SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

**BETALOC TABLETS**

Details of the supplier of the safety data sheet:

**ASTRAZENECA PTY LTD**
PO Box 131
Alma Road, North Ryde
NSW 2113
AUSTRALIA
+61 2 9978 3500

Emergency Telephone
+44 (0) 1235 239 670

SafetyDataSheets.AlderleyPark@astrazeneca.com

Alternative Names

'Betaloc' SA Tablets
'Betaloc' Durules 200 mg
Metoprolol sustained action tablets
Metoprolol Tablets 50, 100 mg

CAS No.: Not applicable

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

Use of the Substance/Mixture: management of angina pectoris and hypertension, prophylaxis of migraine.

SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

- Skin corrosion/irritation: Category 2
- Reproductive toxicity: Category 1A
- Effects on or via lactation: 
- Acute aquatic toxicity: Category 3
- Chronic aquatic toxicity: Category 3

**GHS label elements**

Hazard pictograms:

- 

**Signal word:** Danger

**Hazard statements:**

- H315 Causes skin irritation.
- H360 May damage fertility or the unborn child.
- H362 May cause harm to breast-fed children.
- H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:** Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

**Response:**
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

**Disposal:**
P501 Dispose of contents/container to an approved waste disposal plant.

**Other hazards which do not result in classification**
May cause eye irritation.
May form explosive dust-air mixture if dispersed.
See Section 11.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metoprolol tartrate</td>
<td>56392-17-7</td>
<td>&gt;= 60 - &lt; 70</td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

**If inhaled**
Remove patient from exposure.
Obtain medical attention if ill effects occur.

**In case of skin contact**
Wash skin with soap and water.
If symptoms (irritation or blistering) occur obtain medical attention.

**In case of eye contact**
Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes.
Obtain medical attention if ill effects occur.

**If swallowed**
Wash out mouth with water and give 200-300ml of water to drink.
Do NOT induce vomiting as a First-Aid measure.
Obtain medical attention if ill effects occur.

**Most important symptoms and effects, both acute and delayed**
Refer to sections 2 and 11
Causes skin irritation.
May damage fertility or the unborn child.
May cause harm to breast-fed children.
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SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
- water spray, foam, dry powder or CO2.

Unsuitable extinguishing media:
- Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Specific hazards during firefighting:
- If involved in a fire, it may burn and emit noxious and toxic fumes.

Special protective equipment for firefighters:
- A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.
  Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Avoid dispersal of dust in the air.
- Ensure suitable personal protection during removal of spillages.
  See Section 8.

Environmental precautions:
- Prevent entry into drains, sewers or watercourses.
  Collect spillage.

Methods and materials for containment and cleaning up:
- Transfer spilled tablets to a suitable container for disposal.
- Wash the spillage area with water.
- Avoid release to the environment.
  See section 13.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Avoid contact with skin and eyes.
  Wash hands after use.
- Minimize dust generation and accumulation.
  The product may form flammable dust clouds in air, if dust from crushed tablets is allowed to accumulate.

Conditions for safe storage:
- Keep container tightly closed.

Recommended storage temperature:
- < 25 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type</th>
<th>Control</th>
<th>Basis</th>
</tr>
</thead>
</table>

Notes to physician:
Symptomatic treatment and supportive therapy as indicated.
For further detail consult the prescribing information.
Engineering measures: The specific controls will depend on local circumstances and should be based on the risk assessment. Appropriate controls to reduce exposure may include engineering controls, for example ventilation, procedural controls and the use of personal protection equipment.

Prevent entry into drains, sewers or watercourses. See Section 6 for environmental precautions.

Personal protective equipment

Respiratory protection: Use an air fed hood if the risk assessment does not support the selection of other protection.

Eye protection: Use safety glasses to protect against direct contact with the product if the risk assessment does not support the selection of other protection.

Skin and body protection: Use impervious clothing to protect against direct contact with the product or for repeated, excessive handling use full chemical protective suit if the risk assessment does not support the selection of other protection. Use impervious protective gloves to protect against direct contact with the product. If the product is dissolved or wetted use a glove material that is resistant to the solvent/liquid.

Protective measures: Decisions about whether the use of personal protective equipment (PPE) is appropriate as part of the control strategy should be based on the workplace risk assessment and should take account of local legislative requirements for selection and use. There are multiple factors that will affect the specific requirements such as amount and concentration of the material, duration of exposure, frequency of exposure, external environmental conditions, the task, the user etc. All the information above should not be used in isolation and should be considered in the context of the workplace risk assessment on a case by case basis.

The recommended personal protective equipment (PPE) is based on preventing the potential adverse health effects from exposure to the active pharmaceutical ingredient (API). The risk of exposure to the API in the formulation/product needs to be taken into consideration.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: tablets
Colour : white
Odour : No data available
Odour Threshold : No data available
pH : No data available
Melting point/range : No data available
Initial boiling point and boiling range : No data available
Flash point : No data available
Evaporation rate : No data available
Flammability (solid, gas) : No data available
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Solubility(ies)
  Water solubility : No data available
  Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
  Viscosity, dynamic : No data available
  Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No known reactivity hazard under normal conditions.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions: None known.
Conditions to avoid: No conditions producing hazardous situations known.
Incompatible materials: None known.
Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1.1 Acute toxicity
   Not classified based on available information.

   Product:
   Acute oral toxicity: Remarks: Low acute oral toxicity.

   Components:
   Metoprolol tartrate:
   Acute oral toxicity: LD50 Oral (Rat): 3,090 - 4,670 mg/kg
   Acute inhalation toxicity: Remarks: May cause effects as described under single exposure (STOT)
   Acute dermal toxicity: Remarks: No information available.

11.1.2 Skin corrosion/irritation
   Causes skin irritation.

   Components:
   Metoprolol tartrate:
   Result: Irritating to skin.

11.1.3 Serious eye damage/eye irritation
   Not classified based on available information.

   Components:
   Metoprolol tartrate:
   Remarks: May cause eye irritation.
   May cause excessive watering of the eye (lachrymation).

11.1.4 Respiratory or skin sensitisation

   Skin sensitisation
   Not classified based on available information.

   Respiratory sensitisation
   Not classified based on available information.
Components:

Metoprolol tartrate:
Remarks: Rare cases of skin sensitisation have been reported.

11.1.5 Germ cell mutagenicity
Not classified based on available information.

Components:

Metoprolol tartrate:
Germ cell mutagenicity - Assessment: There is no evidence of genotoxic potential in in vitro and in vivo tests.

11.1.6 Carcinogenicity
Not classified based on available information.

Components:

Metoprolol tartrate:
Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

11.1.7 Reproductive toxicity
May damage fertility or the unborn child.
May cause harm to breast-fed children.

Components:

Metoprolol tartrate:
Reproductive toxicity - Assessment: Studies in animals have shown that repeated doses produce embryo/foetotoxic effects. By analogy with other beta-blockers, positive evidence of adverse effects on development from human epidemiological studies, foetal and neonatal toxicity in babies born to women receiving treatment during pregnancy has been reported. Effects on or via lactation

11.1.8 STOT - single exposure
Not classified based on available information.

Components:

Metoprolol tartrate:
Exposure routes: Inhalation, Oral
Remarks: May cause lowering of blood pressure (resulting in dizziness, fatigue and headache), change in heart rhythm and gastrointestinal disorders.

11.1.9 STOT - repeated exposure
Not classified based on available information.
Components:

Metoprolol tartrate:
Remarks: May cause effects as described under single exposure.(STOT)

11.1.10 Aspiration toxicity
Not classified based on available information.

Components:

Metoprolol tartrate:
No information available.

Further information

Product:
Remarks: This health hazard assessment is based on a consideration of the composition of this product.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.
Remarks: No information on this formulation.
The following information refers to Metoprolol succinate

Components:

Metoprolol tartrate:
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 130 mg/l
Exposure time: 96 H
Test Type: static test
Method: OECD Test Guideline 203

NOEC (Oncorhynchus mykiss (rainbow trout)): 32 mg/l
Exposure time: 96 H
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 120 mg/l
Exposure time: 48 H
Test Type: static test
Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 30 mg/l
Exposure time: 48 H
Test Type: static test
Method: OECD Test Guideline 202
Toxicity to algae: EC50 (Selenastrum capricornutum (green algae)): 58.3 mg/l
Exposure time: 72 H
Test Type: Growth inhibition
Method: OECD Test Guideline 201

NOEC (Selenastrum capricornutum (green algae)): 7.5 mg/l
Exposure time: 72 H
Test Type: Growth inhibition
Method: OECD Test Guideline 201

Toxicity to bacteria: EC50 (Sewage sludge organisms): > 100 mg/l
Exposure time: 3 H
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Ecotoxicology Assessment
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.
Remarks: Information refers to Metoprolol succinate

Persistence and degradability

Components:

Metoprolol tartrate:
Biodegradability: Result: not rapidly degradable

Bioaccumulative potential

Components:

Metoprolol tartrate:
Bioaccumulation: Remarks: The substance has low potential for bioaccumulation.

Mobility in soil

Components:

Metoprolol tartrate:
Mobility: Remarks: Water solubility >= 1 mg/l.
Distribution among environmental compartments: Remarks: No information available.

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Disposal should be in accordance with local, state or national
Waste, even small quantities, should never be poured down drains, sewers or water courses. Dispose of contents/container to an approved incineration plant.

Contaminated packaging: Empty container will retain product residue. Observe all hazard precautions.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

In order to comply with legal duties it is necessary to consult local and national legislation.

Prohibition/Licensing Requirements: There is no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.

The components of this product are reported in the following inventories:

REACH: Not listed

DSL: This product contains the following components that are not on the Canadian DSL nor NDSL.

Metoprolol tartrate 56392-17-7

AICS: Not listed

ENCS: Not listed

ISHL: Not listed

IECSC: Not listed

TCSI: Not listed

TSCA: Not On TSCA Inventory
Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; COM – In-house occupational exposure limit; CPR - Controlled Products Regulations; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; GML - Good Analytical Method for occupational exposure monitoring; HEG - Hazardous Emergency Guide; HYS - Hazardous Yields System; IC50 - Half maximal inhibitory concentration; ICI - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SAFETY DATA SHEET

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SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; COM – In-house occupational exposure limit; CPR - Controlled Products Regulations; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HYS - Hazardous Yields System; IC50 - Half maximal inhibitory concentration; ICI - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SAFETY DATA SHEET

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Further information

Other information: The Safety Data Sheet has been updated to the SAP EH&S Standard template. This update affects all Sections of the Safety Data Sheet. New significant SHE information: 2. New classification, Minor changes: 9, 12, 13

Date format: dd.mm/yyyy

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