



# Propoxyphene, Aspirin, and Caffeine Capsules

Eli Lilly and Company  
Material Safety Data Sheet

Effective Date: 08-Jun-2004

## Section 1 - Chemical Product and Company

**Manufacturer:**  
Eli Lilly and Company  
Lilly Corporate Center  
Indianapolis, IN 46285

**Manufacturer's Emergency Phone:**  
1-317-276-2000  
**CHEMTREC:**  
1-800-424-9300 (North America)  
1-703-527-3887 (International)

**Common Name:** Propoxyphene, Aspirin, and Caffeine Capsules

**Chemical Name:** Benzeneethanol, alpha-[(1R)-2-(dimethylamino)-1-methylethyl]-alpha-phenyl-, propanoate (ester), hydrochloride, (alphaS)- (9CI)

**Chemical Name 2:** Benzeneethanol, alpha-[2-(dimethylamino)-1-methylethyl]-alpha-phenyl-, propanoate (ester), [S-(R\*,S\*)]-, 2-naphthalenesulfonate (salt), monohydrate

**Synonym(s):** 011453 Formulation; ASA Formulation; Caffeine Formulation; Dextropropoxyphene Napsylate Formulation; Acetylsalitic Acid Formulation; Propoxyphene Napsylate; Propoxyphene Hydrochloride; Propoxyphene; Propoxyphene Hydrochloride Capsule Mix; Propoxyphene Napsylate Capsule Mix; 3111; 021720 Formulation; 029352 Formulation

**Trademarks(s):** Darvon Compound-65; Darvon ASA; Darvon; Darvon-N; Doloxene

**Lilly Item Code(s):** PU0368; PU0369; PU0405; PU3045; UC5964; UE0131; UF0018; VF0199; VF0284

See attached glossary for abbreviations.

## Section 2 - Composition / Information on Ingredients

<b>Ingredient</b>	<b>CAS</b>	<b>Concentration %</b>
Propoxyphene Hydrochloride	1639-60-7	0 - 12
Propoxyphene Napsylate	26570-10-5	0 - 16
Aspirin	50-78-2	61 - 64
Caffeine	58-08-2	4 - 6
Excipients	NA	18 - 22

Drug Enforcement Administration Status: Controlled Substance, Schedule II for Bulk Propoxyphene and its salts (non-dosage forms)

Drug Enforcement Administration Status: Controlled Substance, Schedule IV for Propoxyphene and its salts in dosage form

In the U.S., PU0369 contains propoxyphene hydrochloride. However, some formulations manufactured outside the U.S. contain propoxyphene napsylate.

**Exposure Guidelines:**

Propoxyphene hydrochloride - LEG 80 micrograms/m<sup>3</sup> TWA for 12 hours.

Propoxyphene napsylate - LEG 200 micrograms/m<sup>3</sup> TWA for 12 hours.

Aspirin - TLV 5 mg/m<sup>3</sup> TWA. LEG 3 mg/m<sup>3</sup> TWA for 12 hours.

UK - Exposure Standard 5 mg/m<sup>3</sup> TWA.

Ireland - Occupational Exposure Limit 5 mg/m<sup>3</sup> TWA.

Italy - Occupational Exposure Limit 5 mg/m<sup>3</sup> TWA.

Spain - Occupational Exposure Limit 5 mg/m<sup>3</sup> (VLA-ED) TWA.

Germany - TRGS 900 Limit Value 5 mg/m<sup>3</sup> TWA.

## Section 3 - Hazards Identification

**Appearance:** White to off-white powder finished as capsules

**Physical State:** Solid

**Odor:** Odorless

### Emergency Overview



**Emergency Overview Effective Date:** 04-May-2000

**Lilly Laboratory Labeling Codes:**

**Health** 3

**Fire** 1

**Reactivity** 0

**Primary Physical and Health Hazards:** Not hazardous if intact. Toxic. Mutagen. Corrosive (eyes). Irritant (skin, respiratory tract). Nervous System, Heart and Blood Effects.

**Caution Statement:** Intact Propoxyphene, Aspirin, and Caffeine Capsules are not considered to be a health hazard. The contents of Propoxyphene, Aspirin, and Caffeine Capsules is toxic, alters genetic material, may cause burns or permanent tissue damage to the eyes, and may be irritating to the skin and respiratory tract. Effects of exposure may include dizziness, nausea/vomiting, change in heart rate/rhythm, shortness of breath, abnormal clotting, and chemical dependency.

