## 1 Identification

### Product identifier

#### Trade name: COE-PAK AUTOMIX NDS (Catalyst)

#### Application of the substance / the mixture
Dental sealing material

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:
GC America Inc.
3737 W. 127th Street
Alsip, IL 60803
USA

sds@gcamerica.com

#### Information department:
Regulatory Affairs

#### Emergency telephone number:
During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900
Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

## 2 Hazard identification

### Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion - Category 1A</td>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage - Category 1</td>
<td>H318</td>
<td>Causes serious eye damage.</td>
<td></td>
</tr>
<tr>
<td>Skin Sensitizer - Category 1</td>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
<td></td>
</tr>
<tr>
<td>Specific Target Organ Toxicity - Single Exposure - Category 2</td>
<td>H371</td>
<td>May cause damage to organs.</td>
<td></td>
</tr>
<tr>
<td>Specific Target Organ Toxicity - Repeated Exposure - Category 1</td>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
<td></td>
</tr>
</tbody>
</table>

#### Additional information:
The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.

### Label elements

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

### Hazard pictograms

- GHS05
- GHS07
- GHS08
- GHS09

### Signal word
Danger

(Contd. on page 2)
Trade name: COE-PAK AUTOMIX NDS (Catalyst)

· Hazard-determining components of labeling:
  calcium dihydroxide
  4-chloro-3,5-dimethylphenol

· Hazard statements
  Causes severe skin burns and eye damage.
  May cause an allergic skin reaction.
  May cause damage to organs.
  Causes damage to organs through prolonged or repeated exposure.
  Very toxic to aquatic life with long lasting effects.

· Precautionary statements
  Do not breathe dust/fume/gas/mist/vapours/spray.
  Wear protective gloves/protective clothing/eye protection/face protection.
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  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 on this label).
  Take off contaminated clothing and wash it before reuse.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  NFPA ratings (scale 0 - 4)
  Health = 1
  Fire = 1
  Reactivity = 0

  HMIS-ratings (scale 0 - 4)
  HEALTH
  Health = 1
  FIRE
  Fire = 1
  REACTIVITY
  Reactivity = 0

3 Composition/Information on ingredients

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

· Dangerous components:
  CAS: 1314-13-2  zinc oxide  15 - 40% w/w
  CAS: 1305-62-0  calcium dihydroxide  3 - 7% w/w
  CAS: 8042-47-5  white mineral oil (petroleum)  3 - 7% w/w
  CAS: 88-04-0  4-chloro-3,5-dimethylphenol  ≤ 1% w/w

· Additional information:
  If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA’s Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).
4 First aid measures

· Description of first aid measures
· General information: Immediately remove any clothing soiled by the product. If symptoms persist consult doctor.
· After inhalation: Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly. Seek medical treatment.
· After eye contact: Protect unharmed eye. Rinse opened eye for several minutes under running water. Call a doctor immediately.
· After swallowing: Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.
· Information for doctor:
· Most important symptoms and effects, both acute and delayed: Allergic reactions
· Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire.
· Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.
· Additional information: Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Remove persons from danger area. Avoid formation of dust. Avoid contact with the eyes and skin. Wear protective clothing.
· Environmental precautions: Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil.
· Methods and material for containment and cleaning up: Use neutralizing agent. Pick up mechanically.
46.1.5.2
Dispose of the collected material according to regulations.

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
Observe instructions for use.
Prevent formation of dust.
Any deposit of dust which cannot be avoided must be regularly removed.
Avoid contact with the eyes and skin.

Information about protection against explosions and fires:
Dust can combine with air to form an explosive mixture.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store only in unopened original receptacles.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions:
Observe instructions for use / storage.
Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

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

Control parameters
Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EL Short-term value</th>
<th>EL Long-term value</th>
<th>EV Short-term value</th>
<th>EV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>10 mg/m³</td>
<td>2 mg/m³</td>
<td>10 mg/m³</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>1305-62-0 calcium dihydroxide</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Exposure controls

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Do not inhale dust / smoke / mist.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

**Breathing equipment:**

Suitable respiratory protective device recommended.

**Protection of hands:**

Protective gloves

**Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Safety glasses

### 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**
- **Form:** Fluid paste
- **Color:** White
- **Odor:** Odorless
- **Odor threshold:** Not determined.

**pH-value:** Not applicable.

**Change in condition**
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Flammability (solid, gaseous):** Not determined.

**Ignition temperature:** Undetermined.

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.
Trade name: COE-PAK AUTOMIX NDS (Catalyst)

- Vapor pressure: Not applicable.
- Density at 20 °C: 2.8 g/cm³
- Relative density: Not determined.
- Vapor density: Not applicable.
- Evaporation rate: Not applicable.

