

# SAFETY DATA SHEET

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with this material, as well as describing potential risks to the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material.

This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, in CLP Regulation (EC) No 1272/2008 and in Annex I of the Commission Regulation (EU) No 2015/830.

## SECTION 1. Identification of the substances/mixture and of the company/undertaking

### 1.1 Product Identifier

Product Name: **CARBOL FUCHSIN (Gram)**  
Product Number: **HS160**  
Brand: **TCS Biosciences**

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

Identified uses: For professional use only.

### 1.3 Details of the supplier of the safety data sheet

Company: TCS Biosciences Ltd  
Botolph Claydon, Buckingham,  
MK18 2LR, UK  
Telephone: +44 (0) 1296 714222  
Email address: [sales@tcsgroup.co.uk](mailto:sales@tcsgroup.co.uk)  
Web address: [www.tcsbiosciences.co.uk](http://www.tcsbiosciences.co.uk)  
EC Representative: TCS Biosciences Europe B.V.,  
Provincial Weg 6,  
Kornhorn,  
Netherlands.

### 1.4 Emergency telephone number

+44 (0)1296 714222 only available during the following office hours:  
Monday – Thursday 8:30 – 17:00 GMT/BST  
Friday 9:00 – 15:00 GMT/BST

## SECTION 2. Hazards Identification

### 2.1 Classification of the substance or mixture

2.1.1 Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008:  
Acute Toxicity, Inhalation (Category 4)

### 2.2 Label Elements

2.2.1 Labelling in accordance with Classification Labelling and Packaging Regulation (EC) No 1272/2008:



Pictograms:  
Signal word:

**Warning**

#### Hazard Statements

H332 Harmful if inhaled.

#### Precautionary Statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

- 2.3 Other hazards:** Dyes and Stains by their physical nature may result in permanent staining if in contact with skin and clothing.  
No substance contained in this product meets the criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII; and, no substance within this product is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

### **SECTION 3. Composition/Information on Ingredients**

#### **3.2 Mixtures**

Synonyms: None  
Form: Liquid

Component	EC-No	CAS-No	Concentration	Classification in accordance with Regulation (EC) No 1272/2008
Ethanol	200-578-6	64-17-5	0.5-1%	Flam.Liq 2 ; H225
Phenol	203-632-7	108-95-2	0.3-0.5%	Acute tox 3; H301, H311, H331, Muta 2; H341, STOT RE2; H373, Skin Cor 1B:H314
Basic Fuchsin	211-189-6	632-99-5	≤0.1%	Acute tox 4 ; H302; Carc 2; H351
Methanol	67-56-1	200-659-6	≤0.05%	Flam.Liq(2); H225; AcuteTox.(3); H331,H301,H311 STOT SE 1;H370

For full text of the H-Statements mentioned in this section please refer to Section 16

### **SECTION 4. First Aid Measures**

#### **4.1 Description of first aid measures**

If exposed keep patient calm and seek immediate medical attention. Show this safety data sheet to doctor/physician in attendance.

##### **If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If not breathing, give artificial respiration. Get medical advice/attention.

##### **In case of skin contact**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

##### **In case of eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.

##### **If swallowed**

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed**

No data available.

**4.3 Indication of immediate medical attention and special treatment needed**

No data available.

**SECTION 5. Fire-Fighting Measures****5.1 Suitable extinguishing media**

Use alcohol-resistant foam or fine water spray, dry chemical powder or carbon dioxide  
For large fires immediately alert fire emergency services. Evacuate personnel to safe area.

**5.2 Special hazards arising from the substance or mixture**

May emit toxic fumes under fire: Carbon oxides, Nitrogen oxide.

**5.3 Precautions for fire-fighters**

Wear self-contained breathing apparatus/protective clothing.

**5.4 Further information**

No data available.

**SECTION 6. Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Observe all warning labels on container. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Wear respiratory protection and other personal protective equipment provided.  
Wash hands thoroughly after handling. Evacuate personnel to safe area.

