Material Safety Data Sheet - Coffee

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Date of Preparation: September 1, 1996
MSDS No. 001

Section 1 - Chemical Product and Company Identification
Product/Chemical Name: COFFEE
Chemical Formula: C8-H10-N4-O2
CAS Number: 58-08-2
Other Designations: Café Ole, Koffee, Klutch-time Drink General Use: Wake-up drink, Stay awake, Working Late, Pre-exam Students, Sobering Up Drink, Excuse to Talk and Have Meetings, Soil Mixture
Manufacturer: Juan Valdez, Respected Television Personality who promotes sought-after Colombian coffee.
Address: The Mountains, Colombia
Phone: None. Look for him in grocery store aisles, taping his latest commercials promoting coffee.
Hours of operation: All day --- He's picking beans with his burro in the mountains for his latest photo shoot.
Emergency phone number: Look on the label of the most popular brands and bother them. Juan's busy making commercials.

Emergency Overview

Section 2 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>% wt. or % vol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Ingredient: Caffeine</td>
<td>58-08-2</td>
<td>Depends on what it is mixed with</td>
</tr>
</tbody>
</table>
| Other Ingredients: Milk, Water, Whiskey, Cream, Saccharin, Aspartamine, or Sugar | Various | If you're Irish, Coffee 1%, Whiskey 99%
If you're French, Mexican, or Cajun, Coffee 50%/Milk 50% |

Impurities: Depends on where it is purchased. Definitely check can or burlap bag if it is imported from Colombia

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Ingredient</td>
<td></td>
<td>No established limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Ingredient</td>
<td></td>
<td>Remember what Mother Nature says: Everything in moderation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trace
Toxicity Data: 192 mg/kg oral-human LDLo; 14700 ug/kg oral-infant (Aghast! In a baby bottle? Whose child was used as a test, and what balloon are they in now?) 320 mg/kg oral-child LDLo (More Ritalin needed for these kids); TDLo; 13 mg/kg oral-man TDLo; 96 mg/kg/1 day intermittent oral-woman TDLo; 1 gm/kg oral-woman LDLo; 192 mg/kg oral-rat LD50127 mg/kg oral-mouse LD50; 224 mg/kg oral-rabbit LD50; 100 mg/kg oral-cat LDLo; 140 mg/kg oral-dog LD50; 230 oral-guinea pig LD50; 230 mg/kg oral-hamster LD50; (No Wonder So Many Cities Are Animal Infested and Others There’s No Trace Of ‘Em)
Acute Toxicity Level: Toxic by ingestion. (So we drink it every morning, afternoon and night?)
Target Effects: Poisoning may affect the central nervous system and heart. At Increased Risk From Exposure: Persons with glaucoma, duodenal ulcers, liver, cardiovascular, renal or psychological disorders.
Additional Data: May cross the placenta. May be excreted in breast milk. Alcohol may enhance the toxic effects. (Why do we use coffee to counteract the effects?) Interactions with medications have been reported.

Section 3 - Physical and Chemical Properties
Physical State: Beans, grinds
Appearance and Odor: Light Brown to Black
Odor Threshold: When the whole office or neighborhood thinks of Eggs and Bacon
Vapor Pressure: 760 mm Hg at 178 °C
Vapor Density (Air=1): 6.7
Specific Gravity (H2O=1, at 4 °C): 1.2
Evaporation Rate: Overnight, if you leave it on your desk.
Water Solubility: 2.17%
Solvent Solubility: Soluble in chloroform, pyrimidine, petroleum ether, benzene, alcohol, acetone, pyrrole, tetrahydrofuran.
Boiling Point: 352 F (178C)
Freezing/Melting Point: 460 F (238 C)%
Volatile: 0.5%, but depends on psychological state of consumer.

Section 4 - Fire-Fighting Measures
Autoignition Temperature: 1697F (925 °C)
Flammability Classification: On the contrary, can be used to extinguish offensive cigars and, if aimed correctly, in the lap of rude and ardent suitors.
Extinguishing Media: Ask chef to put bananas on top and make Bananas Foster.
Unusual Fire or Explosion Hazards: Usually only in After Dinner Drinks.
Hazardous Combustion Products: Bourbon and Whiskey, maybe Irish Cream
Fire-Fighting Instructions: Rule out the use of Tabasco in coffee in southern regions. Rule out the use of alcohol in all geographical territories. Remove container from area, if possible, without risk. See Extinguishing medium above.
Fire-Fighting Equipment: Use Date’s water glass.

