

# MATERIAL SAFETY DATA SHEET (MSDS)

## **CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)**

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

1.1. Product identifier

Trade name : CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)

Product code : SI0302900500 Cas No:N/A

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 Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

**Phone no.** : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

## 2. Hazards identification -DSD

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

#### Classification EC 67/548 or EC 1999/45

Classification : C; R35

<u>Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)</u>

**Health hazards** : Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314

2.2. Label elements

### Labelling EC 67/548 or EC 1999/45

Symbol(s)



Symbol(s) : C : Corrosive

R Phrase(s) : R35 : Causes severe burns.
S Phrase(s) : S24 : Avoid contact with skin.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.



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### 2. Hazards identification -DSD (continued)

S28: After contact with skin, wash immediately with

S35 : This material and its container must be disposed of in a safe way. S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection. S45 : In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

 ${\bf S59: Refer\ to\ manufacturer/supplier\ for\ information\ on\ recovery/recycling}.$ 

Contains : 4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]

dimethylammonium chloride - AMMONIUM OXALATE PURIFIED 99% - Ethanol

- Water

## Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms







Signal words : Danger

**Hazard statements** : H314 : Causes severe skin burns and eye damage.

**Precautionary statements** 

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• **Response** : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

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

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

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated

clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

• Storage : P405: Store locked up.

• **Disposal considerations** : 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.

**Contains** : 4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]

dimethylammonium chloride - AMMONIUM OXALATE PURIFIED 99% - Ethanol

- Water

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

Substance / Preparation : Preparation.

**Hazardous component(s)** : This product is hazardous.

 Substance name
 Contents
 CAS No
 EC No
 Annex No
 REACH Ref.
 Classification

 4-I4.4'-bis(dimethylamino)
 > 1 < 5 %</td>
 548-62-9
 208-953-6
 612-204-00-2
 --- R10

**4-[4,4'-bis(dimethylamino)** : >1 < 5 % 548-62-9 208-953-6 612-204-00-2 ---- R10 benzhydrylidene]cyclohexa-2,5- R52-53 dien-1-ylidene]

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### 3. Composition/information on ingredients (continued)

dimethylammonium chloride

99%

**Ethanol** 

Water

**AMMONIUM OXALATE PURIFIED:** 

> 0.01 < 1 %

> 15 < 25 %

> 75 < 99 %

6009-70-7

64-17-5

7732-18-5

200-578-6

231-791-2

603-002-00-5

Flam. Liq. 3 \_ H226 Aquatic Chronic 3 \_ H412

Xn; R21

R10 C: R35

Skin Corr. 1A \_ H314 Flam. Lig. 3 H226

Not classified (DSD/DPD)

Not classified (GHS)

4. First aid measures

4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor.

: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap Skin contact

and water. Immediately call a POISON CENTER or doctor.

: Immediately call a POISON CENTER or doctor. Remove contact lenses, if present Eye contact

and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

Ingestion : Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse

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

: Causes severe skin burns and eye damage. Symptoms relating to use

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

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

5. Fire-fighting 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

**Hazardous combustion products** 

: Under fire conditions, hazardous fumes will be present. Thermal decomposition generates: Corrosive vapours.

5.3. Advice for fire-fighters



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### 5. Fire-fighting measures (continued)

**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.

### 6. Accidental release measures

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

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

**Technical measures** : Use special care to avoid static electric charges.

**Special precautions**: Remove ignition sources. No naked lights. No smoking.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

Avoid release to the environment.

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

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Store away from other materials. Collect spillage.

### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

#### 7. Handling and storage

#### 7.1. Precautions for safe handling

Handling : Handle empty containers with care because residual vapours are flammable. Take

precautionary measures against static discharge. Avoid contact during pregnancy or while nursing. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist,

vapours, spray.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

Proper grounding procedures to avoid static electricity should be followed. Use only

non-sparking tools. Use explosion-proof electrical, ventilating, lighting, ...,

equipment.

**Special precautions** : No naked lights. No smoking.

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



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#### 7. Handling and storage (continued)

: Keep only in the original container in a cool, well ventilated place. Keep in fireproof Storage

place. Ground/bond container and receiving equipment. Keep container tightly

closed

Storage regulation : Comply with applicable regulations.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s) : None.

#### 8. Exposure controls/personal protection

#### 8.1. Exposure controls

Personal protection











Personal protection : Avoid all unnecessary exposure.

 Respiratory protection : Wear approved mask. Hand protection : Wear protective gloves.

: Wear suitable protective clothing. Skin protection Eye protection : Chemical goggles or face shield.

 Others : When using, do not eat, drink or smoke.

8.2. Control parameters

**Occupational Exposure Limits** : No data available.

### 9. Physical and chemical properties

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

Physical state at 20 °C : Liquid. : Colorless Colour : Characteristic. Odour **Odour threshold** : No data available. pH value : No data available. Melting point [°C] : No data available.

