SAFETY DATA SHEET



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation

ALBENDAZOLE TABLETS

Registration number

of the mixture

Synonyms ALBEN TABLETS 400 MG * AZENTEL TABLETS 400 MG * ESKAZOLE TABLETS 400 MG *

ESKAZOLE 400 MG CHEWABLE TABLETS * NEMATIL TABLETS 400 MG * ZENTEL TABLETS

400 MG * ALBENDAZOLE, FORMULATED PRODUCT

Issue date 18-June-2014

Version number

18-June-2014 **Revision date**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Medicinal Product

> This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant

to medicinal use of the product. In this instance patients should consult prescribing

information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate

safety data sheet for each ingredient.

Uses advised against No other uses are advised.

1.3. Details of the supplier of the safety data sheet

GlaxoSmithKline UK 980 Great West Road

Brentford, Middlesex TW8 9GS UK

UK General Information (normal business hours): +44-20-8047-5000

Email Address: msds@gsk.com Website: www.gsk.com

1.4. Emergency telephone

number

TRANSPORT EMERGENCIES::

UK In-country toll call: +(44)-870-8200418 International toll call: +1 703 527 3887

available 24 hrs/7 days; multi-language response

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Classification according to Regulation (EC) No 1272/2008 as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Supplemental label information Not applicable.

2.3. Other hazards Caution - Pharmaceutical agent. See section 11 for additional information on health hazards.

Assume that this product is capable of sustaining combustion.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Material name: ALBENDAZOLE TABLETS SDS LIK **General information**

CAS-No. / EC No. REACH Registration No. INDEX No. **Chemical name** % **Notes**

ALBENDAZOLE 38.94 54965-21-8

259-414-7

Classification: **DSD:** Repr. Cat. 2;R61, Xn;R22, N;R50/53

> CLP: Acute Tox. 4;H302, Repr. 1B;H360, STOT RE 1;H372, Aquatic Acute 1;H400,

Aquatic Chronic 1;H410

MICROCRYSTALLINE CELLULOSE 20 - < 30 9004-34-6

232-674-9

Classification: DSD: -

CLP: -

Starch 10 - < 20 9005-25-8

232-679-6

Classification: DSD: -

CLP: -

Polyvinylpyrrolidone 1 - < 3 9003-39-8

Classification: **DSD:** R52/53

CLP: Aquatic Chronic 3;H412

MAGNESIUM STEARATE 557-04-0

209-150-3

Classification: DSD: -

CLP:

Other components below reportable levels 10 - < 20

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

The full text for all R- and H-phrases is displayed in section 16. Composition comments

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

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

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

Rinse mouth. Get medical attention if symptoms occur. Ingestion Direct contact with eyes may cause temporary irritation.

4.2. Most important symptoms

and effects, both acute and

delayed

The possible symptoms of overexposure include: nausea; vomiting; abdominal pain; headache.

Treat symptomatically. 4.3. Indication of any

immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

General fire hazards Assume that this product is capable of sustaining combustion.

5.1. Extinguishing media

Suitable extinguishing

media

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

Unsuitable extinguishing None known.

media

Material name: ALBENDAZOLE TABLETS

SDS LIK 2 / 10

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

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

Special fire fighting

procedures

Move containers from fire area if you can do so without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. For personal protection, see section 8.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the

SDS.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

6.4. Reference to other

sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Avoid prolonged exposure. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10

of the SDS).

7.3. Specific end use(s)

Medicinal Product

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CCK

Occupational exposure limits

Components	Туре	Value	Note
ALBENDAZOLE (CAS 54965-21-8)	8 HR TWA	100 mcg/m3	
	OHC	3	Reproductive hazard
MAGNESIUM STEARATE (CAS 557-04-0)	OHC	1	
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)	OHC	1	
UK. EH40 Workplace Exposi	ure Limits (WELs)		
Components	Туре	Value	Form
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)	STEL	20 mg/m3	Inhalable dust.
	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Starch (CAS 9005-25-8)	TWA	4 mg/m3	Respirable.
		10 mg/m3	Inhalable
commended monitoring ocedures	Follow standard monitoring procedures.		
erived No Effect Level (DNEL)	Not available.		
edicted no effect ncentrations (PNECs)	Not available.		

