1 Identification

Product identifier

Trade name: ESOBAR / EZ-PASTE

Article number: 770; 20(CAN)

Application of the substance / the mixture:
Radiopaque contrast media for diagnostic imaging of the gastrointestinal tract

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
E-Z-EM Canada Inc.
11065 boulevard L-H. Lafontaine
Montréal, QC, Canada
H1J 2Z4
tel: (514) 353-5820

Information department:
B-Lands Consulting
WTC, 5 Place Robert Schuman, BP 1516
38025 Grenoble, FRANCE
Tel: +33 476 295 869
Fax: +33 476 295 870
Email: clients@reachteam.eu
www.reachteam.eu

Emergency telephone number:
EMERGENCY CONTACT:
Health: 1-800-257-5181
U.S. Transport - Chemtrec: 1-800-424-9300
International Transport - Chemtrec: 1-703-527-3887

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable.

Hazard pictograms Not applicable.

Signal word Not applicable.

Hazard statements Not applicable.

Additional Information:

WHMIS-symbols:
Not Hazardous.
Not controlled under WHIMS (Canada).

Classification system:

NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0
3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture: consisting of the following components.

Hazardous Components: Not applicable.

<table>
<thead>
<tr>
<th>Information on components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8043-29-6 Glycerine</td>
</tr>
</tbody>
</table>

4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:
Do not induce vomiting; immediately call for medical help.

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

Extinguishing media

Suitable extinguishing agents:
Use extinguishing measures appropriate to local circumstances and the environment.
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

Explosion data: Sensitivity to mechanical impact / static discharge: Not expected to be sensitive to mechanical impact or static discharge.

Oxidizing properties: None

Advice for firefighters

Evacuate personnel to an upwind direction, remove unneeded material and cool container(s) with water from a maximum distance.

Protective equipment:
Firefighters should wear adequate personal protective equipment with protection of respiratory tract (selfcontained breathing apparatus) (SCBA).
In addition, firefighters should wear flame and chemicals resistant clothing, boots and gloves.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
Remove persons from danger area.

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

**Methods and material for containment and cleaning up:**
Dispose of the collected material according to regulations.
Ventilate area of release.
Eliminate all ignition sources.
Stop spill or leak at source if safely possible.
Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13).
Notify the appropriate authorities as required.

**Special spill response procedures:**
FOR USA: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.

**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

**Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with the eyes and skin.

**Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.

**Conditions for safe storage, including any incompatibilities**

**Requirements to be met by storerooms and receptacles:**
Store in a cool, dry place in tightly closed receptacles.

**Information about storage in one common storage facility:**
Not required.

**Further information about storage conditions:**
Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel.
Protect against physical damage.

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

### 8 Exposure controls/personal protection

**Control parameters**

**Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

**Exposure controls**

**Personal protective equipment**

**General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

The glove material must be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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: Goggles recommended during refilling.

Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
  Form: Paste
  Color: White

Odor:
  Odor: Characteristic
  Odor threshold: Not determined.

pH-value:
  Not determined.

Melting point/Melting range:
  Not determined.

Boiling point/Boiling range:
  Not determined.

Flash point:
  Not determined.

Flammability (solid, gaseous):
  Not determined.

Ignition temperature:
  Not determined.

Decomposition temperature:
  Not determined.

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

Flammability Limits:
  Lower: Not Determined.
  Upper: Not Determined.

Explosion limits:
  Lower: Not determined.
  Upper: Not determined.

Oxidizing properties
  Not determined.
Trade name: ESOBAR / EZ-PASTE

Vapor pressure: Not determined.
Density: Not determined.
Relative density Not determined.
Vapor density Not determined.
Evaporation rate Not determined.
Solubility in / Miscibility with Water: Not determined.
Partition coefficient (n-octanol/water): Not determined.
Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.
Solids content: 0.4 %
Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid Extreme heat
Incompatible materials: Reactive metals.
Hazardous decomposition products:
Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide and carbon dioxide
Sulfur oxides (SOx)
Barium oxides
Other unidentified organic compounds.

11 Toxicological information

Information on toxicological effects
Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6132-04-3 Trisodium citrate dihydrate</td>
</tr>
<tr>
<td>Oral LD50 6.4 g/Kg bw (Mouse) (read across from citric acid)</td>
</tr>
<tr>
<td>Dermal LD50 &gt;2000 mg/kg (Rat) (read across from citric acid)</td>
</tr>
<tr>
<td>99-76-3 Methylparaben</td>
</tr>
<tr>
<td>Oral LD50 &gt;6000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>94-13-3 Propylparaben</td>
</tr>
<tr>
<td>Oral LD50 &gt;6332 mg/kg (Mouse)</td>
</tr>
<tr>
<td>7727-43-7 Barium sulphate</td>
</tr>
<tr>
<td>Oral LD50 &gt;20000 mg/kg (Rat) (External SDS)</td>
</tr>
</tbody>
</table>

Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitization: No sensitizing effects known.

Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9000-07-1 Carrageenan</td>
<td>3</td>
</tr>
<tr>
<td>6155-57-3 Saccharin Sodium dihydrate</td>
<td>Yes: Carc. 2B</td>
</tr>
<tr>
<td>140-11-4 benzyl acetate</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6155-57-3 Saccharin Sodium dihydrate</td>
<td>Yes</td>
</tr>
</tbody>
</table>

12 Ecological information

Toxicity

Aquatic toxicity:
7727-43-7 Barium sulphate
EC50/48h | 32 mg/L (Daphnia Magna)

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information
Use according to the good working practice. Avoid transfer into the environment.

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.

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

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Smaller quantities can be disposed of with household waste.
Reutilise if possible or contact a waste processors for recycling or safe disposal

Waste disposal key:
If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies

Uncleaned packagings:
Recommendation:
Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
Safety Data Sheet
acc. to OSHA HCS

Printing date 05/15/2017
Reviewed on 05/15/2017
Version 3

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14 Transport information

| UN-Number | DOT, TDG, ADN, IMDG, IATA | Void |
| UN proper shipping name | DOT, TDG, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | DOT, TDG, ADN, IMDG, IATA | Class | Void |
| Packing group | DOT, TDG, IMDG, IATA | Void |
| Environmental hazards: | Marine pollutant: | No |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

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):
None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 0.1%)
None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)
None of the ingredients is listed.

GHS label elements
Not applicable.

Hazard pictograms
Not applicable.

Signal word
Not applicable.

Hazard statements
Not applicable.

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.

Date of preparation / last revision 05/15/2017 / 2

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
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)
WHMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Trade name: ESOBAR / EZ-PASTE

Sources
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2011.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2011 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. US EPA Title III List of Lists - October 2006 version.