

Material Safety Data Sheet



DRAGENDROFF'S REAGENT

Test reagent for alkaloids

VERSION : 02

DATE OF ISSUE : 26-08-2019

SUPERSEDES : 01

Product Code : 31540

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1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Trade name : DRAGENDROFF'S REAGENT

Product code : 31540

Identification of the product : Dragendroff's reagent

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 : MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP.Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm).

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225

Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Symbol(s) : Xi : Irritation.

Highly flammable

C: Corrosive



R Phrase(s) :R37/38: Irritating to respiratory system and skin.

S Phrase(s) :S2 : Keep out of reach of children.

S28: After contact with skin, wash immediately with plenty of ...(to be specified by manufacturer).

Labelling according Regulation (EC) No 1272/2008

Hazard pictograms

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Signal word : Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

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

P261 Avoid breathing vapours.

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Supplemental Hazard Statements none

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. Lachrymator.

3. Composition/information on ingredients

Substance / Preparation : DRAGENDROFF'S REAGENT

Substance name	Contents	CAS No
Acetic acid	$\geq 50 - < 90 \%$	64-19-7
Ethyl acetate	$\geq 50 - \leq 100 \%$	141-78-6

Substance.

Contains no other components or impurities which will influence the classification of the product.

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

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

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• In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

• In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

• If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Potassium oxides, Bismuth oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

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7. Handling and storage

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

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

8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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.

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 industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

• 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

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Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to engine 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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Odour Threshold: No data available

pH : No data available

Melting point/freezing point :No data available

Initial boiling point and boiling range :77 °C at 1013 hPa

Flash point: 7 °C

Evaporation rate :No data available

Flammability (solid, gas) :No data available

Upper/lower: No data available

flammability or explosive limits

Vapour pressure : No data available

Vapour density :No data available

Relative density: 0.950 g/cm³ at 20 °C

Water solubility: No data available

Partition coefficient: noctanol/ water : No data available

Auto-ignition temperature :No data available

Decomposition temperature :No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

9.2 Other safety information

No data available

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

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10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Potassium oxides, Bismuth oxides

In the event of fire: see section 5

11. Toxicological information

11.1 Information on toxicological effects

• Acute toxicity

No data available

• Skin corrosion/irritation

No data available

• Serious eye damage/eye irritation

No data available

• Respiratory or skin sensitisation

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

• Germ cell mutagenicity

No data available

• Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

• Reproductive toxicity

No data available

• Specific target organ toxicity - single exposure

No data available

• Specific target organ toxicity - repeated exposure

No data available

• Aspiration hazard

No data available

• Additional Information

RTECS: Not available

Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts.

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Symptoms include: hematemesis, bloody diarrhea, edema and/or perforation of the esophagus and pylorus, pancreatitis, hematuria, anuria, uremia, albuminuria, hemolysis, convulsions, bronchitis, pulmonary edema, pneumonia, cardiovascular collapse, shock, and death. Direct contact or exposure to high concentrations of vapor with skin or eyes can cause: erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache

12. Ecological information

12.1 Toxicity

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 Other adverse effects

13. Disposal considerations

13.1 Waste treatment methods

• Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

• Contaminated packaging

Dispose of as unused product.

14. Transport information

14.1 UN number

ADR/RID: 2031 IMDG: 2031 IATA: 2031

14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Acetic acid, Ethyl acetate)

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IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Acetic acid, Ethyl acetate)

IATA: Flammable liquid, corrosive, n.o.s. (Acetic acid, Ethyl acetate)

14.3 Transport hazard class(es)

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)

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

No data available

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

For this product a chemical safety assessment was not carried out


16. Other information**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006**Further information** : None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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