1 Identification

- **Product identifier:** CRM-16-A
- **Trade name:** CANTESCO® CERAMIC ANTI-SPATTER
- **Item number(s):** CRM-16-A
- **MSDS Number:** 68
- **UPC bar code(s):** 699913-12570
- **Application of the substance / the mixture:** CERAMIC ANTI-SPATTER
- **Manufacturer/Supplier:**
  WWW.CANTESCO.COM

USA ADDRESS:
KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENeca, NY 14224
PH (716) 558-2971

CANADIAN ADDRESS:
KEMPER SYSTEM CANADA
6345 NETHERHART ROAD
MISSISSAUGA, ON L5T 1B8
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
  Tel: (716) 558-2971 ext. 228
  www.cantesco.com
- **Emergency telephone number:**
  ChemTrec (800) 424-9300
  Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**
  GHS02 Flame
  Flammable Aerosols - Category 1 H222 Extremely flammable aerosol.
  GHS04 Gas cylinder
  Gases Under Pressure - Compressed Gas H280 Contains gas under pressure; may explode if heated.
  GHS07

(Contd. on page 2)
### 43.2.13

Eye Irritation - Category 2A  
Specific Target Organ Toxicity - Single Exposure - Category 3

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Signal word:** Danger

- **Hazard-determining components of labeling:**
  - acetone
  - butanone

- **Hazard statements:**
  - Extremely flammable aerosol.
  - Contains gas under pressure; may explode if heated.
  - Causes serious eye irritation.
  - May cause drowsiness or dizziness.

- **Precautionary statements:**
  - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - Do not pierce or burn, even after use.
  - Do not spray on an open flame or other ignition source.
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wash thoroughly after handling.
  - Use only outdoors or in a well-ventilated area.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
  - If eye irritation persists: Get medical advice/attention.
  - Store locked up.
  - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
  - Store in a well-ventilated place.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- **NFPA ratings (scale 0 - 4):**
  - Health = 1
  - Fire = 4
  - Reactivity = 0

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-97-8</td>
<td>butane</td>
<td>30-60% w/w</td>
</tr>
<tr>
<td>74-98-6</td>
<td>propane</td>
<td>30-60% w/w</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>10-30% w/w</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>≤10% w/w</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
4 First-aid measures

· **After 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.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

· **After swallowing:** If symptoms persist consult doctor.

· **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

5 Fire-fighting measures

· **Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture:** No further relevant information available.

· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:** Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

· **Methods and material for containment and cleaning up:** Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents

· **Reference to other sections:** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

· **Handling**

· **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

· **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Do not spray on a naked flame or any incandescent material.
### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

#### Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>106-97-8 butane</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 750 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: 600 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 800 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1900 mg/m³, 800 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: (2370) mg/m³, (1000) ppm</td>
<td>NIC-EX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>74-98-6 propane</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 1,000 ppm</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>refer to Appendix F in TLVs &amp; BEIs book; NIC-EX</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>67-64-1 acetone</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 500 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: 250 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 750 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: 500 ppm</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 2400 mg/m³, 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 590 mg/m³, 250 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 1187 mg/m³, 500 ppm</td>
<td>Long-term value: 594 mg/m³, 250 ppm</td>
</tr>
<tr>
<td></td>
<td>BEI</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>78-93-3 butanone</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 100 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: 50 ppm</td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 885 mg/m³, 300 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: 590 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 590 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 885 mg/m³, 300 ppm</td>
<td>Long-term value: 590 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>
Trade name: CANTESCO® CERAMIC ANTI-SPATTER

TLV (USA) Short-term value: 885 mg/m³, 300 ppm
Long-term value: 590 mg/m³, 200 ppm
BEI

Ingredients with biological limit values:

67-64-1 acetone
BEI (USA) 50 mg/L
Medium: urine
Time: end of shift
Parameter: Acetone (nonspecific)

78-93-3 butanone
BEI (USA) 2 mg/L
Medium: urine
Time: end of shift
Parameter: MEK

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:
The glove material has to be impermeable and resistant to the product/substance/preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:
Natural rubber, NR
Butyl rubber, BR
Nitrile

Eye protection:

9 Physical and chemical properties

Form: Suspension
Color: White
Odor: Solvent-like
Odor threshold: Not determined.

PH-value: Not determined.

