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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

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Material Name: Alprazolam Drops

Trade Name: XANAX®
Chemical Family: Benzodiazepine

Intended Use: Pharmaceutical product used as antianxiety agent

2. HAZARDS IDENTIFICATION

Appearance: A yellow liquid with an alcohol odor

Statement of Hazard: Non-hazardous in accordance with international standards for workplace safety.

Additional Hazard Information:

Short Term: May cause eye irritation (based on components) . Active ingredient may be harmful if

swallowed. Ingestion of large quantities may cause may cause headache, dizziness, nausea, vomiting, diarrhea, drowsiness, and symptoms of drunkenness. Inhalation of the vapors may cause irritation of the upper respiratory passages, possibly with coughing and discomfort; temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness; abnormal liver function as detected by

laboratory test; or nonspecific discomfort, such as nausea, headache, or weakness.

Long Term: Repeat-dose studies in animals have shown a potential to cause adverse effects on nervous

system and fetus. Chronic ingestion of ethanol has been associated with an increased

incidence of cancer, liver cirrhosis, and congenital malformations.

Known Clinical Effects: Common adverse effects include lightheadedness, dizziness and drowsiness, and dry mouth.

EU Indication of danger: Not classified

Note: This document has been prepared in accordance with standards for workplace safety, which

require the inclusion of all known hazards of the active substance or its intermediates regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your

workplace.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	Classification	%
Ethanol	64-17-5	200-578-6	F;R11	12
Alprazolam	28981-97-7	249-349-2	R64 Repr.Cat.2;R61 Xn;R22	0.07

Ingredient	CAS Number	EU EINECS/ELINCS List	Classification	%
Grapefruit Flavor	Not Assigned	Not listed	Not Listed	*
Propylene glycol	57-55-6	200-338-0	Not Listed	*
Water, purified	7732-18-5	231-791-2	Not Listed	*
Sodium saccharin USP	128-44-9	204-886-1	Not Listed	*

Additional Information: * Proprietary

Ingredient(s) indicated as hazardous have been assessed under standards for workplace

safety.

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Eye Contact: Flush eye(s) immediately with plenty of water. If irritation occurs or persists, get medical

attention.

Skin Contact: Wash exposed area with soap and water, remove contaminated clothing and obtain medical

assistance if irritation occurs.

Ingestion: Get medical attention. Do not induce vomiting unless directed by medical personnel. Never

give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Symptoms and Effects of Exposure: For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Identification and/or Section 11 - Toxicological Information.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam

Hazardous Combustion Products: May include oxides of carbon.

Fire Fighting Procedures: During all fire fighting activities, wear appropriate protective equipment, including self-

contained breathing apparatus.

Fire / Explosion Hazards: May generate flammable vapors. Fine particles (such as dust and mists) may fuel

fires/explosions.

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6. ACCIDENTAL RELEASE MEASURES

Health and Safety Precautions: Personnel involved in clean-up should wear appropriate personal protective equipment (see

Section 8). Minimize exposure.

Measures for Cleaning / Collecting: Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill

area thoroughly.

Measures for Environmental

Protections:

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to

avoid environmental release.

Additional Consideration for Large

Spills:

Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

General Handling: Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use

appropriate personal protective equipment (see Section 8).

Storage Conditions: Store at room temperature in properly labeled containers. Keep away from heat, sparks and

flames.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ethanol

ACGIH Threshold Limit Value (TWA) = 1000 ppm TWA

Australia TWA = 1000 ppm TWA

= 1880 mg/m³ TWA **Austria OEL - MAKs** = 1000 ppm MAK

= 1900 mg/m³ MAK

Belgium OEL - TWA = 1000 ppm TWA

= 1907 mg/m³ TWA **Bulgaria OEL - TWA**= 1000.0 mg/m³ TWA

Czech Republic OEL - TWA = 1000 mg/m³ TWA

Denmark OEL - TWA = 1000 ppm TWA

 $= 1900 \text{ mg/m}^3 \text{ TWA}$

Estonia OEL - TWA = 1000 mg/m³ TWA

= 500 ppm TWA Finland OEL - TWA = 1000 ppm TWA

= 1900 mg/m³ TWA

France OEL - TWA = 1000 ppm VME

= 1900 mg/m³ VME **Germany - TRGS 900 - TWAs** = 500 ppm TWA

= 960 mg/m³ TWA

Greece OEL - TWA = 1000 ppm TWA

= 1900 mg/m³ TWA

Hungary OEL - TWA = 1900 mg/m³ TWA Ireland OEL - TWAs = 1000 ppm TWA

= 1900 mg/m³ TWA

Latvia OEL - TWA = 1000 mg/m³ TWA

Lithuania OEL - TWA = 1000 mg/m³ IPRV

= 500 ppm IPRV

Netherlands OEL - TWA = 1000 mg/m³ MAC

= 500 nnm M

= 500 ppm MAC

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OSHA - Final PELS - TWAs: = 1000 ppm TWA = 1900 mg/m³ TWA

 Poland OEL - TWA
 = 1900 mg/m³ NDS

 Portugal OEL - TWA
 = 1000 ppm TWA

 Romania OEL - TWA
 = 1000 ppm TWA

 Slovakia OEL - TWA
 = 500 ppm TWA

= 960 mg/m³ TWA

Slovenia OEL - TWA = 1000 ppm TWA = 1900 mg/m³ TWA

Spain OEL - TWA = 1000 ppm VLA-ED = 1910 mg/m³ VLA-ED

Sweden OEL - TWAs = 1000 mg/m³ LLV = 500 ppm LLV

Propylene glycol

Australia TWA = $10 \text{ mg/m}^3 \text{ TWA}$

= 150 ppm TWA = 474 mg/m³ TWA = 10 mg/m³ TWA = 150 ppm TWA

= 470 mg/m³ TWA

Latvia OEL - TWA = 7 mg/m³ TWA

Lithuania OEL - TWA = 7 mg/m³ IPRV

Alprazolam

Pfizer OEL TWA-8 Hr: 3 μg/m³

Analytical Method: Analytical method available for Alprazolam. Contact Pfizer Inc for further information.

