
MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name: Indicator Solution No. 8 Mixed Indicators in Ethanol (50%)
Product Numbers: IS08, 801432

Brand: Solmedia Ltd

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

Identified uses: Test reagent

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

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification under CLP: Regulation (EC) No. 1272/2008 [CLP]

Hazard Class	Hazard Category	Target Organs	Hazard Statement
Flammable liquid and vapour	Category 2	-	H225
Eye irritation	Category 2	Eyes	H319

2.2 Label elements

Hazard pictograms:



Signal words: Danger

Hazard Statements:

H225 Highly flammable liquid and vapour

H319 Causes serious eye irritation

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243: Take precautionary measures against static discharge.

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

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well ventilated place. Keep cool.

2.3 Other hazards

None

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

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

			Classification (Regulation (EC) No 1272/2008 [CLP])	
Hazardous Components		Amount [%]	Hazard class/ Hazard category	Hazard Statements
Name:	Ethanol absolute	>80%	FLAM. LIQUID CAT. 2	H225
CAS NO.	64-17-5			
EC-NO.	200-578-6			
EU REACH-REG. NO.	01-2119457610-43			

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact in case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray ABC-powder Carbon dioxide (CO₂) Nitrogen

Extinguishing media which must not be used for safety reasons no restriction

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO₂) Carbon monoxide

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Use personal protection equipment.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 Methods and materials for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

Clear spills immediately

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid: Inhalation Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature: 15-25 °C Storage class: 3 Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ethanol absolute– Gestis – UK – LTV – 1920mg/m³ -1000ppm

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Skin 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 applicable laws and good laboratory practices.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (DIN EN 136/140) Recommendation: VWR 111-0206 Suitable material: A2B2E2K2P3 Recommendation: VWR 111-0059

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection:

Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- (a) Appearance Physical state: liquid Colour: Red/Blue
- (b) Odour: no data available
- (c) Odour threshold: no data available

Safety relevant basic data

- (d) pH: no data available
- (e) Melting point/freezing point: no data available
- (f) Initial boiling point and boiling range: no data available
- (g) Flash point: no data available
- (h) Evaporation rate: no data available
- (i) Flammability (solid, gas): Highly flammable liquid and vapour.
- (j) Upper/lower flammability or explosive limits Lower explosion limit: no data available
Upper explosion limit: no data available
- (k) Vapour pressure: no data available
- (l) Vapour density: no data available
- (m) Relative density: no data available
- (n) Solubility (ies) at 20 °C: no data available Soluble (g/L) in: no data available
- (o) Partition coefficient: n-octanol/water: no data available
- (p) Auto-ignition temperature: no data available
- (q) Decomposition temperature: no data available
- (r) Viscosity Kinematic viscosity: no data available Dynamic viscosity: no data available
- (s) Explosive properties: not applicable
- (t) Oxidising properties: not applicable

9.2 Other safety information

- Bulk density: no data available
- Refraction index: no data available

Dissociation constant: no data available

Surface tension: no data available

Henry constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects:

Acute oral toxicity

Ethanol Absolute –LD50:> 6200mg/kg – Rat (Merck kGaA)

Acute dermal toxicity:

Ethanol Absolute – LD50 <20000 mg/kg – Rabbit – (CHP)

Acute inhalation toxicity:

Ethanol Absolute – LC50: <8000mg/l (4h) – Rat (CHP)

Irritant and corrosive effects: Primary irritation to the skin: Not applicable.

Irritation to eyes: Not applicable.

Irritation to respiratory tract: not applicable

Respiratory or skin sensitisation In case of skin contact: not sensitising

After inhalation: not sensitising

STOT-single exposure: Not applicable

STOT-repeated exposure: Not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity No indication of human carcinogenicity.

Germ cell mutagenicity No indications of human germ cell mutagenicity exist.

Reproductive toxicity No indications of human reproductive toxicity exist.

Aspiration hazard not applicable

Other adverse effects no data available

Additional information no data available

Other information: Not applicable.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity values:

Fish Toxicity:

Ethanol Absolute – LC50: 11000mg/l (96h) – Bengtsson, B.E., L. Renberg and M. Tarkpea 1984.

Molecular Structure & Aquatic Toxicity – an example with C1-C13 Aliphatic Alcohols. Chemosphere 13 (5/6):613-622

Daphnia Toxicity:

Ethanol Absolute – LC50: 92mg/l (48h) – Takashi, I.T, U.M Cowgill and P.G Murphy 1987. Comparison of Ethanol Toxicity to Daphnia magna and Ceriodaphnia dubia tested at two different temperatures: Static Acute Toxicity Test Results. Bull.Environ.Contam.Toxicol. 39(2):29-236

Ethanol Absolute – EC50: 9950mg/l (48h) – Barera, Y, and W.J Adams 1983. Resolving some practical questions about Daphnia Acute Toxicity Tests. In: W.E Bishpp (ed.), Aquatic toxicology and Hazard Assessment, 6th symposium, ASTM STP 802, Philadelphia, PA :509-518.

Algae Toxicity:

No data available

Bacteria Toxicity:

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. 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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number

UN1170

14.2 UN proper shipping name

Ethanol

14.3 Transport hazard class(es)

3 Classification code: F1 Hazard labels: 3

14.4 Packaging group

III

14.5 Environmental hazards

No

14.6 Special precautions for user

Special precautions: Hazard identification number (Kemler No.): 80 tunnel restriction code: E (Passage forbidden through tunnels of category E.)

Sea Transport (IMDG)

14.1 UN-No.: 1170

14.2 Proper Shipping Name: Ethanol

14.3 Class(es): 3 Classification code: Hazard label(s): 3

14.4 Packing group: II

14.5 Environmental hazards: No MARINE POLLUTANT: No

14.6 Special precautions for user: Segregation group: 1 EmS-No. F-E S-D

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

14.1 UN-No.: 1170

14.2 Proper Shipping Name: Ethanol

14.3 Class(es): 3 Classification code: F1 Hazard label(s): 3

14.4 Packing group: II

14.5 Special precautions for user not relevant

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 as amended by Regulation (EU) 2015/830.

Water hazard class (WGK): strongly hazardous to water (WGK 3)

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Further information

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.