**6.2 Environmental precautions**

May create a hazard to drinking water sources when very large quantities get into groundwater. Do not let undiluted product or large quantities enter drains or water course. Avoid discharge to the environment. Prevent further leakage or spillage where safe to do so. Inform responsible authorities as appropriate.

**6.3 Methods and materials for containment and cleaning up**

Absorb spillage with appropriate absorbent material e.g. vermiculite or sand; and dispose into suitably labelled closed containers for disposal according to local regulations. Wash spillage site with water and appropriate detergent.

**6.4 Reference to other sections**

For disposal refer to section 13.

**SECTION 7. Handling and Storage****7.1 Precautions for safe handling**

Observe all warning labels on container. Take precaution to avoid exposure. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Wear respiratory protection and appropriate personal protective equipment provided. Take precaution to avoid exposure. Avoid contact with eyes and skin.

Do not eat, drink, smoke when handling this product. Wash hands thoroughly after use.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated place. Replace container lid after use and keep container tightly closed to prevent leakage. Keep in locked storage or only make accessible to specialists or their authorised assistants.

**7.3 Specific end uses** Recommend restriction to professional users only.

## SECTION 8. Exposure Controls//Personal Protection

### 8.1 Control parameters

#### Components with workplace control parameters

TWA Time Weighted Average Concentration (Long Term Exposure Limit)

STEL Short Term Exposure Limit

LTEL Long Term Exposure Limit

Component	CAS-No	Value	Control Parameters	Basis
Phenol	180-95-2	TWA LTEL – 8h STEL – 15mins	2 ppm – 7.8mg/m <sup>3</sup> 4 ppm – 16mg/m <sup>3</sup>	UK.EH40 WEL- Workplace Exposure limit
Methanol	67-56-1	TWA LTEL – 8h STEL – 15mins	200 ppm – 266mg/m <sup>3</sup> 250 ppm – 333mg/m <sup>3</sup>	UK.EH40 WEL- Workplace Exposure limit
Ethanol	64-17-5	TWA LTEL – 8h	1000ppm 1920 mg/m <sup>3</sup>	UK.EH40 WEL- Workplace Exposure limit

Can be absorbed through the skin, dermal absorption may lead to systemic toxicity.

### 8.1.3 DNEL's Workers

Component	Route of Exposure	Acute Effects local	Acute Effects systemic	Chronic Effects local	Chronic Effects systemic
Phenol CAS-No: 180-95-2	Oral	na			
	Inhalation	16mg/m <sup>3</sup>	n/a	n/a	8 mg/m <sup>3</sup>
	Dermal	na	n/a	na	1.23mg/kg bw/day
Methanol CAS-No 67-56-1	Oral	na	8mg/kg bw/day	na	8mg/kg bw/day
	Inhalation	na			
	Dermal	na	8mg/kg bw/day	na	8mg/kg bw/day
Ethanol CAS-No 64-17-5	Oral	na			
	Inhalation	na	na	na	950 mg/m <sup>3</sup>
	Dermal	na	na	na	343mg/kg bw/day*

\* Repeated dose toxicity – NOAEL Oral Value: 8238 mg/kg bw/day

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

#### 8.2.2 Personal protective equipment

##### 8.2.2.1 Eye/face protection

Avoid exposure to sprays/mist/aerosols. Use face shield and/or safety goggles for eye protection complying with appropriate government standards such as EN166 (EU).

##### 8.2.2.2 Skin and Body Protection

Handle with chemical-resistant, impervious gloves or complying with appropriate government standards: EU Directive 89/686/EEC; standard EN 374. Inspect gloves prior to use to ensure adequate protection. Use proper glove removal technique to avoid skin contact with substance/mixture. Dispose of contaminated gloves after use in accordance with local and national applicable laws and good laboratory practises. Wash and dry hands thoroughly after handling. Promptly remove any contaminated clothing and clean appropriately before reuse. Use chemically resistant complete suit or protective clothing with closed cuffs and closed neck, appropriate to the concentration /amount of the dangerous substance at the specific workplace.