Section 5 - Stability and Reactivity
Stability: Stable under normal conditions, watch out in aircraft, fast cars, bars, restaurants and mental hospitals.
Polymerization: Hazardous polymerization has been reported in the late sixties and seventies with those wearing synthetic polyester suits.
Chemical Incompatibilities: Acids, Chlorine, Oxidizers. Suggest you don’t ingest these by themselves, either.
Conditions to Avoid: Fast Food Restaurants, unless you have a litigious personality.

Hazardous Decomposition Products: Thermal oxidative decomposition of product can produce toxic oxides of carbon and nitrogen, but okay with garden plants.

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: Mouth, however, policemen in donut houses may ingest through nose.

Acute Effects
Inhalation: Great way to wake up in the morning, or anytime for that matter.
Eye: Caffetieres look good in the kitchen Wash eyes for 15 minutes if you get it in your eyes instead of your mouth.
Skin: Could stain skin a dark color. Use if you are out of suntan lotion.
Ingestion: Can be toxic if that is all you drink. Remember mother nature. No deaths were reported in rats exposed to 55 ppm for 4 hours.
Carcinogenicity: IARC, NTP, and OSHA do not list coffee as a carcinogen.

Chronic Effects and Medical Conditions Aggravated by Long-Term Exposure: Disturbed sleep, psychosis, heartburn, hyperventilation. Respiratory failure and cardiopulmonary arrest may occur. Prolonged use can result in dependence. Withdrawal symptoms can occur following abrupt cessation, such as bad mood bosses and complaining employees.

Emergency and First Aid Procedures

Inhalation: Get fresh air, have your coffee under a tree.
Eye Contact: Buy boring American coffee machines instead of having the fancy cappuccino contraptions.
Skin Contact: Take a bath, whether you need it or not, but not after an incident at a fast food restaurant; you may need it as evidence.
Ingestion: Dilute with whiskey.
Note to Physicians: You ought to have more coffee in your waiting rooms.
Special Precautions/Procedures: If you find white packets in your coffee cans, notify the police.

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: If you are in a fast food restaurant, call Joe Lawyer at (713) 555-1212.
Small Spills: Brawney towels
Large Spills: Bring in the dog to lick it up.
Containment: For large spills, dike far ahead of liquid spill for later disposal. Let the kids play in it while you are waiting for rescue. Do not release into sewers or waterways.
Container Cleaning and Disposal: Collect cans and use them to collect poker chips and pennies, or get grandma to make a nice little cotton ball holder for the wife or a crayon case for the kids.
Ecological Information: Grinds are good for gardens.

EPA Regulations:
RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)
RCRA Hazardous Waste Classification (40 CFR 261) Not classified
CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112 - None
CERCLA Reportable Quantity (RQ) None SARA 311/312 Codes:
SARA Toxic Chemical (40 CFR 372.65): Not listed

OSHA Regulations:

State Regulations: None, except in the esteemed State of Louisiana, where coffee appreciation is a birth right and art form, so anything weaker than Community Coffee is generally and publicly unacceptable. You can visit with your own can of "Chock Full of Nuts" which is a good second choice, but you might have to negotiate entry as long as you don’t tell Boudreaux, King of the Krewe of Coffee Aficionados in Sportman's Paradise, who can be sighted each Mardi Gras tossing coffee beans with his beads and dubloons on Canal Street and wishes to keep the State's well-earned reputation of culinary experts.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Make iced coffee or ask your secretary to get it.
Ventilation: Keep all windows shut when brewing, otherwise you’ll ruin the effect with the eggs and bacon.
Administrative Controls: Do not allow purchase of the decaffeinated version if you want it to wake up.
Respiratory Protection: ditto on ventilation
Protective Clothing/Equipment: Make sure you put a coffee filter in the machine, unless you have digestive problems, then if so, leave it out.
Safety Stations: Put a paper towel under your cup so you don’t leave a ring on the counter or your table. If you want to impress you boss or a client, disregard this so they will think you stayed up late and being sloppy is okay; at least you did the job.
Contaminated Equipment: Keep if you were on an airline or at a fast food restaurant…might need evidence.

Section 9 - Special Precautions and Comments

Handling Precautions: Buy a bigger scoop at the grocery store. The ones that come in the containers are never big enough.
Storage Requirements: Buy bigger discount cans at discount stores and fill up smaller cans as needed. Don’t play a prank on the pipe smoking uncle by storing in his pouch. He might fly around when you’re visiting.

DOT Transportation Data (49 CFR 172.101):

Packaging Authorizations Bulk Packaging: Best not to pack it with shipments by yacht or small water craft from Colombia.

Quantity Limitations
a) Passenger, Aircraft, or Railcar: Must have supplies enough for 5 times the flight or trip, otherwise the pilot or engineer could turn back without a moments notice.

Vessel Stowage Requirements
a) Vessel Stowage: Make sure it is in plain view, so the above doesn’t occur.