



**Methyl Red Mixed Indicator Solution (R)**

Revision date: 19.06.2017

Product code: 3L-118

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

**1.1. Product identifier**

Methyl Red Mixed Indicator Solution (R)

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

**Use of the substance/mixture**

Use as laboratory reagent

**1.3. Details of the supplier of the safety data sheet**

Company name:	Waldeck GmbH & Co KG	
	Division Chroma	
Street:	Havixbecker Str. 62	
Place:	D-48161 Münster	
Post-office box:	410180	
	D-48065 Münster	
Telephone:	+49(0)180/2247662	Telefax: +49(0)180/1247662
Responsible Department:	Labor	
	Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr	
<b>1.4. Emergency telephone number:</b>	+49(0)180/2247662	

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Hazard Statements:

Highly flammable liquid and vapour.

**2.2. Label elements**

**Regulation (EC) No. 1272/2008**

**Signal word:** Danger

**Pictograms:**



**Hazard statements**

H225 Highly flammable liquid and vapour.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235	Store in a well-ventilated place. Keep cool.

**2.3. Other hazards**

No information available.



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

**3.2. Mixtures**

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64-17-5	ethanol, ethyl alcohol			95 - < 100 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
493-52-7	Methyle Red, Indicator			< 1 %
	207-776-1			
61-73-4	Methylene blue			< 0.1 %
	200-515-2			
	Acute Tox. 4; H302			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

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

Highly flammable. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.



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**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

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

Remove all sources of ignition.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

No special measures are necessary.

**Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

Vapours can form explosive mixtures with air.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Advice on storage compatibility**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

**Further information on storage conditions**

storage temperature: at room temperature

**7.3. Specific end use(s)**

Use as laboratory reagent

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

**8.2. Exposure controls**



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**Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**Eye/face protection**

Wear eye/face protection.



**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.



**Skin protection**

Flame-retardant protective clothing. Wear anti-static footwear and clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	violet
Odour:	Ethanol

**Test method**

pH-Value:	2,8-4,4
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**Changes in the physical state**

Melting point:	not determined
Initial boiling point and boiling range:	78 °C
Flash point:	17 °C

**Flammability**

Solid:	not applicable
Gas:	not applicable

Lower explosion limits:	3,5 vol. %
Upper explosion limits:	15 vol. %
Ignition temperature:	400 °C

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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**Oxidizing properties**

Not oxidizing.

Vapour pressure:	not determined
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Density:	~0,83 g/cm <sup>3</sup>
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Water solubility: (at 20 °C)	miscible
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**Solubility in other solvents**

not determined

Partition coefficient:

not determined

Vapour density:

not determined

Evaporation rate:

not determined

Solvent content:

99,80 %

**9.2. Other information**

Solid content:

not determined

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Highly flammable.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64-17-5	ethanol, ethyl alcohol					
	oral	LD50 mg/kg	6200	Rat	IUCLID	
	inhalative (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS	
61-73-4	Methylene blue					
	oral	LD50 mg/kg	1180	Rat	(RTECS)	

**SECTION 12: Ecological information**

**12.1. Toxicity**

The product is not: Ecotoxic.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64-17-5	ethanol, ethyl alcohol					
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID	
493-52-7	Methyle Red, Indicator					
	Acute fish toxicity	LC50 7 mg/l	96 h	Gambusia affinis (Mosquito fish)		
61-73-4	Methylene blue					
	Acute fish toxicity	LC50 45 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute crustacea toxicity	EC50 2260 mg/l	48 h	Daphnia magna (Big water flea)		

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31
493-52-7	Methyle Red, Indicator	3,83
61-73-4	Methylene blue	5,86

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

<b>14.1. UN number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3



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Classification code: F1  
Special Provisions: 144 601  
Limited quantity: 1 L  
Excepted quantity: E2  
Transport category: 2  
Hazard No: 33  
Tunnel restriction code: D/E

**Inland waterways transport (ADN)**

14.1. UN number: UN 1170  
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
14.3. Transport hazard class(es): 3  
14.4. Packing group: II  
Hazard label: 3



Classification code: F1  
Special Provisions: 144 601  
Limited quantity: 1 L  
Excepted quantity: E2

**Marine transport (IMDG)**

14.1. UN number: UN 1170  
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
14.3. Transport hazard class(es): 3  
14.4. Packing group: II  
Hazard label: 3



Special Provisions: 144  
Limited quantity: 1 L  
Excepted quantity: E2  
EmS: F-E, S-D

**Air transport (ICAO-TI/IATA-DGR)**

14.1. UN number: UN 1170  
14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
14.3. Transport hazard class(es): 3  
14.4. Packing group: II  
Hazard label: 3



Special Provisions: A3 A58 A180  
Limited quantity Passenger: 1 L  
Passenger LQ: Y341



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Excepted quantity: E2  
IATA-packing instructions - Passenger: 353  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 364  
IATA-max. quantity - Cargo: 60 L

**14.6. Special precautions for user**

Warning: Combustible liquid.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3: ethanol, ethyl alcohol

2010/75/EU (VOC): 99,8 %

2004/42/EC (VOC): 99,8 %

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

**Additional information**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - water contaminating

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data

**Relevant H and EUH statements (number and full text)**

H225 Highly flammable liquid and vapour.





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H302

Harmful if swallowed.

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*