### 8.2.2.3 Respiratory protection

It is recommended that a full-face respirator or air hood be used; use respirator and components tested and approved to appropriate government standards such as NIOSH (US) or EN 143 / EN 14387 (EU).

### 8.2.2.4 Thermal Hazards

No specific thermal hazard. Product is stored at room temperature.

## 8.2.3 Environmental Exposure Controls None

## SECTION 9. Physical and Chemical Properties

The physical/chemical properties of this product has not been fully investigated. Judgements have been made based upon consideration of its major component(s).

### 9.1 Information on basic physical and chemical properties

a) Physical state:	Liquid.
b) Colour:	Deep pink
c) Odour:	slight smell of phenol
d) Melting/freezing point	No data available
e) Initial boiling point /boiling range:	No data available
f) Flammability:	No data available
g) Upper/lower explosion limits:	Not applicable
h) Flash point:	No data available
i) Auto-ignition temperature:	Not applicable
j) Decomposition temperature:	No data available
k) pH:	No data available
l) Kinematic viscosity:	Not applicable
m) Solubility at 20°C: Water	Miscible
Fat	No data available
n) Partition coefficient n-octanol/water (log value):	Not applicable
o) Vapour pressure:	No data available
p) Density and/or relative density:	No data available
q) Relative vapour density:	Not applicable
r) Particle characteristics:	Not applicable

### 9.2 Other information

9.2.1. Information with regard to physical hazard classes Not applicable.

9.2.2. Other safety characteristics Not applicable.

## SECTION 10. Stability and Reactivity

This product has not been tested. Judgements on the expected stability/reactivity of this product have been made based upon consideration of its major components.

10.1	Reactivity	No data available
10.2	Chemical stability	Stable under specified conditions of use and storage
10.3	Possibility of hazardous reactions	No data available
10.4	Conditions to avoid	No data available.
10.5	Incompatible materials	Strong Oxidising agents
10.6	Hazardous decomposition products	Products of Carbon Oxides and Nitrogen Oxides may be on burning or heating. The nature of released decomposition products has not been determined.

## SECTION 11. Toxicological Information

### 11.1 Information on toxicological effects

The toxicological properties of this product has not been fully investigated. Judgements have been made based upon consideration of its major component(s).

#### Toxicokinetics – Mixture

- (a) Acute toxicity Based on available data; the classification criteria are met.  
 HS160 – Harmful if inhaled. Inhalation toxicity = 9030ppmV bw  
 Phenol CAS-No 108-95-2  
 LC50, Inhal – mouse = 42.7ppm  
 LD50, Dermal - rabbit - 660mg/kg  
 LD50, Oral - rat = 340mg/kg  
 Basic Fuchsin CAS-No 632-99-5  
 LD50, Oral - mouse = 5000mg/kg  
 Methanol CAS-No 67-56-1  
 Oral, human: LDLo=300mg/kg  
 Inh, monkey: LCLo=1000ppm  
 Derm, monkey: LDLo= 393mg/kg
- (b) Skin corrosion/irritation Based on available data; the classification criteria are not met.  
 Phenol – corrosive, causes severe skin burns
- (c) Serious eye damage/ eye irritation Based on available data; the classification criteria are not met.  
 Phenol – corrosive, causes severe skin burns
- (d) Respiratory or skin sensitization Based on available data; the classification criteria are not met.
- (e) Germ cell mutagenicity Based on available data; the classification criteria are not met.  
 Phenol - mutagenic  
 Human Lymphocyte (5 µmol/L) - sister chromatid test.
- (f) Carcinogenicity Based on available data, the classification criteria are not met.  
 Basic Fuchsin – suspected of causing cancer.
- Tumourigenic **RTECS criteria:** Based on available data, the classification criteria are not met.  
**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC or EC.
- (g) Reproductive toxicity Based on available data; the classification criteria are not met.
- (h) STOT Specific target organ toxicity  
 - single exposure Based on available data; the classification criteria are not met.  
 Methanol - Causes damage to organs.
- (i) STOT Specific target organ toxicity  
 - repeated exposure Based on available data; the classification criteria are not met.  
 Phenol – May cause damage to the kidney, liver, skin & nervous system through prolonged or repeated exposure.  
 LOEL – rat = 10000 ppm  
 NOEL – rat = 3000 ppm
- (j) Aspiration hazard Based on available data; the classification criteria are not met.