Decomposition point [°C] : N/A

Critical temperature [°C] : No data available. Auto-ignition temperature [°C] : No data available.



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## **CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)**

## 9. Physical and chemical properties (continued)

Flammability (solid, gas) : Flammable.

Flammable liquid and vapour.

Flash point [°C] : No data available.

Boiling point [°C] : N/A

Initial boiling point [°C] : No data available.
Final boiling point [°C] : No data available.

Evaporation rate : N/A

Vapour pressure [20°C] : No data available.

Vapour pressure mm/Hg : N/A
Vapour density : N/A
Density [g/cm3] : N/A
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : N/A

Solubility in water : No data available.

Log Pow octanol / water at 20°C : No data available.

Solubility : 4,6

Viscosity at 40°C [mm2/s] : No data available.

9.2. Other information

Explosive properties : N/A

Explosion limits - upper [%] : No data available.

Explosion limits - lower [%] : No data available.

Oxidising properties : No data available.

#### 10. Stability and reactivity

#### 10.1. Reactivity

**Reactivity** : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

**Hazardous reactions** : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat.

Sparks.



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## **CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)**

#### 10. Stability and reactivity (continued)

#### 10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

May release flammable gases.

Thermal decomposition generates: Corrosive vapours.

## 11. Toxicological information

#### 11.1. Information on toxicological effects

**Toxicity information**: The product has been not fully tested. The calculated risk has been done under the

requirements of the EU regulations.

**Acute toxicity** 

Inhalation
 Based on available data, the classification criteria are not met.
 Based on available data, the classification criteria are not met.
 Ingestion
 Based on available data, the classification criteria are not met.

**Corrosion** : Causes severe skin burns and eye damage.

Irritation : Based on available data, the classification criteria are not met. Sensitization : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. Mutagenicity : Based on available data, the classification criteria are not met. Carcinogenicity **Toxic for reproduction** : Based on available data, the classification criteria are not met. STOT-single exposure : Based on available data, the classification criteria are not met. STOT-repeated exposure : Based on available data, the classification criteria are not met. **Aspiration hazard** : Based on available data, the classification criteria are not met.

#### 12. Ecological information

#### 12.1. Toxicity

**Toxicity information** : The product has been not fully tested. The calculated risk has been done under the

requirements of the EU regulations.

Harmful to aquatic life with long lasting effects.

12.2. Persistence - degradability

**Persistence - degradability** : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential



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## **CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)**

### 12. Ecological information (continued)

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

### 13. Disposal considerations

#### 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Handle empty containers with care because residual vapours are flammable.

#### 14. Transport information

#### 14.1. Land transport (ADR-RID)

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

UN N° : 1993 H.I. nr : 30 ADR - Class : 3

**Labelling - Transport** : 3 : Flammable liquid.



ADR - Classification code : F1
ADR - Group : III

ADR - Packing instructions : P001 R001 LP001

ADR - Limited Quantity : 5 L

ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and

E. Other carriage: Passage forbidden through tunnels of category E.



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#### 14. Transport information (continued)



### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

UN N° : 1993

**IMO-IMDG - Class or division** : 3 : Flammable liquid.

IMO-IMDG - Packing group : 111

: P001 LP01 **IMO-IMDG - Packing instructions** 

: 5 L **IMO-IMDG - Limited quantities IMO-IMDG** - Marine pollution : No **EMS-Nr** : F-E S-E

#### 14.3. Air transport (ICAO-IATA) [English only]

: FLAMMABLE LIQUID, N.O.S. Proper shipping name

UN N° : 1993

IATA - Class or division : 3 : Flammable liquid.

IATA - Packing group : 111

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing

instruction

- Passenger and Cargo - Maximum : 60 L

Quantity/Packing

: ALLOWED IATA - Cargo only

- Cargo only - Packing instruction : 366 : 220 L

- Cargo only - Maximum Quantity/

**Packing** 

IATA - Limited Quantites : 10 L **ERG-Nr** : 3L

## 15. Regulatory information

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

Safety, health and environmental

regulations/legislation specific for the

substance or mixture

: Ensure all national/local regulations are observed.

: The components of this product are not subject to restrictions. **REACH Restrictions - Annex XVII REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization.



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## **CRYSTAL VIOLET STAINING SOLUTION (GRAM'S)**

#### 15. Regulatory information (continued)

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Revision - See : \*

**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

List of relevant R phrases (heading 3): R10: Flammable.

R21 : Harmful in contact with skin. R22 : Harmful if swallowed. R35 : Causes severe burns.

R40: Limited evidence of a carcinogenic effect.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

List of full text of H-statements in

section 3

: H226 : Flammable liquid and vapour.

H302 : Harmful if swallowed. H312 : Harmful in contact with skin.

H314: Causes severe skin burns and eye damage. H412: Harmful to aquatic life with long lasting effects.

Further information : None.

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In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

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