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## MATERIAL SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name: Formal Saline 10%  
Product code: HST409  
Brand: Solmedia Ltd

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

Identified uses – Manufacture of substances. Laboratory chemicals.

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

- Name of Supplier: Solmedia Ltd.  
- Address of Supplier: Unit 2, Vernon Drive  
Battlefield Enterprise Park  
Shrewsbury  
SY1 3TF  
UK  
- Telephone: 0844 80 80 900  
- Email: labsupplies@solmedialtd.com

#### 1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification under CLP:** Acute Tox. 4: H302; Skin Sens. 1: H317; Carc. 1B: H350; Muta. 2: H341

#### 2.2 Label elements

##### Label elements under CLP:

**Hazard statements:** H302: Harmful if swallowed.  
H317: May cause an allergic skin reaction.  
H341: Suspected of causing genetic defects.  
H350: May cause cancer

**Signal words:** Danger

**Hazard pictograms:** GH007: Exclamation mark

GHS08: Health hazard

**Precautionary statements:**

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P301+312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell

P308+313: IF exposed or concerned: Get medical advice/attention.

P333+313: If skin irritation or rash occurs: Get medical advice/attention.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**PBT:**

This product is not identified as a PBT/vPvB substance.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Hazardous ingredients:

FORMALDEHYDE

EINECS	CAS	CLP Classification	Percent
200-001-8	50-00-0	Carc. 2: H351; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Corr. 1B: H314; Skin Sens. 1: H317	1-10%

METHANOL

200-659-6	67-56-1	Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370	<1%
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**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Skin contact:</b>	Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Transfer victim immediately to hospital. Consult a doctor.
<b>Eye contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.
<b>Ingestion:</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor. Obtain emergency medical attention. Call a POISON CENTRE or doctor if you feel unwell.
<b>Inhalation:</b>	Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

<b>Skin contact:</b>	There may be mild irritation and redness at the site of contact.
<b>Eye contact:</b>	There may be irritation and redness. The eyes may water profusely
<b>Ingestion:</b>	There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.
<b>Inhalation:</b>	There may be irritation of the throat with a feeling of tightness in the chest.
<b>Delayed / immediate effects:</b>	Immediate effects can be expected after short-term exposure.

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

Show this safety data sheet to the doctor in attendance.

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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Water spray. Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

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

In combustion emits toxic fumes of carbon dioxide / carbon monoxide

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Use water spray to cool unopened containers

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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not discharge into drains or rivers. Discharge into environment must be avoided.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal

### **6.4 Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **Handling requirements:**

Avoid direct contact with the substance. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Keep away from heat and sources of ignition. Take measures to prevent the build-up of electrostatic charge.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS

510): Non-combustible, acute toxic Cat.3 / toxic hazardous material or hazardous materials causing chronic effects.

### 7.3 Specific end use(s)

No other specific uses stipulated other than the uses mentioned in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Hazardous ingredients:

FORMALDEHYDE...40%

Workplace exposure limits:

Respirable dust:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>	-	-

METHANOL

UK	266 mg/m <sup>3</sup>	333mg/m <sup>3</sup>	-	-
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**DNEL / PNEC** No data available.

### 8.2 Exposure controls

**Engineering measures:** Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of the workday. Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with application laws and good laboratory practises. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Full contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: 8 hrs. Splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: 8hrs.

<b>Eye protection:</b>	Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
<b>Skin protection:</b>	Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Environmental:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>State:</b>	Liquid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Pungent
<b>Solubility in water:</b>	Soluble
<b>Boiling point/range°C:</b>	100
<b>Flammability limits %:</b>	
	lower: 7
	upper: 70
<b>Flash point°C :</b>	85
<b>Vapour pressure:</b>	53 hPa at 39C
<b>Relative density:</b>	1.08

### 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below

#### 10.4 Conditions to avoid

Heat, flames and sparks

#### 10.5 Incompatible materials

Strong bases. Acids. Oxidising agents. Alkali metals. Strong oxidising agents. Amines. Strong acids. Acid chlorides. Acid anhydrides. Reducing agents. Peroxides. Isocyanates. Phenol. Aniline.

#### 10.6 Hazardous decomposition products

In combustion emits toxic fumes. In the event of fire: see section 5

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Hazardous ingredients:

##### FORMALDEHYDE...40%

ORL	RAT	LD50	42	mg/kg
ORL	RAT	LD50	100	mg/kg
SCU	RAT	LD50	420	gm/km

##### METHANOL

IVN	RAT	LD50	2131	mg/kg
ORL	MUS	LD50	7300	mg/kg
ORL	RAT	LD50	5628	gm/km

**Toxicity values: No data available.**

#### Symptoms / routes of exposure

- Skin contact:** There may be irritation and redness at the site of contact.
- Eye contact:** There may be irritation and redness. The eyes may water profusely.
- Ingestion:** There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

#### Delayed / immediate effects:

Immediate effects can be expected after short-term exposure.

**Other information:** RTECS: Not available. Methyl alcohol may be fatal or cause blindness if swallowed., Cannot be made non-poisonous., Effects due to ingestion may include: Nausea, Headache, Vomiting, Gastrointestinal disturbance, Dizziness, Weakness, Confusion., Drowsiness, Unconsciousness, May cause convulsions. Liver - Irregularities - Based on Human Evidence

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## SECTION 12: Ecological information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

Biodegradable

### 12.3 Bioaccumulative potential

No bioaccumulation potential.

### 12.4 Mobility in soil

Readily absorbed into soil.

### 12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance

### 12.6 Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Disposal operations:** Incinerate according to applicable local, state and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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## SECTION 14: Transport information

This product does not require a classification for transport.

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## **SECTION 15: Regulatory information**

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

This safety datasheet complies with the requirements of Regulation (EC)No.1907/2006.

### **15.2 Chemical safety assessment**

This product does not require a classification for transport.

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## **SECTION 16: Other information.**

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

### **Phrases used in s.2 and 3:**

- 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.
- H317: May cause an allergic skin reaction.
- H331: Toxic if inhaled.
- H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- H370: Causes damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.