Change in condition
Melting point/Melting range: >95.3 °C
Boiling point/Boiling range: >56 °C

Flash point: >-17 °C
### Safety Data Sheet acc. to OSHA HCS & WHMIS

**Printing date:** 11/23/2016  
**Reviewed on:** 11/23/2016

**Trade name:** CANTESCO® CERAMIC ANTI-SPATTER

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Flammable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>365 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>1.5 Vol %</td>
</tr>
<tr>
<td>Upper</td>
<td>13.0 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C</td>
<td>8300 hPa</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>0.73 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour density at 20 °C</td>
<td>2.410 g/cm³</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Partly miscible</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solvent content</td>
<td>135.2 %</td>
</tr>
<tr>
<td>Organic solvents</td>
<td></td>
</tr>
<tr>
<td>Solids content</td>
<td>12.0 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects:**
  - Acute toxicity
  - Specific symptoms in biological assay: No further relevant information available.
  - Primary irritant effect
    - on the skin: No irritant effect.
    - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    - The product shows the following dangers according to internally approved calculation methods for preparations:
12 Ecological information

- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behavior in environmental systems**
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.
- **Additional ecological information**
- **General notes**:
  - Water hazard class 1 (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.
- **Other adverse effects**: No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**:
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
  - **Recommendation**:
    - Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

14 Transport information

<table>
<thead>
<tr>
<th>DOT, TDG, IMDG, IATA</th>
<th>UN1950</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>Aerosols, flammable</td>
</tr>
<tr>
<td>DOT</td>
<td>1950 Aerosols</td>
</tr>
<tr>
<td>TDG</td>
<td>AEROSOLS</td>
</tr>
<tr>
<td>IMDG</td>
<td>AEROSOLS, flammable</td>
</tr>
<tr>
<td>IATA</td>
<td></td>
</tr>
</tbody>
</table>

| **Transport hazard class(es)** | 2.1 |
| DOT | |
### Trade name: CANTESCO® CERAMIC ANTI-SPATTER

| · Label | 2.1 |
| · TDG (Transport dangerous goods): | |
| · Class | 2.1 |
| · Label | 2.1 |

### IMDG, IATA

| · Class | 2.1 |
| · Label | 2.1 |

### Packing group

- DOT, TDG, IMDG, IATA: Not regulated

### Environmental hazards:

- Marine pollutant: No

### Special precautions for user:

- Warning: Gases
- EMS Number: F-D,S-U
- Stowage Code: SW1 Protected from sources of heat.
  
  - SW2: For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

  - Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

- Not applicable.

### Transport/Additional information:

- DOT
  - Quantity limitations: On passenger aircraft/rail: 75 kg
  - On cargo aircraft only: 150 kg
- Remarks: This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

### TDG

- Excepted quantities (EQ): Code: E0
  - Not permitted as Excepted Quantity
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      - 78-93-3 butanone
      - 71-36-3 butan-1-ol
    - TSCA (Toxic Substances Control Act):
      All ingredients are listed or exempted
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients is listed.
- **Canadian substance listings**
  - Canadian Domestic Substances List (DSL/NDSL):
    All ingredients are listed.
  - Canadian Ingredient Disclosure list (limit 0.1%):
    None of the ingredients is listed.
  - Canadian Ingredient Disclosure list (limit 1%):
    - 106-97-8 butane
Safety Data Sheet
acc. to OSHA HCS & WHMIS

Printing date 11/23/2016
Reviewed on 11/23/2016

Trade name: CANTESCO® CERAMIC ANTI-SPATTER

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1</td>
<td>acetone</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
</tr>
</tbody>
</table>

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **GHS pictograms**
  - GHS02
  - GHS04
  - GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
  - acetone
  - butanone
- **Hazard statements**
  - Extremely flammable aerosol.
  - Contains gas under pressure; may explode if heated.
  - Causes serious eye irritation.
  - May cause drowsiness or dizziness.
- **Precautionary statements**
  - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - Do not pierce or burn, even after use.
  - Do not spray on an open flame or other ignition source.
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Wash thoroughly after handling.
  - Use only outdoors or in a well-ventilated area.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
  - If eye irritation persists: Get medical advice/attention.
  - Store locked up.
  - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
  - Store in a well-ventilated place.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

### 16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

- **Department issuing SDS:** Product safety department
- **Contact:** Stephen Nowicki
- **Date of preparation / last revision** 11/23/2016 / -
- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
Trade name: CANTESCO® CERAMIC ANTI-SPATTER

DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)