#### Potential health effects

##### Inhalation

Harmful if inhaled. Material is destructive to the tissue of the mucous membranes and upper respiratory tract.

##### Ingestion

Maybe harmful if swallowed.

##### Skin

May cause skin irritation. Readily absorbed through the skin.

##### Eyes

May cause eye irritation.

#### Signs and Symptoms of Exposure

Burning sensation, cough, wheeze, laryngitis, shortness of breath, headache, nausea, vomiting, circulatory collapse, tachypnea, paralysis, convulsion and coma. Phenol predominantly targets the kidneys, liver, skin and nervous system.



**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties:** No component of this mixture is classified as endocrine disrupting according to Regulation (EU) No 2017/2100.

**11.2.2 Other information:** RTECS: Phenol SJ3325000

**SECTION 12. Ecological Information**

The toxicological properties of this product has not been fully investigated. Judgements have been made based upon consideration of major component(s).

- 12.1 Toxicity** Not classified as acutely or chronically toxic to aquatic organisms.
- 12.2 Persistence and degradability** No data available
- 12.3 Bioaccumulative potential** Adverse ecological effects cannot be excluded in the event of improper handling or disposal.  
Do not let undiluted product or large quantities enter drains or water course. Inform responsible authorities as appropriate.
- 12.4 Mobility in soil** No data available
- 12.5 Results of PBT and vPvB assessment** This mixture does not contain any substances that are assessed to be a PBT or a vPvBs
- 12.6 Endocrine disrupting properties** No component of this mixture is classified as endocrine disrupting according to Regulation (EU) No 2017/2100.
- 12.7 Other adverse effects** No data available.

**SECTION 13. Disposal Considerations****13.1 Waste treatment methods**

- 13.1.1 Product** Dispose of as hazardous waste and offer non-recyclable solutions to a licensed waste material processor. Comply with local regulations.
- Contaminated Packaging** Dispose of as unused product.

**SECTION 14. Transport Information**

Not regulated as dangerous goods under ADR/RID, IMDG, or IATA.

		ADR/RID	IMDG	IATA
14.1	UN-Number	na	na	na
14.2	UN proper shipping name	na	na	na
14.3	Transport hazard class(es)	na	na	na
14.4	Packaging group	na	na	na
14.5	Environmental hazards	No	Marine pollutant: No	No
14.6	Special precautions for users	No data available		
14.7	Maritime transport in bulk according to IMO instruments	No data available		

**SECTION 15. Regulatory information**

This Safety Data Sheet complies with the requirements of Regulations (EC) No. 1907/2006 and its amendments (EU) No. 453/2010 & (EU) No. 2015/830; and (EC) No. 1272/2008.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 All components are listed as existing substances in Europe

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out for this product.

**SECTION 16. Other information****Additional information from Section 3.**Hazard Statement(s)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

**Further information**

The information herein is provided in good faith and is correct to the best of our knowledge but makes no representation as to its completeness or accuracy. This safety data sheet is intended for use only as a guide for the appropriate precautionary handling of material by suitably trained persons. TCS Biosciences Ltd shall not be held liable for any loss, injury or damage which may result from its use.

Issue 1: created 06.12.12

V2; created 3.09.2014 updated information on inhalation toxicity.

V3: created 01.04.2017 removal of classification and labelling according to Directive 1999/45/EEC & 67/548/EEC, addition of StainHD logo.

Version 5 created 12.04.2022, addition of EC Representative information to Section 1, format updated to comply with Annex II of REACH.

HS160 end