MATERIAL SAFETY DATA SHEET
CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Midwest Plus™ Aerosol Spray
Chemical Name: Aerosol
Part Number: 380080
Product Use: Cleaning and Lubrication
Distributed By: DENTSPLY Professional
A Division of DENTSPLY International
901 West Oakton Street, Des Plaines, IL 60018-1834
Tel: 1-847-640-4800 or 1-800-800-7202

Information in case of emergency:
Abbreviated dialing: 145 (or: ++41 (0)44/251 51 51) Toxicological Info-Centre CH-Zurich

2 Hazards Identification

· Hazard description:

   F+ Extremely flammable

· Information concerning particular hazards for human and environment:

   The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.
   Warning! Pressurized container.
   R 12 Extremely flammable.
   Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.
   Do not pierce or burn, even after use.
   60.1 % by mass of the contents are flammable
   Keep out of the reach of children

· Classification system:

   The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

· Description: Active substance with propellant
· Declarable, or hazardous components:

<table>
<thead>
<tr>
<th>EINECS: 200-827-9</th>
<th>propane</th>
<th>F+; R 12</th>
<th>25-50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 203-448-7</td>
<td>butane</td>
<td>F+; R 12</td>
<td>25-50%</td>
</tr>
</tbody>
</table>

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: Generally the product does not irritate the skin.
· After eye contact: Rinse opened eye for several minutes under running water.
· After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
· For safety reasons unsuitable extinguishing agents: Water with full jet.
· Protective equipment: No special measures required.

6 Accidental release measures

· Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
· Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
· Measures for cleaning/collection: Ensure adequate ventilation.

(Contd. on page 2)
7 Handling and storage

- Handling:
- Information for safe handling:
  Open and handle receptacle with care.
  The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials. Observe the general safety regulations when handling chemicals.
- Information about fire - and explosion protection:
  Do not spray onto a naked flame or any incandescent material.
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- Storage:
  - Requirements to be met by storerooms and receptacles:
    Store in a cool location.
    Store only in the original receptacle.
    Observe official regulations on storing packagings with pressurized containers.
  - Information about storage in one common storage facility: Store away from oxidizing agents.
- Further information about storage conditions:
  Keep container tightly sealed.
  Do not seal receptacle gas tight.
  Store in cool, dry conditions in well sealed receptacles.
  Protect from heat and direct sunlight.
  Storage temperature between 18 °C and 25 °C.
  Duration of storage: In original container, at least 3 years.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace: butane (25-50%)
  - WEL Short-term value: 1810 mg/m³, 750 ppm
  - WEL Long-term value: 1450 mg/m³, 600 ppm
  - Carc (if more than 0.1% of buta-1,3-diene)
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- Material of gloves
  Suitable protective gloves: Nitril gloves, minimum thickness of 0.3 mm, e.g. Ultranitril type 491.
  Corresponds to the standards DIN/EN 374-2 and 374-3.
- Penetration time of glove material
  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Eye protector with side protection (framed eyeglasses) EN 166.
- Body protection: Protective work clothing.

9 Physical and chemical properties (typical data)

- General Information
  Form: Aerosol
  Colour: Light yellow
  Odour: Weak, characteristic
- Change in condition
  Melting point/Melting range: Not applicable
  Boiling point/Boiling range: -44°C (DIN 51751)
  Not applicable, as aerosol.
- Flash point:
  Active substance: 215°C (ISO 2592)
- Ignition temperature:
  365°C (DIN 51794)
- Self-igniting:
  Product is not selfigniting.
- Danger of explosion:
  Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- Explosion limits (@1013 mbar):
  Lower: 1.5 Vol %
  Upper: 10.9 Vol %
  Vapour pressure at 20°C: 3300 hPa
- Density:
  Active substance: 0.87 g/cm³ @ 20°C DIN 51757
- Solubility in / Miscibility with water:
  Insoluble.
- Viscosity:
  Kinematic:
  Active substance: 17 mm²/s @ 40°C (ISO 3104)
- Additional information:
  Safety relevant data, which has to be considered as product specifications.
10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** Reacts with strong oxidizing agents.
- **Dangerous decomposition products:** Carbon monoxide and carbon dioxide.

11 Toxicological information

- **Acute toxicity:**
  - LD/LC50 values relevant for classification: 2000 - 5000 mg / kg (oral, rat)  
    > 5,100 mg/m³ 4h (inhalation, rat)

- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:**
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
  - **Recommendation**
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**European waste catalogue**

| 16 05 04 | gases in pressure containers (including halons) containing dangerous substances |

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**

  - **ADR/RID class:** 2.1 5F
  - **UN-Number:** 1950
  - **Hazard label:** 2.1
  - **Description of goods:** 1950 AEROSOLS
  - **Remarks:** Contains: Hydrocarbons

- **Maritime transport IMDG:**

  - **IMDG Class:** 2.1
  - **UN Number:** 1950
  - **Label:** 2.1
  - **EMS Number:** F-D.S-U
  - **Marine pollutant:** No
  - **Proper shipping name:** AEROSOLS
  - **Remarks:** Contains: Hydrocarbons

- **Air transport ICAO-TI and IATA-DGR:**

  - **ICAO/IATA Class:** 2.1
  - **UN/ID Number:** 1950
  - **Label:** 2.1
  - **Proper shipping name:** AEROSOLS, flammable
  - **Remarks:** Contains: Hydrocarbons

(Contd. on page 4)
Regulatory information

· Labelling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:
  
  F+ Extremely flammable

· Risk phrases:  
12 Extremely flammable.

· Safety phrases:  
9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
33 Take precautionary measures against static discharges.
51 Use only in well-ventilated areas.

· Special labelling of certain preparations:
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use.
60.1 % by mass of the contents are flammable.
Keep out of the reach of children.

· National regulations:

· Other regulations, limitations and prohibitive regulations:

· Substances of very high concern (SVHC) according to REACH, Article 57
  This preparation does not contain any SVHC ("Substances of Very High Concern")

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Regulations / approvals / listings:
  All contents comply with current pharmacological or food grade standards.
  RoHS:
  The following substances ARE NOT contained:
  Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and / or polybrominated biphenyls (PBB), lead or it’s compounds, cadmium or it’s compounds, mercury or it’s compounds, chromium-6 + compounds.
  IP346:
  The contained refined mineral oils are exempt of labelling.
  The content of polycyclic aromatic hydrocarbons (PCA) according to IP346 is <3% (DMSO-extract).

· Relevant R-phrases:
  12 Extremely flammable.

· The product does not contain:
  PCB, PCT, TCDD (tetrachlorodibenzodioxin) and other dioxin-like substances.

Densply Professional

Code No. 82634-1010

~Verified on 2013-03 by Henry Schein to be the most current version of the MSDS. To be verified again on 2016-03. ~