

METHYL VIOLET STAINING SOLUTION

GHS Safety Data Sheet

Version No:4

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

METHYL VIOLET STAINING SOLUTION

OTHER NAMES

"C.I. Basic Violet K", "C.I. 42535", "microscopy stain", indicator, "pH indicator", "methyl violet 2B", "methyl violet 6B", "methyl violet FN", "Aizen Methyl Violet",

PROPER SHIPPING NAME

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

PRODUCT USE

Laboratory reagent for microscopy and pH indicator.

Used with Crystal Violet and Bismarck Brown for staining metachromatic granules of diphtheria organisms.

Edible meat marking inks containing methyl violet are not to be used to mark meat or meat products sold in Australia. [National Food Authority]

As from 1st January 1996 edible meat marking inks containing methyl violet are not permitted to be used to mark meat or meat products destined to the EU (including Germany). Product that has been stamped using methyl violet may be acceptable up to and including the 30th June 1996.

SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315- 317, T.V. INDUSTRIAL ESTATE,

248, WORLI,

MUMBAI- 400030.INDIA.

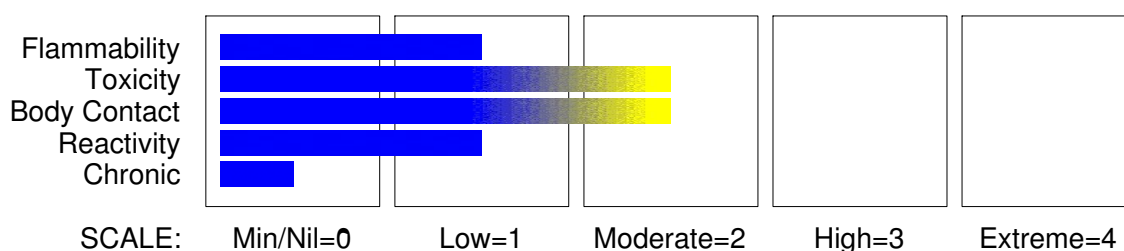
technical@sdfine.com

Telephone: 91- 22- 24959898

Telephone: 91- 22- 24959899

Fax: 91- 22- 24937232

HAZARD RATINGS



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Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Acute Aquatic Hazard Category 3

Acute Toxicity (Oral) Category 3

Carcinogen Category 2



EMERGENCY OVERVIEW

HAZARD

DANGER

Determined by using GHS criteria:

H301 H351 H402

Toxic if swallowed

Suspected of causing cancer

Harmful to aquatic life

PRECAUTIONARY STATEMENTS

Prevention

Wash hands thoroughly after handling.

Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use.

Use personal protective equipment as required.

Do not eat, drink or smoke when using this product.

Response

If exposed or concerned: Get medical attention advice.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Specific treatment: refer to Label or MSDS.

Storage

Store locked up.

Disposal

Dispose of contents and container in accordance with relevant legislation.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
Methyl Violet indicator, as C.I. Basic Violet 1	8004-87-3	0.5-1.0

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Section 4 - FIRST AID MEASURES

SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
 - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
 - If pain persists or recurs seek medical attention.
 - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
 - Flush skin and hair with running water (and soap if available).
 - Seek medical attention in event of irritation.

INHALED

- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear passage of breathing.
- If irritation or discomfort persists seek medical attention.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

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Section 5 - FIRE FIGHTING MEASURES

FIRE/EXPLOSION HAZARD

- Solid which exhibits difficult combustion or is difficult to ignite.
 - Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.
 - Dry dust can also be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport.
 - Build-up of electrostatic charge may be prevented by bonding and grounding.
 - Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
 - All movable parts coming in contact with this material should have a speed of less than 1-metre/sec.
- Combustion products include: nitrogen oxides (NO_x) and sulfur oxides (SO_x).

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Personal Protective Equipment

- Breathing apparatus.
- Gas tight chemical resistant suit.
- Limit exposure duration to 1 BA set 30 mins.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.
- Sweep up, shovel up or
- Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
- Place spilled material in clean, dry, sealable, labelled container.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment and dust respirator.
- Prevent spillage from entering drains, sewers or water courses.
- Avoid generating dust.
- Sweep, shovel up. Recover product wherever possible.
- Put residues in labelled plastic bags or other containers for disposal.
- If contamination of drains or waterways occurs, advise emergency services.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+



X



+



X



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+

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Section 6 - ACCIDENTAL RELEASE MEASURES

+: May be stored together
O: May be stored together with specific preventions
X: Must not be stored together

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

SUITABLE CONTAINER

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- C.I. Basic Violet 1: CAS:8004- 87- 3 CAS:4353- 72- 4 CAS:1335- 69- 9
CAS:134191- 03- 0 CAS:8048- 69- 9 CAS:12634- 45- 6
CAS:12227- 76- 8
- 4, 4' - bis(dimethylamino)benzophenone: CAS:90- 94- 8

MATERIAL DATA

These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:

- the architecture of the air spaces remain intact,
- scar tissue (collagen) is not synthesised to any degree,
- tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- seriously reduce visibility,
- cause unpleasant deposits in the eyes, ears and nasal passages,

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

· contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

INGREDIENT DATA

4,4'-BIS(DIMETHYLAMINO)BENZOPHENONE:

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- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

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- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

MAK IIIB: Substances suspected of having carcinogenic potential.

MAK values, and categories and groups are those recommended within the Federal Republic of Germany.

PERSONAL PROTECTION



EYE

No special equipment for minor exposure i.e. when handling small quantities.

· OTHERWISE:

- Safety glasses with side shields.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

No special equipment needed when handling small quantities.

OTHERWISE: Wear chemical protective gloves, eg. PVC.

