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# IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

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Material Name: Morphine Sulfate Tablets (5, 10, and 30 mg)

Trade Name: DOLCONTIN, ALGEDOL; CONTALGIN; MORPHOLAR

Chemical Family: Not determined

Intended Use: Pharmaceutical active used as opioid analgesic

# 2. HAZARDS IDENTIFICATION

**Appearance:** Tablets, varying in color depending on strength

Signal Word: WARNING

**Statement of Hazard:** May cause harm to the unborn child.

May cause harm to breastfed babies.

Possible mutagen

**Additional Hazard Information:** 

**Short Term:** May be harmful if swallowed. (based on components) Dust may cause irritation if tablets are

crushed or broken

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

developing fetus.

Known Clinical Effects: Ingestion of this material may cause effects similar to those seen in clinical use including dry

mouth, drowsiness, headache, dizziness, nausea, vomiting, weakness, anxiety, blurred vision and dilated pupils. Cases of overdosage may also lead to respiratory depression, hypotension,

coma, convulsions, cardiac arrhythmia, and tachycardia.

**EU Indication of danger:** Toxic to reproduction, Category 2

Mutagenic Category 3

**EU Hazard Symbols:** 



**EU Risk Phrases:** 

R61 - May cause harm to the unborn child. R64 - May cause harm to breastfed babies. R68 - Possible risk of irreversible effects.

Australian Hazard Classification (NOHSC):

Hazardous Substance. Non-Dangerous Goods.

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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.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Hazardous**

Note:

Ingredient	CAS Number	<b>EU EINECS/ELINCS List</b>	Classification	%
Morphine Sulfate	64-31-3	200-582-8	Xn;R22	3-20
			Muta.Cat.3;R68	
			Repr.Cat.2;R61	
			R64	
Magnesium stearate	557-04-0	209-150-3	Not Listed	*
Titanium dioxide	13463-67-7	236-675-5	Not Listed	*
Polyethylene glycol	25322-68-3	Not listed	Not Listed	*
Talc (non-asbestiform)	14807-96-6	238-877-9	Not Listed	*
		EEC No. 456-230-0		

Ingredient	CAS Number	EU EINECS/ELINCS List	Classification	%
Hydroxyethyl cellulose	9004-62-0	Not listed	Not Listed	*
Purified water	7732-18-5	231-791-2	Not Listed	*
Lactose NF, anhydrous	63-42-3	200-559-2	Not Listed	*
Hydroxypropyl cellulose	9004-64-2	Not listed	Not Listed	*
Film coating	NOT ASSIGNED	Not listed	Not Listed	*
Cetearyl alcohol	8005-44-5	Not listed	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 with water while holding eyelids open for at least 15 minutes. Seek medical attention

immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek

medical attention.

**Ingestion:** Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not

induce vomiting unless directed by medical personnel. Seek medical attention immediately.

**Inhalation:** Remove to fresh air and keep patient at rest. Seek medical attention immediately.

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

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

Hazardous Combustion Products: Emits toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides and other

sulfur-containing compounds.

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

contained breathing apparatus.

Fire / Explosion Hazards: Not applicable

## 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 spilled material by a method that

controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of

dry solids. 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:** Minimize dust generation and accumulation. If tablets or capsules are crushed and/or broken,

avoid breathing dust and avoid contact with eyes, skin, and clothing. When handling, use appropriate personal protective equipment (see Section 8). Releases to the environment

should be avoided.

**Storage Conditions:** Store as directed by product packaging.

**Storage Temperature:** At or below 25°C (77°F)

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to available public information for specific member state Occupational Exposure Limits.

Magnesium stearate

ACGIH Threshold Limit Value (TWA) = 10 mg/m<sup>3</sup> TWA except stearates of toxic metals

Australia TWA= 10 mg/m³ TWABelgium OEL - TWA= 10 mg/m³ TWA

**Ireland OEL - TWAs** = 10 mg/m³ TWA except lead stearate

**Lithuania OEL - TWA** = 3 mg/m<sup>3</sup> IPRV

**Portugal OEL - TWA** = 10 mg/m³ TWA does not include stearates of toxic metals **Spain OEL - TWA** = 10 mg/m³ VLA-ED not including stearates of toxic metals

Sweden OEL - TWAs =  $5 \text{ mg/m}^3 \text{ LLV}$ 

Titanium dioxide

 ACGIH Threshold Limit Value (TWA)
 = 10 mg/m³ TWA

 Australia TWA
 = 10 mg/m³ TWA

 Austria OEL - MAKs
 = 6 mg/m³ MAK

 Belgium OEL - TWA
 = 10 mg/m³ TWA

Belgium OEL - TWA = 10 mg/m³ TWA = 10.0 mg/m³ TWA = 10.0 mg/m³ TWA

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**Denmark OEL - TWA**  $= 6 \text{ mg/m}^3 \text{ TWA}$ Estonia OEL - TWA = 5 mg/m<sup>3</sup> TWA France OEL - TWA = 10 mg/m<sup>3</sup> VME **Greece OEL - TWA**  $= 10 \text{ mg/m}^3 \text{ TWA}$  $= 5 \text{ mg/m}^3 \text{ TWA}$ Ireland OEL - TWAs  $= 10 \text{ mg/m}^3 \text{ TWA}$  $= 4 \text{ mg/m}^3 \text{ TWA}$ 