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in

discussion with the supplier of the personal protective equipment.

Material name: ALBENDAZOLE TABLETS

SDS LIK 4351 Version No.: 14 Revision date: 18-June-2014 Issue date: 18-June-2014

Eye/face protection Not normally needed.

Skin protection

- Hand protection The choice of an appropriate glove does not only depend on its material but also on other quality

features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present. Select suitable chemical resistant protective gloves (EN

374) with a protective index 6 (>480min permeation time).

Other Wear suitable protective clothing.

Respiratory protection No personal respiratory protective equipment normally required. **Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

Hygiene measures 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.

Environmental exposure controls

Hazard guidance and control recommendations

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.
Form Tablet.

Colour Not available.

Odour Not available.

Odour threshold Not available.

PH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point Not available.

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.

Vapour pressureNot available.Vapour densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Solubility (other) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.Explosive propertiesNot available.Oxidizing propertiesNot available.

9.2. Other information No relevant additional information available.

SECTION 10: Stability and reactivity

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

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

Material name: ALBENDAZOLE TABLETS

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Contact with incompatible materials.10.5. Incompatible materials Strong oxidising agents. Fluorine.

4351 Version No.: 14 Revision date: 18-June-2014 Issue date: 18-June-2014

10.6. Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.

SECTION 11: Toxicological information

Occupational exposure to the substance or mixture may cause adverse effects. **General information**

Information on likely routes of exposure

Ingestion Health injuries are not known or expected under normal use. Inhalation Health injuries are not known or expected under normal use. Skin contact Health injuries are not known or expected under normal use.

Eye contact Direct contact with eyes may cause temporary irritation. Avoid contact with eyes.

Symptoms The possible symptoms of overexposure include: nausea, vomiting, abdominal pain, headache.

11.1. Information on toxicological effects

Acute toxicity Health injuries are not known or expected under normal use.

Components **Species Test results**

ALBENDAZOLE (CAS 54965-21-8)

Acute

Oral

LD50 Rat 1320 - 2000 mg/kg

MAGNESIUM STEARATE (CAS 557-04-0)

Acute

Oral

LD50 Rat > 2000 mg/kg

MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat > 2000 mg/kg

Polyvinylpyrrolidone (CAS 9003-39-8)

Acute

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Health injuries are not known or expected under normal use.

Corrosivity

ALBENDAZOLE Acute dermal irritation

Result: Non-irritant Species: Rabbit

Irritation Corrosion - Skin: P.I.I. value

MAGNESIUM STEARATE 0

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation. Health injuries are not known or expected

under normal use.

Eye

irritation

ALBENDAZOLE Acute Occular irritation

Result: Non-Irritating Species: Rabbit

Respiratory sensitisation Health injuries are not known or expected under normal use. Skin sensitisation Health injuries are not known or expected under normal use.

Sensitisation

ALBENDAZOLE Maximisation assay (Magnusson and Kligman)

> Result: negative Species: Guinea pig

Germ cell mutagenicity Health injuries are not known or expected under normal use.

Mutagenicity

ALBENDAZOLE Ames

Result: negative

Chromosomal Aberration Assay In Vitro

Result: negative

Material name: ALBENDAZOLE TABLETS

4351 Version No.: 14 Revision date: 18-June-2014 Issue date: 18-June-2014

^{*} Estimates for product may be based on additional component data not shown.

Mutagenicity

ALBENDAZOLE

ALBENDAZOLE In vivo Micronucleus

Result: negative

Carcinogenicity

Health injuries are not known or expected under normal use.

24 Month Result: negative Species: Mouse 24 Month Result: negative Species: Rat

IARC Monographs. Overall Evaluation of Carcinogenicity

Polyvinylpyrrolidone (CAS 9003-39-8) 3 Not classifiable as to carcinogenicity to humans.

Possible risk of affecting the quantity or the quality of breast milk in humans. May damage the Reproductive toxicity

unborn child.

None known.

