



## Material Safety Data Sheet for Cell Cultures (Biosafety Level 1)

### 1. Product Identification

Name of cell line: Chang-Liver (CLS order no. 300139)  
Designation: Human Liver cell line, permanent cell line

### 2. Company Identification

CLS Cell Lines Service GmbH  
Dr. Eckener-Str. 8  
D-69214 Eppelheim  
Germany

Emergency phone number: +49 (0)6221 700799

### 3. Composition / Ingredients

Unit: cryovial; frozen liquid

Hazardous Ingredient(s)	CAS no.	Percentage	EC no.
Dimethyl Sulfoxide	67-68-5	10	200-664-3
Non-Hazardous Ingredient(s)		Percentage	
DMEM, supplemented for freezing		60-80	
FBS (Fetal Bovine Serum)		10-20	
Cells		1	

### 4. Hazards Identification

Human source cell line  
Categorized as non-infectious and non-toxic

### 5. First Aid Measures

Skin contact:  
Wash off immediately with plenty of water and soap.  
Eye contact:  
Flush eyes immediately with water for 10-15 minutes.  
Ingestion:  
If the material was swallowed, rinse the mouth with water.

### 6. Accidental Release Measures

Use personal protective equipment  
Do not flush into surface water.  
Clean contaminated surface thoroughly. Autoclave before disposal into appropriated containers.

## 7. Handling and storage

Handling:

Open only under a sterile workbench. Wear protective equipment. Handle as if containing infectious material.

Storage:

Keep the cryovial at -150°C (freezer) or at -196°C (liquid nitrogen vapour phase).

## 8. Personal Protection

Hygienic measures

Avoid the contact with skin, eyes and clothing. Keep away from food and drinks. Wash hands immediately after handling the product.

Normally, no respiratory protective equipment is required.

Use protective gloves and safety goggles and wear a lab coat while handling the product.

## 9. Physical and Chemical Properties / Reactivity

Form:

Liquid

DMSO is stable. It is incompatible with a very wide range of materials, including acid chlorides, strong acids, strong oxidizing agents, strong reducing agents, phosphorus halides, moisture, copper wool + trichloroacetic acid, hygroscopic.

## 10. Toxicological Information

Not hazardous according to Directive 67/548/EC.

Toxicity data for DMSO:

ORL-RAT LD50 14500 mg kg<sup>-1</sup>

IVN-MAN TDLO 686 mg kg<sup>-1</sup>

IVN-MUS LD50 3100 mg kg<sup>-1</sup>

IVN-DOG LD50 2500 mg kg

ORL-MAM LD50 21400 mg kg<sup>-1</sup>

IPR-RAT LD50 8200 mg kg<sup>-1</sup>

ORL-BWD LD50 100 mg kg<sup>-1</sup>

## 11. Transportation Information

Non-hazardous for air, sea and road freight.

## 12. General Information

Recommended use:

For in vitro research use only.

Disclaimer:

The information provided in the present Material Safety Data Sheet is believed to be correct at the date of publication. No guarantee is given for its accuracy or completeness, but is intended as guidance only. Biological material may be hazardous and should be used with caution.

CLS Cell Lines Service GmbH shall not be held liable for any damage resulting from handling or from contact with the product.