Engineering Controls: Engineering controls should be used as the primary means to control exposures. General

room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne

contamination levels below the exposure limits listed above in this section.

Personal Protective Equipment:

Ireland OEL - TWAs

Hands: Impervious gloves are recommended if skin contact with drug product is possible and for bulk

processing operations.

Eyes: Wear safety glasses or goggles if eye contact is possible.

Skin: Impervious protective clothing is recommended if skin contact with drug product is possible and

for bulk processing operations.

Respiratory protection: If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate

respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Solution Color: Golden - Yellow

Odor: Alcoholic Molecular Formula: Mixture

Molecular Weight: Mixture

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10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions

Conditions to Avoid: Heat, sparks, flame, and electrostatic discharge

Incompatible Materials: Acids, bases, and oxidizers

11. TOXICOLOGICAL INFORMATION

General Information: The information included in this section describes the potential hazards of the individual

ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

Alprazolam

Rat Oral LD 50 1220 (F) mg/kg
Rat Oral LD 50 3100 (M) mg/kg
Mouse Oral LD 50 1410-1700 mg/kg
Rat Intravenous LD 50 ~ 15 mg/kg

Ethanol

Mouse Oral LD50 3,450 g/m³
Rat Oral LD50 7,060 mg/kg
Mouse Inhalation LC50 4h 39 g/m³
Rat Inhalation LC50 10h 20,000 ppm

Propylene glycol

Mouse Oral LD50 22,000 mg/kg Rat Oral LD50 20,000 mg/kg Rabbit Dermal LD50 20,800 mg/kg

Sodium saccharin USP

Mouse Oral LD50 17.5 g/kg Rat Oral LD50 14.2 - 17 g/kg

<u>Irritation / Sensitization: (Study Type, Species, Severity)</u>

Alprazolam

Eve Irritation Rabbit Mild

Skin Irritation Rabbit Non-irritating

Ethanol

Eye Irritation Rabbit Severe

Propylene glycol

Skin Irritation Rabbit Mild Eye Irritation Rabbit Mild

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Alprazolam

1 Year(s) Dog 3-30 mg/kg LOAEL Central nervous system Oral None identified 1 Year(s) Rat Oral 25 mg/kg/day NOAEL 2 Year(s) Rat Oral 3, 10, 30 mg/kg/day

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Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Alprazolam

Reproductive & Fertility Rat Oral 5 mg/kg/day NOAEL Negative

Embryo / Fetal Development Rat Oral 5 mg/kg/day NOAEL Embryotoxicity

Embryo / Fetal Development Rabbit Oral 0.5 mg/kg/day NOAEL Embryotoxicity, Teratogenic

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Alprazolam

Bacterial Mutagenicity (Ames) Salmonella Negative

In Vivo Micronucleus Rat Negative

Direct DNA Interaction Salmonella Negative

Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))

Alprazolam

2 Year(s) Rat Oral 30 mg/kg/day Not carcinogenic

104 Week(s) Mouse Oral 10 mg/kg/day Not carcinogenic

Carcinogen Status: None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

See below

Sodium saccharin USP

IARC: Group 3

12. ECOLOGICAL INFORMATION

Environmental Overview: Environmental properties have not been thoroughly investigated. Releases to the environment

should be avoided. See aquatic toxicity data for individual components below:

Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

Ethanol

Fingerling Trout NPDES LC50 24 Hours 11,200 mg/L
Rainbow Trout NPDES LC50 96 Hours 12,900 mg/L
Fathead minnow NPDES LC50 96 Hours 14,200 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of waste in accordance with all applicable laws and regulations. Member State

specific and Community specific provisions must be considered.

14. TRANSPORT INFORMATION

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

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15. REGULATORY INFORMATION

EU Indication of danger: Not classified

OSHA Label:

Non-hazardous in accordance with international standards for workplace safety.

Canada - WHMIS: Classifications

WHMIS hazard class:

None required

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Ethanol

California Proposition 65 developmental toxicity, initial date 10/1/87 (when in alcoholic

beverages)

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

EU EINECS/ELINCS List

200-578-6

Propylene glycol

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

EU EINECS/ELINCS List

200-338-0

Water, purified

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

Present

obligations of Register:

EU EINECS/ELINCS List 231-791-2

Sodium saccharin USP

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

Present

204-886-1

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Alprazolam

California Proposition 65 developmental toxicity, initial date 7/1/90

Drug Enforcement Administration:Schedule IVStandard for the Uniform SchedulingSchedule 4

for Drugs and Poisons:

EU EINECS/ELINCS List 249-349-2

16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

R11 - Highly flammable.

R22 - Harmful if swallowed.

R61 - May cause harm to the unborn child. R64 - May cause harm to breastfed babies.

Reasons for Revision: Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking.

Updated Section 8 - Exposure Controls / Personal Protection.

Prepared by: Corporate Occupational Toxicology & Hazard Assessment

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet