

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 05.05.2015

Version number 1

Revision: 05.05.2015

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

· **1.1 Product identifier**

· **Product name: Abacavir Impurity Standard**

· **Part number: Cat 1113**

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

No further relevant information available.

· **Application of the substance / the mixture** Reference material for laboratory use only

· **Manufacturer/Supplier:**

LGC Limited  
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Teddington  
Middlesex TW11 0LY  
UNITED KINGDOM

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· **Further information obtainable from:**

Product safety department  
eMail : sds-request@lgcgroup.com

· **1.4 Emergency telephone number:** +44 (0) 20 8943 7000 (Monday - Friday : 8am - 5pm)

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R61: May cause harm to the unborn child.



Xn; Harmful

R62-40: Possible risk of impaired fertility. Limited evidence of a carcinogenic effect.



Xi; Irritant

R41: Risk of serious damage to eyes.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

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- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
Abacavir Sulfate  
[(1S,4R)-4-(2,6-Diamino-9H-purin-9-yl)-2-cyclopenten-1-yl]methanol
- **Hazard statements**  
H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.  
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P321 Specific treatment (see on this label).  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

CAS: 188062-50-2 RTECS: -	Abacavir Sulfate ☠ T Repr. Cat. 2 R61; ☠ Xn R62-40; ☠ Xi R41; ☠ Xi R43 Carc. Cat. 3 ☠ Carc. 2, H351; Repr. 2, H361; ☠ Eye Dam. 1, H318; ☠ Skin Sens. 1, H317	> 99%
RTECS: -	[(1S,4R)-4-(2,6-Diamino-9H-purin-9-yl)-2-cyclopenten-1-yl]methanol ☠ Xi R41; ☠ Xi R43 ☠ Eye Dam. 1, H318; ☠ Skin Sens. 1, H317	< 1.0%

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· **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

##### · After inhalation:

Supply fresh air and call a doctor.

In case of unconsciousness place patient in recovery position for transport.

##### · After skin contact: Immediately wash with water and soap and rinse thoroughly.

##### · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

##### · After swallowing: Rinse mouth. Do not induce vomiting.

#### · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

#### · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

##### · Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

#### · 5.3 Advice for firefighters

##### · Protective equipment: Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

#### · 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

#### · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

#### · 6.3 Methods and material for containment and cleaning up:

Dispose of contaminated material as waste according to item 13.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

#### · 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Open and handle receptacle with care.

##### · Information about fire - and explosion protection: Keep respiratory protective device available.

#### · 7.2 Conditions for safe storage, including any incompatibilities

##### · Storage:

##### · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.

Store only in the original receptacle.

Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

##### · Information about storage in one common storage facility: Store away from foodstuffs.

##### · Further information about storage conditions: None.

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· **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** Lists used were valid at the time of SDS preparation.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374

· **Material of gloves** Only use chemical-protective gloves with CE-labelling of category III.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Solid

Colour: Off white

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

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· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	222-225 °C
<b>Boiling point/Boiling range:</b>	Not determined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not determined.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** Stable under normal conditions.
- **10.2 Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**  
Formation of toxic gases is possible during heating or in case of fire.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**  
Formation of toxic gases is possible during heating or in case of fire.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** Sensitisation possible through skin contact.

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- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Carc. 2, Repr. 2

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**  
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packaging:**
- **Recommendation:** Dispose of in accordance with national regulations.

**SECTION 14: Transport information**

- |   |                 |
|---|-----------------|
| · <b>14.1 UN-Number</b>   |                 |
| · <b>ADR, IMDG, IATA</b>  | Not applicable  |
| · <b>ADR, IMDG, IATA</b>  | Not applicable  |
| · <b>14.3 Transport hazard class(es)</b>  |                 |
| · <b>ADR, IMDG, IATA</b>  |                 |
| · <b>Class</b>  | Not applicable  |
| · <b>14.4 Packing group</b>   |                 |
| · <b>ADR, IMDG, IATA</b>  | Not applicable  |
| · <b>14.5 Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>  | No              |
| · <b>14.6 Special precautions for user</b>  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |

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· UN "Model Regulation":

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### SECTION 15: Regulatory information

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

· **Philippines Inventory of Chemicals and Chemical Substances**

None of the ingredients is listed.

· **Australian Inventory of Chemical Substances**

None of the ingredients is listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

· **Relevant phrases**

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

R40 Limited evidence of a carcinogenic effect.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

· **Sources**

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.