Latvia OEL - TWA  $= 10 \text{ mg/m}^3 \text{ TWA}$ Lithuania OEL - TWA = 5 mg/m<sup>3</sup> IPRV Netherlands OEL - TWA  $= 10 \text{ mg/m}^3 \text{ MAC}$ **OSHA - Final PELS - TWAs:**  $= 15 \text{ mg/m}^3 \text{ TWA}$ total

Poland OEL - TWA  $= 10.0 \text{ mg/m}^3 \text{ NDS}$ <2% free crystalline silica and containing no

asbestos

Portugal OEL - TWA  $= 10 \text{ mg/m}^3 \text{ TWA}$ Romania OEL - TWA  $= 10 \text{ mg/m}^3 \text{ TWA}$ Spain OEL - TWA = 10 mg/m<sup>3</sup> VLA-ED Sweden OEL - TWAs  $= 5 \text{ mg/m}^3 \text{ LLV}$ 

Polyethylene glycol

Austria OEL - MAKs  $= 1000 \text{ mg/m}^3 \text{ MAK}$  $= 1000 \text{ mg/m}^3 \text{ TWA}$ Germany - TRGS 900 - TWAs **Netherlands OEL - TWA** = 1000 mg/m<sup>3</sup> MAC Slovakia OEL - TWA  $= 1000 \text{ mg/m}^3 \text{ TWA}$ Slovenia OEL - TWA  $= 1000 \text{ mg/m}^3 \text{ TWA}$ 

Talc (non-asbestiform)

**ACGIH Threshold Limit Value (TWA)** = 2 mg/m<sup>3</sup> TWA particulate matter containing no asbestos and

Listed

<1% crystalline silica

 $= 2.5 \text{ mg/m}^3 \text{ TWA}$ 

= 2 mg/m<sup>3</sup> MAK

 $= 2 \text{ mg/m}^3 \text{ TWA}$ 

containing no asbestos fibers

asbestos-free fibers

**ACGIH OELs - Notice of Intended Changes** 

**Australia TWA** Austria OEL - MAKs **Belgium OEL - TWA** 

= 1.0 f/cm3 TWA **Bulgaria OEL - TWA** containing <2% uncombined crystalline silicon

dioxide  $= 3.0 \text{ mg/m}^3 \text{ TWA}$  $= 6.0 \text{ mg/m}^3 \text{ TWA}$ Czech Republic OEL - TWA  $= 10 \text{ mg/m}^3 \text{ TWA}$  $= 2.0 \text{ mg/m}^3 \text{ TWA}$ 

**Denmark OEL - TWA** = 0.3 fiber/cm3 TWA Estonia OEL - TWA  $= 0.5 \text{ mg/m}^3 \text{ TWA}$  $= 1 \text{ mg/m}^3 \text{ TWA}$ **Finland OEL - TWA** = 0.5 fibers/cm3 TWA

 $= 5 \text{ mg/m}^3 \text{ TWA}$ **Greece OEL - TWA**  $= 10 \text{ mg/m}^3 \text{ TWA}$ 

 $= 2 \text{ mg/m}^3 \text{ TWA}$ **Hungary OEL - TWA**  $= 2 \text{ mg/m}^3 \text{ TWA}$  $= 0.8 \text{ mg/m}^3 \text{ TWA}$ Ireland OEL - TWAs  $= 10 \text{ mg/m}^3 \text{ TWA}$ **Netherlands OEL - TWA**  $= 1 \text{ mg/m}^3 \text{ MAC}$ 

OSHA - Final PELs - Table Z-3 Mineral D: = 20 mppcf TWA **Poland OEL - TWA**  $= 1.0 \text{ mg/m}^3 \text{ NDS}$  $= 4.0 \text{ mg/m}^3 \text{ NDS}$ 

Portugal OEL - TWA  $= 2 \text{ mg/m}^3 \text{ TWA}$ Romania OEL - TWA  $= 2 \text{ mg/m}^3 \text{ TWA}$ 

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Slovakia OEL - TWA = 10 mg/m<sup>3</sup> TWA

 $= 2 \text{ mg/m}^3 \text{ TWA}$ Slovenia OEL - TWA  $= 2 \text{ mg/m}^3 \text{ TWA}$ 

**Spain OEL - TWA** =  $2 \text{ mg/m}^3 \text{ VLA-ED}$  this value is for the particulated matter that is

free from asbestos and contains less than 1% of crystalline silica

Sweden OEL - TWAs = 1 mg/m³ LLV

 $= 2 \text{ mg/m}^3 \text{ LLV}$ 

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

**Morphine Sulfate** 

Pfizer Occupational Exposure OEB3 (control exposure to the range of >10ug/m³ to < 100ug/m³)

Band (OEB):

**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:** 

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 airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear

an appropriate respirator with a protection factor sufficient to control exposures to the bottom of

the OEB range.

