MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Neutral red 1% alcoholic
Item Code: MIC502
Brand: Solmedia Ltd

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

Identified uses: PC21: 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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP:

Flam. Liq. 3: H226

Most important adverse effects:

Flammable liquid and vapour.

2.2 Label elements

Label elements under CLP:

Hazard statements: H226: Flammable liquid and vapour.

Signal words: Warning

Hazard pictograms: GHS02: Flame

Precautionary statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233: Keep container tightly closed.

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

P370+P378: In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

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

P501: Dispose of contents/ container in accordance with national regulations.

Supplementary precautionary statements:

P240: Ground/ bond container and receiving equipment.

P241: Use explosion-proof electrical equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

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:	Neutral red (Toluylene red, Basic Red 5, 3-Amino-7-dimethylamino-2-methylphenazine)	≥1%	N/A	N/A
CAS NO.	553-24-2			
EC-NO.	209-035-8			
Name:	Ethanol Absolute	>90%	FLAM. LIQUID CAT. 2	H225
CAS NO.	64-17-5			
EC NO.	200-578-6			

Name:	Methanol	>2.5-5%	Flam. Liq. CAT. 2. Acute Tox. CAT. 3. Acute Tox. CAT. 3. Acute Tox. CAT. 3. STOT SE1.	H225 H331 H311 H301 H370
CAS NO.	67-56-1			
EC NO.	200-659-6			

SECTION 4: First aid measures

4.1 General information

IF exposed: Immediately call a POISON CENTRE/doctor/…. 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

Immediately call a POISON CENTRE/doctor/…. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Contact doctor with Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

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

Immediately call a POISON CENTRE/doctor/…. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath.

Delayed / immediate effects:

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

In combustion emits toxic fumes.

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for Disposal of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4 Reference to other sections

Refer to section 8 of SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid breathing vapours. Avoid contact with eyes and prolonged skin contact. Avoid the formation of mists. Ground/bond container and receiving equipment.

Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing and wash it before reuse. Wash promptly with soap and water if skin becomes contaminated.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Keep at temperature not exceeding 25°C Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Not applicable.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Hazardous ingredients:

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

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.

Splash contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

Full contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

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 not required. For nuisance exposures use type OV/AG (US) or type ABEK

(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

State: Liquid.

Colour: Red.

Odour: Alcoholic.

pH: Not relevant.

Melting point: Not relevant.

Initial boiling point and range:
78 - 100°C @ 1013 hPa

Flash point: ~ 47°C

Evaporation rate: Not determined.

Flammability (solid, gas):
Not determined.

Upper/lower flammability or explosive limits:
Not determined.

Vapour pressure: Not determined.

Vapour density: Not relevant.

Relative density: Not determined.

Solubility(ies): Soluble in water.

Partition coefficient: Not determined.

Auto-ignition temperature:
Not determined.

Decomposition Temperature:
Not determined.

Viscosity: Not determined.

Explosive properties: Not considered to be explosive.

Oxidising properties: Does not meet the criteria for classification as oxidising.

9.2 Other safety information

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No test data specifically related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable at normal ambient temperatures and when used as recommended.

10.3 Possibility of hazardous reactions

Acids. Alkalis. Oxidising agents.

10.4 Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Acids. Alkalis. Oxidising agents.

10.6 Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx). Hydrocarbons. Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Hazardous ingredients:

Neutral red

IVN	RAT	LD50	112	mg/kg
IVN	MICE	LD50	142	mg/kg
IVN	RABBITS	LD50	97	mg/kg

Ethanol

IVN	RAT	LD50	1440	mg/kg
ORL	MUS	LD50	3450	mg/kg
ORL	RAT	LD50	7060	mg/kg

Methanol

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

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath**.**

Delayed / immediate effects:
No data available.

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Delayed / immediate effects:

No data available.

Other information: Not applicable.

SECTION 12: Ecological information

12.1 Toxicity

Based on available data the classification criteria are not met. However, large or frequent spills may have hazardous effects on the environment.

ETHANOL

Acute toxicity - fish
LC_{50}, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.

Acute toxicity – aquatic invertebrates
LC_{50}, 48 hours: 5012 mg/l, Ceriodaphnia dubia REACH dossier information.

Acute toxicity – aquatic plants
EC_{50}, 72 hours: 11.5 mg/l, Chlorella vulgaris REACH dossier information

Chronic toxicity – aquatic invertebrates
NOEC, 9 days: 9.6 mg/l, Daphnia magna REACH dossier information.

METHANOL

Acute toxicity - fish
LC_{50}, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
EC_{50}, 96 hours: 12700 mg/l, Lepomis macrochirus (Bluegill)

REACH dossier information.

Acute toxicity – aquatic invertebrates

EC_{50}, 96 hours: 18260 mg/l, Daphnia magna

REACH dossier information.

Acute toxicity – aquatic plants

EC_{50}, 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata

REACH dossier information.

Acute toxicity - microorganisms

IC_{50}, 3 hours: >1000 mg/l, Activated sludge

REACH dossier information.

12.2 Persistence and degradability

There is no data on the degradability of this product. Volatile substances are degraded in the atmosphere within a few days.

ETHANOL

Biodegradation

Water - Degradation (74%): 10 days

REACH dossier information.

The substance is readily biodegradable.

Chemical oxygen demand

1.99 g O_2/g substance REACH dossier information.

METHANOL

Photo transformation

Water - DT_{50} : 17.2 days

REACH dossier information.

Biodegradation

Water - Degradation (95%): 20 days

Water - Degradation (91%): 15 days

Water - Degradation (88%): 10 days

Water - Degradation (76%): 5 days

REACH dossier information.

The substance is readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulative potential

Not determined.

Partition coefficient

Not determined.

ETHANOL

Partition coefficient

log Pow: - 0.35 REACH dossier information.

METHANOL

Partition coefficient

log Pow: -0.77 REACH dossier information.

12.4 Mobility in soil

The product contains organic solvents which will evaporate easily from all surfaces. The product contains substances which are water-soluble and may spread in water systems.

ETHANOL

Surface tension

24.5 mN/m @ 20°C/68°F REACH dossier information.

METHANOL

Mobility Mobile.

12.5 Results of PBT and vPvB assessment

PBT identification:

This product does not contain any substances classified as PBT or vPvB.

12.6 Other adverse effects

Not relevant

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal company.

Recovery operations: Not applicable.

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

14.1 UN number

UN1993

14.2 UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (ethanol)

14.3 Transport hazard class(es)

3

14.4 Packaging group

III

14.5 Environmental hazards

No

Marine pollutant

No

14.6 Special precautions for user

EmS F-E, S-E

ADR transport category

3

Emergency Action Code

•3Y

Hazard Identification Number (ADR/RID)

30

Tunnel restriction code

(D/E)

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

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

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.

H226: Flammable liquid and vapour. Expert Judgement

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

H370: Causes damage to organs (Eyes, Central nervous system.

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.