Safety footwear may be required.

OTHER

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash unit.

RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	P1 Air- line*	- -	PAPR- P1 -
50 x ES	Air- line**	P2	PAPR- P2
100 x ES	-	P3	-
		Air- line*	-
100+ x ES	-	Air- line**	PAPR- P3

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult your

Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:

solvent, vapours, degreasing etc., evaporating from tank (in still air)

aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)

direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)

grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).

Air Speed:

0.25- 0.5 m/s (50- 100 f/min)

0.5- 1 m/s (100- 200 f/min.)

1- 2.5 m/s (200- 500 f/min)

2.5- 10 m/s (500- 2000 f/min.)

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Within each range the appropriate value depends on:

Lower end of the range

1: Room air currents minimal or favourable to capture

2: Contaminants of low toxicity or of nuisance value only

3: Intermittent, low production.

4: Large hood or large air mass in motion

Upper end of the range

1: Disturbing room air currents

2: Contaminants of high toxicity

3: High production, heavy use

4: Small hood - local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Dark coloured powder. No odour. Sparingly soluble in water.

Aqueous solution, 0.05%, changes yellow to blue at pH range 0.0-1.6.

PHYSICAL PROPERTIES

Solid.

Mixes with water.

Molecular Weight: Not available.

Melting Range (°C): 60- 70

Solubility in water (g/L): Miscible

pH (1% solution): 3 (1% ethanol)

Volatile Component (%vol): <8 @ 110 deg C.

Relative Vapour Density (air=1): >1

Lower Explosive Limit (%): Not available.

Autoignition Temp (°C): Not available.

State: Divided solid

Boiling Range (°C): Not available.

Specific Gravity (water=1): 1.17

pH (as supplied): Not applicable

Vapour Pressure (kPa): Not applicable.

Evaporation Rate: Not applicable

Flash Point (°C): Not available

Upper Explosive Limit (%): Not available.

Decomposition Temp (°C): Not available

Viscosity: Not available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

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Section 11 - TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

EYE

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.

Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts.

No human exposure data available. For this reason health effects described are based on experience with chemically related materials.

As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

The commercial material may contain Michler's ketone. When administered orally in the diet, Michler's ketone induced increased incidences of hepatocellular carcinomas in rats and mice of both sexes and in female mice and haemangiosarcomas (primarily subcutaneous) in male mice.

TOXICITY AND IRRITATION

TOXICITY

Oral (rat) LD50: 413 mg/kg

Oral (rat) LD50: 460- 680 mg/kg *

Oral (mouse) LD50: 105 mg/kg

Oral (rat) TDLo: 1663 mg/kg/17W- I

Inhalation (rat) TCLo: 110 mg/m³/2h/44d- I

IRRITATION

Eye (rabbit): irritating *

Skin (rabbit): irritating *

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Section 11 - TOXICOLOGICAL INFORMATION

#33mutagen

* BASF Canada

* BASF Canada
* BASF Canada
* BASF Canada
* BASF Canada
* BASF Canada

4,4'-BIS(DIMETHYLAMINO)BENZOPHENONE:

TOXICITY

IRRITATION

Oral (bwd) LD50: 100 mg/kg

Nil Reported

Tenth Annual Report on Carcinogens: Substance anticipated to be Carcinogen
[National Toxicology Program: U.S. Dep. of Health & Human Services 2002].

Section 12 - ECOLOGICAL INFORMATION

Marine Pollutant:Not Determined

The material is classified as an ecotoxin* because the Fish LC50 (96 hours) is less than or equal to 0.1 mg/l

* Classification of Substances as Ecotoxic (Dangerous to the Environment)

Appendix 8, Table 1

Compiler's Guide for the Preparation of International Chemical Safety Cards: 1993

Commission of the European Communities.

Aquatic toxicity: *Poecilia reticulata* 1 mg/l

Inhibition of bacteria in effluent: Modified consumption test:

50% inhibition 10-100 mg/l

Refer to data for ingredients, which follows:

4,4'-BIS(DIMETHYLAMINO)BENZOPHENONE:

Half- life Soil - High (hours):	672
Half- life Soil - Low (hours):	168
Half- life Air - High (hours):	2
Half- life Air - Low (hours):	0.2
Half- life Surface water - High (hours):	672
Half- life Surface water - Low (hours):	31.2
Half- life Ground water - High (hours):	1344
Half- life Ground water - Low (hours):	336
Aqueous biodegradation - Aerobic - High (hours):	672
Aqueous biodegradation - Aerobic - Low (hours):	168
Aqueous biodegradation - Anaerobic - High (hours):	2688
Aqueous biodegradation - Anaerobic - Low (hours):	672
Photooxidation half- life water - High (hours):	1740
Photooxidation half- life water - Low (hours):	31.2
Photooxidation half- life air - High (hours):	2
Photooxidation half- life air - Low (hours):	0.2

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

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Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:None NOTREGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN,IATA,IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

No regulations applicable

No data available for C.I. Basic Violet 1 as CAS: 8004-87-3, CAS: 4353-72-4, CAS: 1335-69-9, CAS: 134191-03-0, CAS: 8048-69-9, CAS: 12634-45-6, CAS: 12227-76-8.

Section 16 - OTHER INFORMATION

Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
4, 4' - bis(dimethylamino)benzophenone	90- 94- 8	Xn; R22 Mut3; R40 Carc3; R40 N; R51/53

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
C.I. Basic Violet 1	8004- 87- 3, 4353- 72- 4, 1335- 69- 9, 134191- 03- 0, 8048- 69- 9, 12634- 45- 6, 12227- 76- 8

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

Issue Date: 15-Dec-2017