------|
| <b>Odor threshold</b>                               | Not available.                  |
| <b>pH</b>   | Not available.                  |
| <b>Melting point/freezing point</b>                 | Not available.                  |
| <b>Initial boiling point and boiling range</b>      | 274.76 °F (134.87 °C) estimated |
| <b>Flash point</b>                                  | -156.0 °F (-104.4 °C) estimated |
| <b>Evaporation rate</b>                             | Not available.                  |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                 |
| <b>Upper/lower flammability or explosive limits</b> |                                 |
| <b>Flammability limit - lower (%)</b>               | 1.9 % estimated                 |
| <b>Flammability limit - upper (%)</b>               | 9.5 % estimated                 |
| <b>Explosive limit - lower (%)</b>                  | Not available.                  |
| <b>Explosive limit - upper (%)</b>                  | Not available.                  |
| <b>Vapor pressure</b>                               | 23.34 psig @70F estimated       |
| <b>Vapor density</b>                                | Not available.                  |
| <b>Relative density</b>                             | Not available.                  |
| <b>Solubility(ies)</b>                              |                                 |
| <b>Solubility (water)</b>                           | Not available.                  |
| <b>Auto-ignition temperature</b>                    | 392 °F (200 °C) estimated       |
| <b>Decomposition temperature</b>                    | Not available.                  |
| <b>Viscosity</b>                                    | Not available.                  |
| <b>Other information</b>                            |                                 |
| <b>Explosive properties</b>                         | Not explosive.                  |
| <b>Oxidizing properties</b>                         | Not oxidizing.                  |
| <b>Specific gravity</b>                             | 0.82 estimated                  |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Nitrates. Fluorine. Chlorine.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Prolonged inhalation may be harmful.   |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.   |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |

**Symptoms related to the physical, chemical and toxicological characteristics**      Aspiration may cause pulmonary edema and pneumonitis.

### Information on toxicological effects

**Acute toxicity**      May be fatal if swallowed and enters airways.

| Components              | Species | Test Results                |
|-------------------------|---------|-----------------------------|
| N-butane (CAS 106-97-8) |         |                             |
| <b>Acute</b>            |         |                             |
| <b>Inhalation</b>       |         |                             |
| LC50                    | Mouse   | 680 mg/l, 2 Hours           |
|                         | Rat     | 658 mg/l, 4 Hours           |
| Propane (CAS 74-98-6)   |         |                             |
| <b>Acute</b>            |         |                             |
| <b>Inhalation</b>       |         |                             |
| LC50                    | Rat     | > 1442.847 mg/l, 15 Minutes |

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

|   |  |
|---|--|
| <b>Skin corrosion/irritation</b>                                      | Prolonged skin contact may cause temporary irritation.   |
| <b>Serious eye damage/eye irritation</b>                              | Direct contact with eyes may cause temporary irritation.   |
| <b>Respiratory or skin sensitization</b>                              |  |
| <b>Respiratory sensitization</b>                                      | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |  |
|   | Not available.   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
|   | Not listed.  |
| <b>US. National Toxicology Program (NTP) Report on Carcinogens</b>    |  |
|   | Not available.   |
| <b>Reproductive toxicity</b>  | This product is not expected to cause reproductive or developmental effects.                                     |
| <b>Specific target organ toxicity - single exposure</b>               | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b>             | Not classified.  |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>  | Prolonged inhalation may be harmful.   |

## 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.

| Components   | Species | Test Results   |
|--|---------|--|
| Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8) |         |  |
| <b>Aquatic</b>   |         |  |
| Fish   | LC50    | Rainbow trout, donaldson trout (Oncorhynchus mykiss) |
|  |         | 2.9 mg/l, 96 hours                                   |

\* 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

#### Partition coefficient n-octanol / water (log Kow)

|          |      |
|----------|------|
| N-butane | 2.89 |
| Propane  | 2.36 |

**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

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | 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).  |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.              |

### 14. Transport information

#### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | AEROSOLS, FLAMMABLE   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Packaging non bulk</b>           | None  |
| <b>Packaging bulk</b>               | None  |

#### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | No.   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |
| <b>Passenger and cargo aircraft</b> | Allowed.  |
| <b>Cargo aircraft only</b>          | Allowed.  |

#### IMDG

|   |   |
|---|---|
| <b>UN number</b>  | UN1950  |
| <b>UN proper shipping name</b>  | AEROSOLS, FLAMMABLE   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>  | 2.1   |
| <b>Subsidiary risk</b>  | -   |
| <b>Packing group</b>  | Not applicable.   |
| <b>Environmental hazards</b>  |   |
| <b>Marine pollutant</b>   | No.   |
| <b>EmS</b>  | Not available.  |
| <b>Special precautions for user</b>   | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not established.  |

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

#### 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.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
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)

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

#### 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. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

N-butane (CAS 106-97-8)

**US. Massachusetts RTK - Substance List**

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

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

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

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

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**US. Rhode Island RTK**

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**US. California Proposition 65**

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

**International Inventories**

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

\*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** 12-22-2014

**Revision date** 03-18-2016

**Version #** 02

**Disclaimer** Malco Corporate cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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. The information in the sheet was written based on the best knowledge and experience currently available.

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