

MATERIAL SAFETY DATA SHEET

SAFETY DATA SHEET

Issue Date: 08/16/2014

Version number: 1.0

Supercedes / Cancels: N/A

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product name: Daclatasvir

Chemical name:

N,N'-[[[1,1'-Biphenyl]-4,4'-diylbis[1H-imidazole-5,2-diyl-(2S)-2,1-pyrrolidinediyl][(1S)-1-(1-methylethyl)-2-oxo-2,1-ethanediy]]]biscarbamic acid dimethyl ester hydrochloride

Product Code: DACL

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

Identified uses: This material may be used for the manufacture of pharmaceuticals.

Uses advised against: N/A

1.3 Details of the supplier of the substance or mixture

Supplier: Beijing Mesochem Technology Co.,Ltd

1.4 Emergency Telephone

0086-57862036

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture [CLP classification]

The product has not been classified as hazardous according to the legislation in force.

2.2 Label elements

Labelling according to CLP Regulation

2.3 Other hazard information:

Ingestion: N/A

Skin Contact: No specific symptoms

Eye Contact: N/A

Inhalation: N/A

Environment (vPvB / PBT): Not regarded as dangerous for the environment

Additional Information [anything else likely to cause a problem] No other information noted

3 INFORMATION ON THE INGREDIENTS

3.1 Substances

Product name:

N,N'-[[[1,1'-Biphenyl]-4,4'-diylbis[1H-imidazole-5,2-diyl-(2S)-2,1-pyrrolidinediyl][(1S)-1-(1-methylethyl)-2-oxo-2,1-ethanediy]]]biscarbamic acid dimethyl ester hydrochloride

Product Code: DACL

Assay: 98.0%~102.0%



3.2 Mixtures: N/A

4 FIRST AID MEASURES

4.1 Description of first aid measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists..

Ingestion: Get medical aid immediately. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. 4.2 Most important symptoms and effects, both acute and delayed

N/A

4.3 Indication of immediate medical attention and special treatment needed

No specific recommendation

5 FIRE-FIGHTING MEASURES

General information: As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and protective clothing to prevent contact with skin and eyes.

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

6 ACCIDENTAL RELEASE OF MATERIAL

General information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leks: Vacuum or sweep up material and place into a suitable disposal container.

7 HANDLING AND STORAGE

Handling: Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required.

Storage: Store in a cool, dry place. Store in a tightly closed container.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eyes and face protection regulations in 29 CFR 1910.133 or European standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European standard EN 149. Use a NIOSH/MSHA or European standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9 PHYSICAL AND CHEMICAL PROPERTIES



9.1 Information on basic physical and chemical properties

[delete those not applicable or add new parameters if needed.

Use correct EU units and avoid vague descriptions such as 'poorly soluble', 'high melting point', 'not very viscous']

Appearance : White to off-white powder

Odour: Odorless

Odour threshold: N/A

pH: N/A

Freezing/Melting Point: N/A

Initial boiling point and boiling range: N/A

Flash Point: N/A

Evaporation rate: N/A

Flammability (solids and gases): N/A

Upper/lower flammability or explosive limits: N/A

Vapour Pressure, Pa at temperature degree C : N/A

Relative Density (at degree C): N/A

Solubility in water and solvents (mg/l): N/A

Partition coefficient : N/A

Autoignition temperature : N/A

Decomposition temperature (degree C): N/A

Viscosity (at degree C): N/A

Explosive properties: N/A

Oxidizing properties: N/A

9.2 Other information

N/A

10 STABILITY AND

10.1 Reactivity

No other information noted.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

N/A

10.4 Conditions to Avoid

N/A

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxide and other toxic gases.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) acute toxicity

N/A

(b) skin corrosion/irritation

N/A

(c) serious eye damage/irritation

N/A

(d) respiratory or skin sensitization

N/A

(e) germ cell mutagenicity

N/A

(f) carcinogenicity

N/A

(g) reproductive toxicity

N/A

(h) STOT-single exposure

N/A

(i) STOT-repeated exposure

N/A

(j) aspiration hazard.

N/A

12. ECOLOGICAL INFORMATION

N/A