

# Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company  
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841  
Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

Creation Date: 24-05-2025

Revision Date: 18-10-2030

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Product identifiers

Product name: May & grunwald's stain, solution  
Product Code: M 1536

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification  
OTTO CHEMIE PVT LTD  
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.  
Email [info@ottokemi.com](mailto:info@ottokemi.com)

1.4. Emergency telephone number  
Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, (Category 2)

Acute toxicity, (Category 3)

Acute toxicity, (Category 3)

Acute toxicity, (Category 3)

Specific target organ toxicity -

single exposure, (Category 1),

Eyes, Central nervous system

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H225

H301 + H311 + H331

H370

Precautionary Statements

P210

P233

P280

P301 + P310

P303 + P361 + P353

P304 + P340 + P311

Supplemental Hazard

Statements

Reduced Labelling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H370

H301 + H311 + H331

Precautionary Statements

H225: Highly flammable liquid and vapour.

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H311: Toxic in contact with skin.

H370: Causes damage to organs.

Danger

Highly flammable liquid and vapour.

Toxic if swallowed, in contact with skin or if inhaled.

Causes damage to organs (Eyes, Central nervous system).

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

Keep container tightly closed.

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

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.

none

Danger

Causes damage to organs.

Toxic if swallowed, in contact with skin or if inhaled.

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P301 + P310  
P304 + P340 + P311

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
IF INHALED: Remove person to fresh air and keep comfortable  
for breathing. Call a POISON CENTER/ doctor.  
none

Supplemental Hazard  
Statements

## 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.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Synonyms

: Eosin – methylene blue  
Eosin methylene blue according to May-Grünwald

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Call a doctor immediately (mention methanol ingestion). Only in exceptional cases, if no medical care is available within one hour, induce vomiting (only in fully conscious persons) and make victim drink ethanol again (approx. 0.3 ml of a 40% alcoholic beverage/kg body weight/hour).

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

Foam Carbon dioxide (CO<sub>2</sub>) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

Carbon oxides

Combustible.

Pay attention to flashback.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

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Forms explosive mixtures with air at ambient temperatures.

## 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

## 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

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

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

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

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorised persons.

Storage near heat sources or in direct sunlight may cause a violent exothermic reaction

Store in the dark.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredients with workplace control parameters

### 8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

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. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

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## Full contact

Material: butyl-rubber

Minimum layer thickness: 0,3 mm

Break through time: 480 min

Material tested: Butoject®

## Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 30 min

Material tested: Dermatrill®

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

## Body Protection

Flame retardant antistatic protective clothing.

## Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Physical state

liquid

b) Color

blue, to, dark bluepurple, to, dark

c) Odor

No data available

d) Melting

No data available

point/freezing point

e) Initial boiling point

No data available

and boiling range

f) Flammability (solid, gas)

No data available

g) Upper/lower flammability or explosive limits

No data available

h) Flash point

11 °C - closed cup

i) Autoignition temperature

No data available

j) Decomposition temperature

No data available

k) pH

No data available

l) Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

m) Water solubility

No data available

n) Partition coefficient:

No data available

n-octanol/water

o) Vapor pressure

No data available

p) Density

0,8 g/cm<sup>3</sup> at 20 °C

Relative density

No data available

q) Relative vapour density

No data available

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r) Particle characteristics  
s) Explosive properties  
t) Oxidizing properties  
9.2 Other safety information  
No data available

No data available

Not classified as explosive.  
none

## SECTION 10: Stability and reactivity

10.1 Reactivity  
Vapours may form explosive mixture with air.  
10.2 Chemical stability  
The product is chemically stable under standard ambient conditions (room temperature) .  
10.3 Possibility of hazardous reactions  
No data available  
10.4 Conditions to avoid  
Warming.  
10.5 Incompatible materials  
Acids, Oxidizing agents, Alkali metals, Strong oxidizing agents, Acid chlorides, Acid anhydrides, Reducing agents  
10.6 Hazardous decomposition products  
In the event of fire: see section 5

## SECTION 11: Toxicological information

11.1 Information on toxicological effects  
Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:  
Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg  
Inhalation LC50 Rat: > 50mg/L.  
Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.  
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).  
Special Remarks on Toxicity to Animals: Not available.  
Special Remarks on Chronic Effects on Humans: Not available.  
Special Remarks on other Toxic Effects on Humans: Not available.

## SECTION 12: Ecological information

12.1 Toxicity  
Mixture  
No data available  
12.2 Persistence and degradability  
No data available  
12.3 Bioaccumulative potential  
No data available  
12.4 Mobility in soil  
No data available  
12.5 Results of PBT and vPvB assessment  
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.  
12.6 Endocrine disrupting properties  
Product:  
Assessment  
: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.  
12.7 Other adverse effects  
No data available  
Components  
Methanol  
Toxicity to fish flow-through test LC50 - Lepomis macrochirus (Bluegill) -  
15.400,0 mg/l - 96 h

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(US-EPA)  
Toxicity to daphnia  
and other aquatic  
invertebrates  
semi-static test EC50 - Daphnia magna (Water flea) - 18.260  
mg/l - 96 h  
(OECD Test Guideline 202)  
Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green  
algae) - ca. 22.000,0 mg/l - 96 h  
(OECD Test Guideline 201)  
Toxicity to bacteria static test IC50 - activated sludge - > 1.000 mg/l - 3 h  
(OECD Test Guideline 209)  
Toxicity to  
fish(Chronic toxicity)  
NOEC - Oryzias latipes (Orange-red killifish) - 7.900 mg/l - 200  
h  
Remarks: (External MSDS)  
1-methoxy-2-propanol  
Toxicity to fish static test LC50 - Leuciscus idus (Golden orfe) - 6.812 mg/l -  
96 h  
(DIN 38412 part 15)  
Toxicity to daphnia  
and other aquatic  
invertebrates  
static test LC50 - Daphnia magna (Water flea) - 23.300 mg/l -  
48 h  
Remarks: (ECHA)  
Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green  
algae) - > 1.000 mg/l - 7 d  
Remarks: (ECHA)

## SECTION 13: Disposal considerations

13.1 Waste treatment methods  
No data available

## SECTION 14: Transport information

14.1 UN number		
ADR/RID: 1230	IMDG: 1230	IATA: 1230
14.2 UN proper shipping name		
ADR/RID: METHANOL, SOLUTION		
IMDG: METHANOL, SOLUTION		
IATA: Methanol, SOLUTION		
14.3 Transport hazard class(es)		
ADR/RID: 3 (6.1)	IMDG: 3 (6.1)	IATA: 3 (6.1)
14.4 Packaging group		
ADR/RID: II	IMDG: II	IATA: II
14.5 Environmental hazards		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6 Special precautions for user		
Tunnel restriction code	: (D/E)	
Further information	: No data available	
14.7 Maritime transport in bulk according to IMO instruments		
Not applicable for product as supplied.		

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the  
substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No.  
1907/2006.  
Authorisations and/or restrictions on use  
REACH - Restrictions on the manufacture,

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placing on the market and use of certain  
dangerous substances, mixtures and articles  
(Annex XVII)

: Methanol

National legislation

Seveso III: Directive 2012/18/EU of the  
European Parliament and of the Council  
on the control of major-accident hazards  
involving dangerous substances.

H2 ACUTE TOXIC

P5c FLAMMABLE LIQUIDS

22 Methanol

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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