WEST-WARD

SAFETY DATA SHEET

1. Identification

Product identifier Methotrexate Tablets USP

Other means of identification

Identification: 2.5 mg yellow, round Tablet, debossed with product identification "54 323" on one side, and scored

on the other.

Recommended use Indicated for the treatment of certain neoplastic diseases, severe psoriasis, and adult rheumatoid

arthritis.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name West-Ward Pharmaceuticals Corporation

Address 1809 Wilson Road

Columbus, Ohio 43228

Telephone (614) 276-4000 Emergency phone number (614) 276-4000

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word Warning

Hazard statement This is a pharmaceutical product designed to be prescribed by a licensed health care

professional. Should any person while using this product observe any adverse health effects, they

should seek medical treatment.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F). Protect from

light.

Disposal Incineration of waste at an approved USEPA incinerator is recommended.

Hazard(s) not otherwise

classified (HNOC)

None known.

3. Composition/information on ingredients

Substances

Chemical name	Chemical name Common name and synonyms		%
Methotrexate		59-05-2	2.5 mg

Composition comments Refer to Physician's Desk Reference for common components present at <1%

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a

physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. If ingestion of a large amount does occur,

call a poison control center immediately.

Methotrexate Tablets USP SDS US

Most important symptoms/effects, acute and delayed

The most frequently reported adverse reactions include ulcerative stomatitis, leukopenia, nausea, and abdominal distress. Other frequently reported adverse effects are malaise, undue fatigue, chills and fever, dizziness and decreased resistance to infection.

Indication of immediate medical attention and special treatment needed

In the event of an overdose, Leucovorin is indicated to diminish the toxicity and counteract the effect of inadvertently administered overdosages. Leucovorin administration should begin as promptly as possible. As the time interval between methotrexate administration and leucovorin initiation increases, the effectiveness of leucovorin in counteracting toxicity decreases.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

the chemical

Specific hazards arising from

During fire, gases hazardous to health may be formed.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Special protective equipment and precautions for firefighters

Fire fighting

Use water spray to cool unopened containers.

equipment/instructions Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate personal protective equipment (See Section

Methods and materials for containment and cleaning up Sweep up and place into a proper container for disposal. Minimize dust generation and accumulation. Collect dust using a vacuum cleaner equipped with HEPA filter. Following product recovery, flush area with water. Incineration of waste at an approved USEPA incinerator is recommended.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Wash hands thoroughly after handling.

Conditions for safe storage. including any incompatibilities Store at 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) Protect from light. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

US. OSHA Table Z-3 (29 CFR 1910.1000) Components Type Value Form TWA 5 mg/m3 Total dust. 50 mppcf Total dust. 50 mppcf Total dust. 15 mppcf Respirable fra US. ACGIH Threshold Limit Values Components Type Value Form Twa Total dust. 50 mppcf Total du	Components	Туре	Value	Form
US. OSHA Table Z-3 (29 CFR 1910.1000) Components Type Value Form TWA 5 mg/m3 Total dust. 50 mppcf Total dust. 15 mppcf Respirable fra US. ACGIH Threshold Limit Values Components Type Value Form TWA 3 mg/m3 Respirable part	Dust	PEL	5 mg/m3	Respirable fraction.
Components Type Value Form Dust TWA 5 mg/m3 mg/m3 mg/m3 mount Respirable frame fr			15 mg/m3	Total dust.
Dust TWA TWA 5 mg/m3 Total dust. 50 mppcf Total dust. 15 mppcf Respirable fra 15 mppcf Total dust. 15 mppcf Respirable fra 15 mppcf Total dust. 15 mppcf Respirable fra 15 mppcf Respirable fra 15 mppcf Respirable part 15 mppcf Respirable part	US. OSHA Table Z-3 (29	CFR 1910.1000)		
US. ACGIH Threshold Limit Values Components Type Value Form Dust TWA Total dust. Total dust. Respirable fra Value Form TWA 3 mg/m3 Respirable part	Components	Туре	Value	Form
US. ACGIH Threshold Limit Values Components Type Value Form Dust TWA 3 mg/m3 Respirable part	Dust	TWA	5 mg/m3	Respirable fraction.
US. ACGIH Threshold Limit Values Components Type Value Form Dust TWA 3 mg/m3 Respirable part 10 mg/m3 Inhalable part			15 mg/m3	Total dust.
US. ACGIH Threshold Limit Values Components Type Value Form Dust TWA 3 mg/m3 Respirable part 10 mg/m3 Inhalable part			50 mppcf	Total dust.
ComponentsTypeValueFormDustTWA3 mg/m3Respirable part10 mg/m3Inhalable part			15 mppcf	Respirable fraction.
Dust TWA 3 mg/m3 Respirable part 10 mg/m3 Inhalable part	US. ACGIH Threshold L	imit Values		
10 mg/m3 Inhalable part	Components	Туре	Value	Form
·	Dust	TWA	3 mg/m3	Respirable particles.
ogical limit values No biological exposure limits noted for the ingredient(s).			10 mg/m3	Inhalable particles.
	logical limit values	No biological exposure limits noted for the ingredient(s).		