- Solubility in / Miscibility with Water: Insoluble.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- Solvent content:
  - Solids content: 83.7 %
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability: Stable at ambient temperature.
- 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:
  - LD/LC50 values that are relevant for classification:
    - CAS: 1314-13-2 zinc oxide
      - Oral | LD50 7,900 mg/kg (rat (f+m))
- Primary irritant effect:
  - on the skin: Strong caustic effect on skin and mucous membranes.
  - on the eye: Strong caustic effect. Strong irritant with the danger of severe eye injury.
- Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
  - The product shows the following dangers according to internally approved calculation methods for preparations:
    - Corrosive
46.1.5.2

Carcinogenic categories

· IARC (International Agency for Research on Cancer)
  None of the ingredients is listed.

· NTP (National Toxicology Program)
  None of the ingredients is listed.

Carcinogenic categories' legend:
- IARC Group 1: The agent is carcinogenic to humans.
- IARC Group 2A: The agent is probably carcinogenic to humans.
- IARC Group 2B: The agent is possibly carcinogenic to humans.
- IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.
- IARC Group 4: The agent is probably not carcinogenic to humans.
- NTP K: Known to be human carcinogen.
- NTP R: Reasonably anticipated to be human carcinogen.

· Repeated dose toxicity. No further relevant information available.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
No further relevant information available.

12 Ecological information

· Toxicity
  · 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.

· Ecotoxicological effects:
  · Remark: Very toxic for fish

· Additional ecological information:
  · General notes:
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    Also poisonous for fish and plankton in water bodies.
    Very toxic for aquatic organisms

· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  · DOT, TDG, ADN, IMDG, IATA: Void

(Contd. on page 8)
## Trade name: COE-PAK AUTOMIX NDS (Catalyst)

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Void</td>
</tr>
<tr>
<td>DOT, TDG, ADN, IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT, TDG, ADN, IMDG, IATA</td>
</tr>
<tr>
<td>Class</td>
<td>Void</td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, TDG, IMDG, IATA</td>
</tr>
<tr>
<td>Environmental hazards:</td>
<td>Marine pollutant: No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>and the IBC Code</td>
<td></td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>Void</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - SARA (Superfund Amendments and Reauthorization Act)
    - Section 355 (extremely hazardous substances): None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      - zinc oxide
  - TSCA (Toxic Substances Control Act):
    - zinc oxide
    - peanut oil
    - calcium dihydroxide
    - white mineral oil (petroleum)
    - 6-chlorothymol
- Canadian substance listings:
  - Canadian Domestic Substances List (DSL)
    - All ingredients are listed.
  - Canadian Ingredient Disclosure list (limit 0.1%)
    - None of the ingredients is listed.
  - Canadian Ingredient Disclosure list (limit 1%)
    - zinc oxide
    - magnesium oxide
    - magnesium oxide
    - calcium dihydroxide
- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms

- GHS05
- GHS07
- GHS08
- GHS09

Signal word: Danger

Hazard-determining components of labeling:
- Calcium dihydroxide
- 4-Chloro-3,5-dimethylphenol

Hazard statements:
- Causes severe skin burns and eye damage.
- May cause an allergic skin reaction.
- May cause damage to organs.
- Causes damage to organs through prolonged or repeated exposure.
- Very toxic to aquatic life with long lasting effects.

Precautionary statements:
- Do not breathe dust/fume/gas/mist/vapours/spray.
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- Immediately call a poison center/doctor.
- Specific treatment (see on this label).
- Take off contaminated clothing and wash it before reuse.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

- Department issuing SDS: Regulatory Affairs
- Contact:
  - Regulatory Affairs
  - Telephone No. +1 (708) 597-0900
  - sds@gcamerica.com
- Date of preparation / last revision: 03/13/2018 / -

Abbreviations and acronyms:
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- HCS: Hazard Communication Standard (USA)
- MSDS: Material Safety Data Sheet
- SDS: Safety Data Sheet
- ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)
- ECHA: European Chemicals Agency
- OSHA: Occupational Safety and Health Administration (USA)
- LEL: Lower Explosive Limit
- UEL: Upper Explosive Limit
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
Trade name: COE-PAK AUTOMIX NDS (Catalyst)

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

· Sources
  • Manufacturers’ MSDS/SDSs
  • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)
  • TOXNET (http://toxnet.nlm.nih.gov/)
  • ECHA (http://echa.europa.eu/)
  • EnviChem (www.echemportal.org)

· Notes:
  CAS Registry Number is a Registered Trademark of the American Chemical Society.
  CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.

· * Data compared to the previous version altered. This version replaces all previous versions.

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