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 : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Topfer's Reagent Product Code: T 1962

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 <u>info@ottokemi.com</u>

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 Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 3), H226 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Dermal (Category 3), H311 Acute toxicity, Inhalation (Category 3), H331 Specific target organ toxicity - single exposure (Category 1), H370 For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal word Danger Hazard statement(s) H226 Flammable liquid and vapour. H301 Harmful if swallowed. H311 Harmful in contact with skin. H331 Toxic if inhaled. H370 Causes damage to organ. Precautionary statement(s) P280 Wear protective gloves, protective clothing, eye protection, face protection. P271 Use only outdoors or in a well-ventilated area. P260 Do not breathe dust, fume, gas, mist, vapours, spray. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor. P307 + P311 IF EXPOSED: Call a POISON CENTER or doctor. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED. Remove to fresh air and keep at rest in a position comfortable for breathing. P363 Wash contaminated clothing before reuse. P361 Remove immediately all contaminated clothing. P403 + P233 Store in well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Supplemental Hazard Statements

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none

2.3 Other hazards

The substance does not fulfill the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Methanol CAS-No. 67-56-1 EC-No. 200-659-6 Index-No. 603-001-00-X	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370 Concentration limits: >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371;	> 99 %
Dimethyl yellow indicator CAS-No. 60-11-7		> 0.01 - < 1 %
Phenolphthalein CAS No 77-09-8 EC No 201-004-7 Index No. 604-076-00-1	STOT SE 2; H371	>0.01 - < 1 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

In case of eye contact

Obtain medical attention if pain, blinking or redness persist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If swallowed

Rinse mouth. Do NOT induce vomiting. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. 4.2 Most important symptoms and effects, both acute and delayed

Symptoms relating to use: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes damage to organ. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

4.3 Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Specific treatment (see on this label). Call a POISON CENTER or doctor.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Foam, Dry powder, Carbon dioxide, Water spray, Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Surrounding fires: Use water spray or fog for cooling exposed containers.

5.2 Special hazards arising from the substance or mixture

Under fire conditions, hazardous fumes will be present.

5.3 Advice for firefighters

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

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5.4 Further information No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures For emergency responders: Equip cleanup crew with proper protection. Ventilate area. Avoid breathing

dust, fume, gas, mist, vapours, spray.

For non-emergency personnel: Evacuate unnecessary personnel.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

Store away from other materials.

6.4 Reference to other sections

See section 8. Exposure controls/personal protection

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling: Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Technical protective measures: Provide good ventilation in process area to prevent formation of vapour.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in a cool, well ventilated place. Keep container tightly closed. Storage - away from: Strong bases, Strong acids, Sources of ignition, Direct sunlight. 7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling

the product.

Personal protective equipment

Eye/face protection

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). 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. Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective 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

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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). Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: yellowish orange

b) Odour Characteristic.

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing

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point

f) Initial boiling point and boiling range No data available No data available g) Flash point No data available h) Evaporation rate No data available i) Flammability (solid, gas) No data available j) Upper/lower flammability or explosive limits No data available k) Vapour pressure No data available I) Vapour density No data available m) Relative density 0.800 g/ml n) Water solubility Soluble in water o) Partition coefficient: n- octanol/water p) Auto-ignition temperature q) Decomposition temperature No data available No data available No data available r) Viscosity No data available s) Explosive properties No data available t) Oxidizing properties No data available 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions. 10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Direct sunlight, Extremely high or low temperatures.
10.5 Incompatible materials
Strong acids, Strong bases.
10.6 Hazardous decomposition products
Hazardous decomposition products: Fumes, Carbon monoxide, Carbon dioxide.

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 Othronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential

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No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment The substance does not fulfill the criteria to be ide Annex XIII of Regulation REACH. 12.6 Other adverse effects Avoid release to the environment.	ntified as PBT substance or vPvB substa	nce according to		
SECTION 13: Disposal considerations 13.1 Waste treatment methods Product Avoid release to the environment. Dispose in a sa Dispose of this material and its container to hazard local, regional, national and/or international regula Contaminated packaging Dispose of as unused product.	dous or special waste collection point, in			
SECTION 14: Transport information 14.1 UN number : 1230	IMDG: 1230	IATA: 1230		
14.2ADR/RID				
UN proper shipping name ADR/RID: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Methanol) IMDG: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Methanol) IATA: Corrosive liquid, flammable, n.o.s. (Methanol) 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			
14.5 Environmental hazards	IMDG. II			
ADR/RID: no	IMDG Marine pollutant: no	IATA: no		
14.6 Special precautions for user	V V CV			
No data available				
Page 7 of 7				
SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations This safety datasheet complies with the requirement		nixture		

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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Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product