Methotrexate Tablets USP SDS US

Appropriate engineering

Ventilation should be matched to conditions.

controls

Individual protection measures, such as personal protective equipment

Eye/face protection None required for consumer use. In laboratory, medical or industrial settings, safety glasses with

side shields are recommended. The use of goggles or full face protection may be required depending on the industrial exposure setting. Contact a health and safety professional for specific

information.

Skin protection

Hand protection For consumer use, no unusual precautions are necessary.

Other None required for consumer use. In laboratory, medical or industrial settings, gloves and lab coats

> are recommended. The use of additional personal protective equipment such as shoe coverings, gauntlets, hood or head coverings may be necessary. Contact a health and safety professional for

specific information.

Respiratory protection None required for consumer use. Respirators may be required for certain laboratory and

manufacturing tasks if engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (where exposure limits have not been established). Workplace risk assessments should be completed before specifying and implementing respirator usage. All respirators must conform to specifications for efficiency and performance. In the United States of America, if respirators are used, a program should be

instituted to assure compliance with OSHA Standard 29 CFR 1910.134. Respirator type: Air-purifying respirator with an appropriate, air-purifying filter, cartridge or canister. Contact a

health and safety professional or manufacturer for specific information.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. **Physical state Form** Tablet. Color Yellow.

Odor Not available. **Odor threshold** Not available. Not available. Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Not available. Flash point **Evaporation rate** Not available.

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

Vapor pressure Not available. Not available. Vapor density Not available. Relative density

Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available.

Methotrexate Tablets USP

926122 Version #: 01 Revision date: -Issue date: 25-April-2015 Viscosity Not available.

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides, Nitrogen oxides

11. Toxicological information

Information on likely routes of exposure

Inhalation Not expected to be hazardous in final pharmaceutical form. Mechanical processing may generate

dust. Inhalation of dusts may cause respiratory irritation.

Skin contactNot expected to be hazardous in final pharmaceutical form. Mechanical processing may generate

dust. Dust or powder may irritate the skin.

Eye contact Not expected to be hazardous in final pharmaceutical form. Mechanical processing may generate

dust. Dust may irritate the eyes.

Ingestion Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

The most frequently reported adverse reactions include ulcerative stomatitis, leukopenia, nausea, and abdominal distress. Other frequently reported adverse effects are malaise, undue fatigue,

chills and fever, dizziness and decreased resistance to infection.

Information on toxicological effects

Acute toxicity May be harmful if swallowed in large quantities.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Dust may irritate the eyes.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity This product is not expected to be mutagenic.

Carcinogenicity

No controlled human data exist regarding the risk of neoplasia. There have been in a number of

animal studies for carcinogenic potential with inconclusive results. Although there is evidence that chromosomal damage to animal somatic cells and human bone marrow cells occurs, the clinical significance remains uncertain. Non-Hodgkin's lymphoma and other tumors have been

reported in patients.

IARC Monographs. Overall Evaluation of Carcinogenicity

Methotrexate (CAS 59-05-2) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Pregnancy Category: X

May cause fetal death or teratogenic effects when administered to a pregnant woman.

This product passes into breast milk. Breast-feeding is not advised in mothers being treated.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazardDue to the physical form of the product it is not an aspiration hazard.

Further information See package insert.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. **Persistence and degradability** No data is available on the degradability of this product.

Methotrexate Tablets USP SDS US

Bioaccumulative potential No data available.

Mobility in soil Product components are soluble in water and will slowly dissolve and disperse.

Other adverse effects

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

Not applicable.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations This material is not listed on the US TSCA Inventory. Therefore, it can only be used for TSCA

exempt purposes such as R&D or drug use.

Over-the-counter drugs in their solid final form (e.g. tablets or pills) are considered exempt under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, in an industrial setting where a component's occupational exposure limits may be surpassed, they

can be considered hazardous.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

> Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Nο

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Methotrexate Tablets USP SDS US Safe Drinking Water Act

(SDWA) Not listed. Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Methotrexate (CAS 59-05-2)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Methotrexate (CAS 59-05-2)

International Inventories

Country(s) or region Inventory name On inventory (yes/no)* Canada Domestic Substances List (DSL) No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

25-April-2015 Issue date

Revision date Version # 01

References 1) Methotrexate Tablets USP, Package Insert, West-Ward Pharmaceuticals Corporation, Columbus, Ohio.

2) PDR - Physicians Desk Reference.

3) Ariel Webinsight. Regulatory and ChemExpert Database.

Disclaimer

West-Ward Pharmaceuticals Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Methotrexate Tablets USP SDS US

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).