# 9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Tablet Color: Various According to

product specification

Molecular Formula: Mixture Molecular Weight: Mixture

# 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Conditions to Avoid: None known

Incompatible Materials: As a precautionary measure, keep away from strong 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)

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#### Magnesium stearate

Rat Oral LD50 > 2000 mg/kg Rat Inhalation LC50 > 2000 mg/m<sup>3</sup>

#### Titanium dioxide

Rat Oral LD50 > 7500 mg/kg Rat Subcutaneous LD 50 50 mg/kg

### Talc (non-asbestiform)

Rat Oral LD50 > 1600 mg/kg

# **Morphine Sulfate**

Rat Oral LD50 461 mg/kg
Rat Intravenous LD50 70 mg/kg
Rat Intraperitoneal LD50 235 mg/kg
Mouse Oral LD50 600 mg/kg
Mouse Intravenous LD50 156 mg/kg

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

## Polyethylene glycol

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

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

## **Morphine Sulfate**

18 Week(s) Rat Oral 60 g/kg LOAEL Lungs 15 Day(s) Rat Subcutaneous 3144 mg/kg LOAEL Kidney, Ureter, Bladder 9 Week(s) Rat Subcutaneous 3150 mg/kg LOAEL

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

## **Morphine Sulfate**

Embryo / Fetal Development Mouse Subcutaneous 0.15 mg/kg LOAEL Teratogenic Embryo / Fetal Development Hamster Subcutaneous 35 mg/kg LOAEL Teratogenic Oral 200 mg/kg Embryo / Fetal Development Mouse LOAEL Teratogenic Embryo / Fetal Development Rat Subcutaneous 35 mg/kg LOAEL Fetotoxicity

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

# **Morphine Sulfate**

In Vivo Micronucleus Mouse Positive
In Vivo Chromosome Aberration Mouse Lymphocytes Positive
In Vitro Direct DNA Damage Human Lymphocytes Positive
In Vitro Chromosome Aberration Mouse Negative
Dominant Lethal Assay Drosophila Negative

# Carcinogen Status: See below

## Titanium dioxide

IARC: Group 2B OSHA: Present

PZ00686

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Talc (non-asbestiform)

IARC: Group 3

# 12. ECOLOGICAL INFORMATION

**Environmental Overview:** Environmental properties of the formulation have not been thoroughly investigated. Releases

to the environment should be avoided.

# 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.

# 15. REGULATORY INFORMATION

EU Symbol: Xn

**EU Indication of danger:** Toxic to reproduction, Category 2

Mutagenic Category 3

EU Risk Phrases:

R61 - May cause harm to the unborn child. R64 - May cause harm to breastfed babies. R68 - Possible risk of irreversible effects.

**EU Safety Phrases:** 

S22 - Do not breathe dust.

S36/37 - Wear suitable protective clothing and gloves.

S53 - Avoid exposure - obtain special instructions before use.

**OSHA Label:** 

WARNING

May cause harm to the unborn child. May cause harm to breastfed babies.

Possible mutagen

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### **Canada - WHMIS: Classifications**

## WHMIS hazard class:

D1b toxic materials D2a very toxic materials



**Morphine Sulfate** 

Australia (AICS):PresentEU EINECS/ELINCS List200-582-8

Hydroxyethyl cellulose

Inventory - United States TSCA - Sect. 8(b) XU
Australia (AICS): Present

**Purified water** 

Inventory - United States TSCA - Sect. 8(b)PresentAustralia (AICS):PresentREACH - Annex IV - Exemptions from thePresent

obligations of Register:

EU EINECS/ELINCS List 231-791-2

Magnesium stearate

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

Australia (AICS):

Present

EU EINECS/ELINCS List

209-150-3

Lactose NF, anhydrous

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

Australia (AICS):

Present

EU EINECS/ELINCS List

200-559-2

Hydroxypropyl cellulose

Inventory - United States TSCA - Sect. 8(b) XU
Australia (AICS): Present

Titanium dioxide

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

Australia (AICS):

Present

EU EINECS/ELINCS List

236-675-5

Polyethylene glycol

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

Australia (AICS):

Present

Talc (non-asbestiform)

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

Australia (AICS):

EU EINECS/ELINCS List

Present
238-877-9

EEC No. 456-230-0

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**Additional Information:** U.S. Drug Enforcement Agency Controlled Drug Substance, Schedule II

# **16. OTHER INFORMATION**

### Text of R phrases mentioned in Section 3

R22 - Harmful if swallowed.

R61 - May cause harm to the unborn child. R64 - May cause harm to breastfed babies. R68 - Possible risks of irreversible effects.

**Data Sources:** Safety data sheets for individual ingredients. Publicly available toxicity information. Pfizer

proprietary drug development information.

Prepared by: Toxicology and Hazard Communication

Pfizer Global Environment, Health, and Safety

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**