

MATERIAL SAFETY DATA SHEET

UPC: 4131303268, 4131303266, 4131301063,

Product Code:430062

Revision Date: December 19, 2006

Supercedes: December 19,, 2006

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Company Identification:

Adams Extract & Spice, LLC

P.O. Box 1726

3217 Johnston Rd.

Gonzales, TX 78629

Telephone: 830-672-1850

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Trade Name: Imitation Banana Extract

Chemical Name: Imitation Banana Extract

Use of Substance: Flavoring of foodstuffs.

2. COMPOSITION INFORMATION ON HAZARDOUS INGREDIENTS

	CAS#	Hazardous	Proximate %
Propylene Glycol	57-55-6	Yes	80-95
Ethyl Alcohol	64-17-5	Yes	<10
Iso-amyl Acetate	123-92-2	Yes	<5
Amyl Butyrate	540-18-1	Yes	<5

3. HAZARDS IDENTIFICATION

Emergency Overview:

Color: Clear Yellow

Physical Form: Liquid

Odor: Banana-like

Major Health Hazards: Harmful if swallowed in concentrated form. No adverse effects anticipated via exposure incidental to proper industrial handling, nor, normal usage. This product is not to be used as a beverage.

Physical Hazards: COMBUSTIBLE

Potential Health Effects:

Eye: May cause transitory stinging and tearing.

Skin: Temporarily discolors skin. Mild irritant and defatting agent on prolonged contact. May cause contact dermatitis in allergic individuals.

Ingestion: No adverse health effects anticipated via exposure incidental to proper industrial handling or normal usage. This product is not to be used as a beverage.

Ingestion of sizable amounts (over 500mL) of propylene glycol may cause some gastrointestinal upset and temporary central nervous system depression. Effects appear more severe in individuals with preexisting kidney conditions. Individuals in hepatic and renal failure should use this product with caution. .

Inhalation: No adverse health effects anticipated via exposure incidental to proper industrial handling.

Chronic: No adverse effects anticipated via exposure incidental to proper industrial handling. Lactic acidosis, stupor and seizure have been reported following chronic ingestion of propylene glycol particularly with individuals in renal failure.

Aggravation of Pre-existing Conditions: No adverse effects anticipated via exposure incidental to proper industrial handling. Individuals with pre-existing renal, hepatic or central nervous system disorders may be more sensitive if the product is abused.

Carcinogen Status: NTP no
IARC no
OSHA no

4. FIRST AID MEASURES

Eyes: Remove contact lenses. Immediately flush eyes with large amounts of water or normal saline occasionally lifting the upper and lower lids, for a minimum of 15 to 20 minutes. Get medical attention if irritation persists or gets worse.

Skin: Remove any contaminated clothing. Launder contaminated clothing prior to wearing again. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation or rash develops or persists. This product may produce intense irritation including pain if applied to broken skin.

Hypersensitivity reactions to propylene glycol have been reported. Propylene glycol is not absorbed to any great extent thru intact skin; however, significant absorption has been reported in a few patients treated for burns and desquamations.

Inhalation: Remove to fresh air. Not expected to require first aid measures.

Ingestion: Not expected to require first aid measures unless a large quantity has been ingested. Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advise. Never give anything by mouth to an unconscious person.

Other: Instillation of propylene glycol into the middle ear in individuals with defects in the tympanic membrane may cause cochlear toxicity, according to animal data.

Note to Physician: The course of propylene glycol poisoning is usually benign but ingestion of large amounts may be as dangerous as severe ethanol intoxication. Large doses may cause severe arrhythmia, including cardiac arrest. Pre-existing renal failure aggravates propylene glycol poisoning and worsens lactic acidosis. Hyperosmolality occurs after marked absorption of propylene glycol. Symptomatology is dose-dependent, ranging from drowsiness to stupor, deep unconsciousness and coma. Hypoglycemia has been reported.

5. FIRE FIGHTING MEASURES

In the event of fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Move exposed containers from fire area, if it can be done without risk. Use water to keep fire-exposed containers cool. Use dry chemical, foam, water or carbon dioxide to extinguish the flames.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Dispose of in accordance with local, state and federal regulations. Do not flush into sewer, waterways or low areas.

7. HANDLING AND STORAGE

Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid): observe all warnings and precautions listed for the product.

8. EXPOSURE CONTROL /PERSONAL PROTECTION

Exposure Limits:

AIHA WEEL for Propylene Glycol: Vapor and Aerosol = 50ppm, Aerosol, only = 10mg/m³

OSHA TWA for Ethyl Alcohol: 100 ppm (1880 mg/m³)
ACGIH TWA for Ethyl Alcohol: 1000 ppm (1880 mg/m³)
NIOSH TWA (hours) for Ethyl Alcohol: 1000 ppm (1880 mg/m³).
ACGIH TWA for iso-amyl acetate: 50 ppm
ACGIH STEL for iso-amyl acetate: 100 ppm
MAK for iso-amyl acetate: 50 ppm, 270 mg/m³
Peak limitation category for iso-amyl acetate: 1
Pregnancy Risk Group: IIc

Engineering Controls:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it to the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Protection:

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a half-face respirator with an organic vapor cartridge and particulate filter (NIOSH type P95 or R95 filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is the lowest. A full-face piece respirator with an organic vapor cartridge and particulate filter (NIOSH P100 or R100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is the lowest. Please note that N series filters are not recommended for this material. For emergencies or instances where the exposure levels are unknown, use a full-face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Clear , transparent

Color: Yellow

Physical Form: Liquid

Odor: Banana-like

Boiling Point: Undetermined

Freezing Point: Undetermined
Vapor Pressure: Undetermined
Vapor Density: Undetermined
Viscosity: Undetermined
Autoignition Temperature: Undetermined
Specific Gravity: Undetermined
Water Solubility: Undetermined
pH: Undetermined
Volatility: Undetermined
Odor Threshold: Undetermined
Evaporative Rate: Undetermined
Coefficient of Water/Oil Distribution: Undetermined
Lower Explosion Limit: Undetermined
Upper Explosion Limit: Undetermined
Decomposition Temperature: Undetermined
NFPA Rating: Not published for mixture.