Reproductivity

ALBENDAZOLE Embryo-foetal development

Result: Effects seen at 10 mg/kg/day, NOAEL 5 mg/kg/day

Species: Rabbit

Embryo-foetal development

Result: Effects seen at 10 mg/kg/day, NOAEL 5 mg/kg/day

Species: Rat Fertility, Female Result: negative Species: Rat Fertility, Male Result: negative Species: Rat Milk effects

Result: Excreated in milk, inconclusive effects.

Species: Rat

Specific target organ toxicity -

single exposure

Specific target organ toxicity -

repeated exposure

ALBENDAZOLE 30 mg/kg/day Repeat dose non-clinical studies

Result: Decrease in size, rat, mouse.

Organ: Testes

Repeat dose non-clinical studies; clinical observation

Result: Human, rat, mouse

Organ: Liver

Repeat dose non-clinical studies; clinical observation

Result: Human, rat, mouse Organ: bone marrow; blood

Aspiration hazard Mixture versus substance

information

Not an aspiration hazard. No information available.

Other information

Caution - Pharmaceutical agent.

SECTION 12: Ecological information

12.1. Toxicity

No information is available about the potential of this product to produce adverse environmental effects. Contains a substance which causes risk of hazardous effects to the environment. The product contains a substance which may cause long-term adverse effects in the environment.

Components		Species	Test results		
ALBENDAZOLE (CAS 54965-21-8)					
Chronic					
Fish	NOEC	Danio rerio	0.022 mg/l, 6 days		
Aquatic					
Acute					
Activated Sludge Respiration	IC50	Residential sludge	> 0.27 mg/l, 3 hours		
Algae	EC50	Green algae (Selenastrum capricornutum)	> 50 mg/l, 72 hours		
Crustacea	EC50	Water flea (Daphnia magna)	0.024 mg/l, 48 hours Static test		
	NOEC	Water flea (Daphnia magna)	0.017 mg/l, 48 hours Static test		

Material name: ALBENDAZOLE TABLETS

4351 Version No.: 14 Revision date: 18-June-2014 Issue date: 18-June-2014

Components		Species	Test results
Microtox	EC50	Microtox	0.36 mg/l, 15 minutes
Terrestrial			
Acute			
Earthworm	EC50	Redworm (Lumbricus rubellus)	15 mg/kg, 60 days agricultural soil
MAGNESIUM STEARATE	(CAS 557-04-0)		
Aquatic			
Acute			
Fish	EC50	Orange-red killfish (Adult Oryzias latipes)	130 mg/l, 96 hours
Microtox	EC50	Microtox	12.5 mg/l, 15 minutes
Polyvinylpyrrolidone (CAS 9	9003-39-8)		
Acute			
	IC50	Activated sludge	> 1000 mg/l, 3 hours Static test
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	84 mg/l, 48 hours Static test
	NOEC	Water flea (Daphnia magna)	32 mg/l, 48 hours Static test

^{*} Estimates for product may be based on additional component data not shown.

12.2. Persistence and

degradability

Photolysis

Half-life (Photolysis-aqueous)

ALBENDAZOLE 0.1 - 1.65 Days Measured

Half-life (Photolysis-atmospheric)

MAGNESIUM STEARATE 17 Hours Estimated

UV/visible spectrum wavelength

ALBENDAZOLE 295 nm, pH 7 MAGNESIUM STEARATE 210 nm

Biodegradability

Percent degradation (Aerobic biodegradation-inherent)

MAGNESIUM STEARATE 77 %, 28 days BOD

0 %, 28 days Modified MITI test, Activated sludge Polyvinylpyrrolidone

Percent degradation (Aerobic biodegradation-ready)

MAGNESIUM STEARATE 95 %, 22 days Sturm test

Percent degradation (Aerobic biodegradation-soil)

MAGNESIUM STEARATE 50 %, 13 days

12.3. Bioaccumulative potential

Not available. **Partition coefficient**

n-octanol/water (log Kow)

Bioconcentration factor (BCF)

1.16 Measured, Lepomis macrochirus, bluegill sunfish **ALBENDAZOLE**

MAGNESIUM STEARATE > 9999 Estimated

12.4. Mobility in soil

Adsorption

Soil/sediment sorption - log Koc

3.89 - 4.44 Measured **ALBENDAZOLE** MAGNESIUM STEARATE 5.86 Estimated

Mobility in general

Distribution

Octanol/water distribution coefficient log DOW

3.47 **ALBENDAZOLE**

Octanol/water distribution coefficient pH

7 **ALBENDAZOLE**

12.5. Results of PBT Not available.

and vPvB assessment

12.6. Other adverse effects Not available.

Material name: ALBENDAZOLE TABLETS

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste 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).