**Routes of Entry:** Inhalation and skin contact.

**Effects of Overexposure:** Intact capsules are intended for human consumption under guidance of a physician. Capsules are not considered hazardous under normal handling procedures. However, exposure to contents of capsules may produce signs and symptoms as indicated.

Propoxyphene hydrochloride and propoxyphene napsylate - Based on clinical data, effects of exposure may include dizziness, nausea/vomiting, respiratory depression, abnormal heart rhythm, and difficulty breathing. Based on animal data, may cause burns or permanent tissue damage to the

eyes. Dependency may occur with prolonged exposure.

**Aspirin** - Ingestion of large quantities may cause gastrointestinal irritation, interfere with the normal blood clotting mechanism, cause ringing in the ears, nausea, vomiting, and kidney tissue changes. Aspirin readily crosses the placenta and the fetus appears to be more sensitive than its mother to the pharmacologic effects. However, fetal effects appear to occur only at high analgesic doses not expected in an occupational exposure setting. May be irritating to the eyes, skin, and respiratory tract.

**Caffeine** - Low concentration may cause a small decrease in heart rate. Ingestion of large quantities may cause increased heart rate, palpitations, increased systolic blood pressure, nervousness, abdominal cramps, increased urine output, dizziness, and headache. Symptoms of withdrawal may follow abrupt cessation. May be irritating to the eyes, skin, and respiratory tract.

**Medical Conditions Aggravated by Exposure:** Hypersensitivity to propoxyphene, aspirin, or caffeine, peptic and gastric ulcers, use of blood thinning agents.

**Carcinogenicity:**

**Caffeine** - IARC Group 3 (not classifiable as to human carcinogenicity). Not listed by NTP, ACGIH, or OSHA.

Remaining ingredients - Not listed by IARC, NTP, ACGIH, or OSHA.

## Section 4 - First Aid Measures

**Eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. See an ophthalmologist (eye doctor) or other physician immediately.

**Skin:** Remove contaminated clothing and clean before reuse. Wash all exposed areas of skin with plenty of soap and water. Get medical attention if irritation develops.

**Inhalation:** Move individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance (mouth-to-mouth) and call a physician immediately.

**Ingestion:** Call a physician or poison control center. Drink one or two glasses of water and give 1-2 tablespoons syrup of ipecac to induce vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

**Notes to Physician:** For treatment of an acute overdose, utilization of an opiate antagonist such as naloxone will produce an immediate effect reversal. Such treatment needs to be provided in a medically-staffed and equipped environment.

## Section 5 - Fire Fighting Measures

**Flash Point:** Not applicable

**UEL:** No applicable information found

**LEL:** No applicable information found

**Extinguishing Media:** Use water, carbon dioxide, dry chemical, foam, or Halon.

**Unusual Fire and Explosion Hazards:** As a finely divided material, may form dust mixtures in air which could explode if subjected to an ignition source.

**Hazardous Combustion Products:** May emit toxic fumes when exposed to heat or fire.

## Section 6 - Accidental Release Measures

**Spills:** Vacuum material with appropriate dust collection filter in place. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist material and remove by sweeping or wet wiping. Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions). Because this is a controlled substance, special handling and storage requirements must be observed to assure compliance with Drug Enforcement Administration regulations.

## Section 7 - Handling and Storage

**Material Handling Precautions:** Because this is a controlled substance, special handling and storage requirements must be observed to assure compliance with Drug Enforcement Administration regulations.

**Storage Conditions:** Controlled Room Temperature: 15 to 30 C (59 to 86 F). Controlled Substance Storage Room.

## Section 8 - Exposure Controls / Personal Protection

See Section 2 for Exposure Guideline information.

Filled capsules are not considered hazardous under normal handling procedures and protective equipment is not required. The following are recommended for manufacturing or other situations where exposure to contents may occur.

**Respiratory Protection:** Use an approved respirator.

**Eye Protection:** Chemical goggles and/or face shield.

**Ventilation:** Laboratory fume hood or local exhaust ventilation.

**Other Protective Equipment:** Chemical-resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required.

**Additional Exposure Precautions:** In production settings, airline-supplied, hood-type respirators are preferred. Shower and change clothing if skin contact occurs. Because this is a controlled substance, special handling and storage requirements must be observed to assure compliance with Drug Enforcement Administration regulations.