10. STABILITY AND REACTIVITY

Stability:

Substance is stable and unreactive under conditions of normal use.

Conditions to avoid:

Excessive heat, flames, ignition sources and incompatibles.

Incompatibilities with Other Materials: Water reactive chemicals, strong oxidizing agents, strong acids, strong bases

Hazardous Decomposition or Byproducts:

Carbon dioxide, carbon monoxide, aldehydes, ketones, oxides of nitrogen, oxides of sulfur, acrid smoke, lactic, pyruvic or acetic acids may also be formed.

Hazardous Polymerization:

Will not polymerize.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: Not available for mixture

Reproductive Effects: Not available for mixture

12. ECOLOGICAL INFORMATION Not available.

13. DISPOSAL CONSIDERATIONS Not available.

14. TRANSPORT INFORMATION Not available

15. REGULATORY INFORMATION

CWC:	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

TSCA Inventory Status:	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	Yes
	Ethyl Alcohol	64-17-5	Yes
	Iso-amyl Acetate	123-92-2	Yes
	Amyl Butyrate	540-18-1	Yes

TSCA 12(b) Export Notification:	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

CERCLA SECTION 103 (40CFR301.4):	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	Yes
	Amyl Butyrate	540-18-1	No

SARA SECTION 302 (40CFR355.30):	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

SARA SECTION 313 40CFR372.65):	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE:	Mixture	Not Assigned	Yes
	Propylene Glycol	57-55-6	Yes
	Ethyl Alcohol	64-17-5	Yes
	Iso-amyl Acetate	123-92-2	Yes
	Amyl Butyrate	540-18-1	No

CHRONIC:	Mixture	Not Assigned	Yes
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	Yes
	Iso-amyl Acetate	123-92-2	Yes
	Amyl Butyrate	540-18-1	No

FIRE:	Mixture	Not Assigned	Yes
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	Yes
	Iso-amyl Acetate	123-92-2	Yes
	Amyl Butyrate	540-18-1	Yes

REACTIVE:	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

SUDDEN RELEASE:	Mixture	Not Assigned	No
	Propylene Glycol	57-55-6	No
	Ethyl Alcohol	64-17-5	No
	Iso-amyl Acetate	123-92-2	No
	Amyl Butyrate	540-18-1	No

OSHA PROCESS SAFETY (29CFR1910.119): Not available for mixture

STATE REGULATIONS: Not available for mixture. This mixture contains ethyl alcohol, which has been found by the state of California to be a developmental and reproductive toxin and a carcinogen when in alcoholic beverages.

EUROPEAN REGULATIONS: Not available for mixture

EC NUMBER (EINECS): Not available for mixture

EC RISK AND SAFETY PHASES: Not available for mixture.

16. OTHER INFORMATION

Reason(s) for (Re) issue:

Format change, additional information.

Acronyms: ACGIH (American Conference of Governmental Industrial Hygienist)
 AIHA (American Industrial Hygienist Association)
 ASSE (American Society of Safety Engineers)
 ASTM (American Society For Testing and Materials)

CAS# (Chemical Abstracts Service Registry Number)
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act of 1980, also known as, Superfund Act)
CHIPS (Chemical Hazard Information and Packaging for Supply)
CPR (Controlled Products Regulations)
CWC (Chemical Weapons Convention)
DOD (Department of Defense)
DOT (U. S. Department of Transportation)
EINECS# (European Inventory of Existing Commercial Substances)
EPCRA (Emergency Planning and Community Right to Know Act)
FSC (Federal Supply Class)
HCC (Hazard Characteristic Code)
HMIR (Hazardous Material Incident Report)
HMIRS (Hazardous Materials Information Response System)
HMIS (Hazardous Materials Information System)
HSWA (Hazardous and Solid Waste Amendment)
IARC (International Agency for Research on Cancer)
IDLH (Immediately Dangerous to Life or Health)
IMIS# (Integrated Management Information System Number)
IUPAC (International Union of Pure and Applied Chemistry)
LEL (Lower Explosive Limits)
NCB (National Codification Bureau)
NDSL (Nondomestic Substances List)
NIH (National Institutes of Health)
NIIN (National Item Identification Number)
NSN (National Supply Number)
NIOSH (National Institute of Occupational Safety and Health)
NTP (National Toxicology Program)
OEL (Occupational Exposure Limit)
OSHA (Occupational Health and Safety Administration)
RCRA (Resource Conservation and Recovery Act)
RIFM (Research Institute for Fragrance Materials)
RTECS (Registry of Toxic Effects of Chemical Substances)
PEL (Permissible Exposure Limit-OSHA)
REL (Recommended Exposure Limit)
SARA (Superfund Amendment and Reauthorization Act)
STEL (Short Term Exposure Limit)
TLV (Threshold Limit Value)
TSCA (Toxic Substances Control Act)
TWA (Time Weighted Average)
UEL (Upper Explosive Limit)
UN/NA (United Nations/North American)
UPC (Universal Product Code)
WEEL (Workplace Environmental Exposure Limit)

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