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

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

emptied.

The Waste code should be assigned in discussion between the user, the producer and the waste **EU** waste code

disposal company.

Disposal methods/information

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

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

General Classifications are for the material when offered for transport as fully regulated. Depending on

> the specific transport details (Ship-From/Ship To locations, quantities being shipped, type of packaging and mode of transport) it may be possible to ship this material in a manner other than fully regulated. (One example is IATA Limited or Excepted Quantity. There are others.) Be sure to review all regulatory agency packaging instructions and special provisions, referenced in this

section, to identify options applicable to the specifics of your shipment.

ADR

14.1. UN number UN3077

14.2. UN proper shipping

Environmentally hazardous substances, solid, n.o.s. (ALBENDAZOLE TABLETS)

14.3. Transport hazard class(es)

9 Class Subsidiary risk 9 Label(s)

Hazard No. (ADR) Not available. Not available. **Tunnel code**

14.4. Packing group Ш 14.5. Environmental hazards Yes

14.6. Special precautions

Not available.

for user

Additional information:

Special Provisions 8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33

IATA

14.1. UN number

14.2. UN proper shipping

name

Environmentally hazardous substance, solid, n.o.s. (ALBENDAZOLE TABLETS)

14.3. Transport hazard 9

class(es)

Subsidiary class(es) 14.4. Packing group Ш 14.5. Environmental hazards No. 9 Labels required **ERG Code** 91

14.6. Special precautions

for user

Not available.

Other information

Cargo aircraft only Allowed.

Additional Information:

Passenger & cargo Allowed. 956 **Packaging Instruction** Pkg Inst cargo only 956 Pkg Inst pasenger & cargo Y956

LQ

SP See 44 A97,A158,A179

400 kg Max net qty pkg 400 kg Max net qty pkg cargo only Max net qty pkg LQ 30 kg G

IMDG

UN3077 14.1. UN number

14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ALBENDAZOLE TABLETS)

name

14.3. Transport hazard class(es)

Class 9 Subsidiary risk 9 Label(s) 14.4. Packing group Ш 14.5. Environmental hazards Marine pollutant Yes F-A. S-F **EmS** 14.6. Special precautions Not available.

for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

MARPOL Annex II applies to liquids used in a ship's operation that pose a threat to the marine

environment. These materials may not be transported in bulk.

ADR; IATA; IMDG



Marine pollutant



SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture **EU regulations**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work Not listed

Directive 94/33/EC on the protection of young people at work

Not listed.

The product is classified and labelled in accordance with EC directives or respective national laws. Other regulations

> This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Pregnant women should not work with the product, if there is the least risk of exposure.

Follow national regulation for work with chemical agents. Young people under 18 years old are not **National regulations**

allowed to work with this product according to the EU Directive 94/33/EC on the protection of

young people at work.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations Not available.

References **GSK Hazard Determination**

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R22 Harmful if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R61 May cause harm to the unborn child.

H302 Harmful if swallowed.

H360 May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Product and Company Identification: Product and Company Identification **Revision information**

Composition / Information on Ingredients: Ingredients

Physical & Chemical Properties:

Toxicological Information: Irritation Corrosion

Transport Information: Material Transportation Information

Regulatory Information: United States

GHS: Classification

Follow training instructions when handling this material. **Training information**

Disclaimer The information and recommendations in this safety data sheet are, to the best of our knowledge,

accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and

the suitability of the material or product for any particular purpose.

Material name: ALBENDAZOLE TABLETS

10 / 10 4351 Version No.: 14 Revision date: 18-June-2014 Issue date: 18-June-2014