## Section 9 - Physical and Chemical Properties

**Appearance:** White to off-white powder finished as capsules

**Odor:** Odorless

**Boiling Point:** Not applicable

**Melting Point:** No applicable information found

**Specific Gravity:** No applicable information found

**pH:** No applicable information found

**Evaporation Rate:** No applicable information found

**Water Solubility:** Soluble

**Vapor Density:** No applicable information found

**Vapor Pressure:** No applicable information found

## Section 10 - Stability and Reactivity

**Stability:** Stable at normal temperatures and pressures.

**Incompatibility:** May react with strong oxidizing agents (e.g., peroxides, permanganates, nitric acid, etc.).

**Hazardous Decomposition:** May emit toxic fumes when heated to decomposition.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### Acute Exposure

No data are available for Propoxyphene, Aspirin, and Caffeine Capsules. Toxicity data for components are presented.

#### Oral:

Propoxyphene hydrochloride - Rat, median lethal dose 164 mg/kg, increased heart rate, incoordination, labored breathing, reduced activity.

Propoxyphene napsylate - Rat, median lethal dose 647 mg/kg, incoordination, reduced activity, respiratory depression.

Aspirin - Rat, median lethal dose 200 mg/kg.

Caffeine - Rat, median lethal dose between 261mg/kg and 383 mg/kg.

#### Skin:

Propoxyphene hydrochloride - Rabbit, 500 mg/kg, no deaths, body weight loss.

Propoxyphene napsylate - Rabbit, 500 mg/kg, no deaths or toxicity.

Caffeine - Rat, median lethal dose greater than 2000 mg/kg.

#### Inhalation:

Propoxyphene hydrochloride - Rat, 1085 mg/m<sup>3</sup> for 1 hour, no deaths or toxicity.

Propoxyphene napsylate - Rat, 730 mg/m<sup>3</sup> for 1 hour, no deaths, reduced activity.

Caffeine - Rat, median lethal concentration 4940 mg/m<sup>3</sup> for 4 hours (approximately 19.76 g/m<sup>3</sup> for 1 hour).

#### Intravenous:

Propoxyphene hydrochloride - Rat, median lethal dose 15 mg/kg, convulsions.

Caffeine - Rat, median lethal dose 105 mg/kg.

**Skin Contact:**

Propoxyphene hydrochloride - Rabbit, nonirritant

Propoxyphene napsylate - Rabbit, nonirritant

Caffeine - Rabbit, nonirritant

**Eye Contact:**

Propoxyphene hydrochloride - Rabbit, corrosive

Propoxyphene napsylate - Rabbit, corrosive

## Chronic Exposure

No data are available for Propoxyphene, Aspirin, and Caffeine Capsules. Toxicity data for components are presented.

**Target Organ Effects:**

Propoxyphene hydrochloride - Nervous system effects (increased irritability), liver effects (increased liver weight, liver tissue changes), adrenal effects (increased weight), thyroid effects (increased thyroid weight).

Propoxyphene napsylate - Nervous system effects (increased irritability), liver effects (increased liver weight, liver tissue changes), adrenal effects (increased weight), thyroid effects (increased thyroid weight).

Aspirin - Blood effects (abnormal clotting), kidney effects (tissue changes), gastrointestinal effects (tissue changes).

**Other Effects:**

Propoxyphene hydrochloride - Decreased body weight gain.

Propoxyphene napsylate - Decreased body weight gain.

**Reproduction:**

Propoxyphene napsylate - Decreased fertility, decreased viability, and decreased growth rate of offspring at doses toxic to the mother.

Aspirin - Menstrual irregularities in adult animals at high doses. Fetal changes at doses toxic to the mother.

Caffeine - Decreased fetal weight and developmental effects at doses toxic to the mother.

**Sensitization:** No applicable information found.

**Mutagenicity:**

Aspirin - Not mutagenic in bacterial or mammalian cells.

Caffeine - Mutagenic in bacterial and mammalian cells.

## Section 12 - Ecological Information

No applicable ecological information found.

## Section 13 - Disposal Considerations

**Waste Disposal:** Because this is a controlled substance, the local Drug Enforcement Administration office must be notified for authority and instructions for disposal. Disposal must be in accordance with applicable federal, state, and local laws and regulations. Dispose of any cleanup materials and waste residue according to all applicable laws and regulations.

## Section 14 - Transport Information

### Regulatory Organizations:

**DOT:** Not Regulated

**ICAO/IATA:** Not Regulated

**IMO:** Not Regulated

## Section 15 - Regulatory Information

Below is selected regulatory information chosen primarily for possible Eli Lilly and Company usage. This section is not a complete analysis or reference to all applicable regulatory information. Please consider all applicable laws and regulations for your country/state.

### U.S. Regulations

Propoxyphene hydrochloride and caffeine

TSCA - Yes

CERCLA - Not on this list

SARA 302 - Not on this list

SARA 313 - Not on this list

OSHA Substance Specific - No

Propoxyphene napsylate

TSCA - No

CERCLA - Not on this list

SARA 302 - Not on this list

SARA 313 - Not on this list

OSHA Substance Specific - No

Aspirin

TSCA - Yes

CERCLA - Not on this list

SARA 302 - Not on this list

SARA 313 - Not on this list

OSHA Substance Specific - No

California Proposition 65 (Cancer/Reproductive) - Name on (developmental, female reproductive) list is aspirin.

## EU Regulations

### EC Classification

Contains aspirin (C = 61 to 64%)

Xn (Harmful)

Xi (Irritant)

### Risk Phrases

R 22 - Harmful if swallowed.

R 36/38 - Irritating to eyes and skin.

R 41 - Risk of serious damage to eyes.

### Safety Phrases

S 22 - Do not breathe dust.

S 24 - Avoid contact with skin.

S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S 45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## Section 16 - Other Information

**MSDS Sections Revised:** Sections 2 and 15.

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact:

Eli Lilly and Company  
Hazard Communication  
317-277-6029

For additional copies contact:

Eli Lilly and Company  
1-800-LILLY-Rx (1-800-545-5979)

### GLOSSARY:

ACGIH = American Conference of Governmental Industrial Hygienists

AIHA = American Industrial Hygiene Association

BEI = Biological Exposure Index

CAS Number = Chemical Abstract Service Registry Number

CERCLA = Comprehensive Environmental Response Compensation and Liability Act (of 1980)

CHAN = Chemical Hazard Alert Notice  
CHEMTREC = Chemical Transportation Emergency Center  
DOT = Department of Transportation  
EC = European Community  
EINECS = European Inventory of Existing Chemical Substances  
ELINCS = European List of New Chemical Substances  
EPA = Environmental Protection Agency  
HEPA = High Efficiency Particulate Air (Filter)  
IARC = International Agency for Research on Cancer  
ICAO/IATA = International Civil Aviation Organization/International Air Transport Association  
IEG = Lilly Interim Exposure Guideline  
IMO = International Maritime Organization  
Kow = Octanol/Water Partition Coefficient  
LEG = Lilly Exposure Guideline  
LEL = Lower Explosive Limit  
MSDS = Material Safety Data Sheet  
MSHA = Mine Safety and Health Administration  
NA = Not Applicable, except in Section 14 where NA = North America  
NADA = New Animal Drug Application  
NAIF = No Applicable Information Found  
NCI = National Cancer Institute  
NIOSH = National Institute for Occupational Safety and Health  
NOS = Not Otherwise Specified  
NTP = National Toxicology Program  
OSHA = Occupational Safety and Health Administration  
PEL = Permissible Exposure Limit (OSHA)  
RCRA = Resource Conservation and Recovery Act  
RQ = Reportable Quantity  
RTECS = Registry of Toxic Effects of Chemical Substances  
SARA = Superfund Amendments and Reauthorization Act  
STEG = Lilly Short Term Exposure Guideline  
STEL = Short Term Exposure Limit  
TLV = Threshold Limit Value (ACGIH)  
TPQ = Threshold Planning Quantity  
TSCA = Toxic Substances Control Act  
TWA = Time Weighted Average/8 Hours Unless Otherwise Noted  
UEL = Upper Explosive Limit  
UN = United Nations  
WEEL = Workplace Environmental Exposure Level (AIHA)