Revision Date 11-2012
Revision 7
Supersedes date 11-2011

SAFETY DATA SHEET
METHYL VIOLET CONCENTRATE

According to Regulation (EU) No 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name METHYL VIOLET CONCENTRATE

Product No. PL.8011, PL.8011/4, PL.8011/5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory reagent.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Pro-Lab Diagnostics
3 Bassendale Road
Wirral
Merseyside
CH62 3QL
Tel: 0151 353 1613
Fax: 0151 353 1614
mowen@pro-lab.com

1.4. Emergency telephone number

+44 (0)151 353 1613 Monday to Friday 9.00 to 17.00
+44 (0)7714 429 646 outside the above hours

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Carc. Cat. 3;R40. Xi;R36. N;R51/53. R10.

Human health

Irritating to eyes. Limited evidence of a carcinogenic effect.

Environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Physical and Chemical Hazards

Flammable. Vapours may be ignited by a spark, a hot surface or an ember.

2.2. Label elements

Contains C.I. BASIC VIOLET 3

Labelling

Harmful

Dangerous for the environment

Risk Phrases

R10	Flammable.
R36	Irritating to eyes.
R40	Limited evidence of a carcinogenic effect.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
S51	Use only in well-ventilated areas.
S57	Use appropriate containment to avoid environmental contamination.
S60	This material and its container must be disposed of as hazardous waste.

S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ETHANOL		**30-60%**
CAS-No.: 64-17-5	**EC No.: 200-578-6**	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11

C.I. BASIC VIOLET 3		**5-10%**
CAS-No.: 548-62-9	**EC No.: 208-953-6**	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Carc. Cat. 3;R40
Eye Dam. 1 - H318	Xn;R22
Carc. 2 - H351	Xi;R41
Aquatic Acute 1 - H400	N;R50/53
Aquatic Chronic 1 - H410	

METHANOL		**1-5%**
CAS-No.: 67-56-1	**EC No.: 200-659-6**	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Acute Tox. 3 - H301	T;R23/24/25,R39/23/24/25
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT SE 1 - H370	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once.

Ingestion

Do not induce vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

Skin contact

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

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

Inhalation

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

May irritate eyes.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed immediately or cooled with water. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Wash hands after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry and cool place.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL	1000 ppm	1920 mg/m3			
METHANOL	WEL	200 ppm	266 mg/m3	250 ppm	333 mg/m3	Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.

METHANOL (CAS: 67-56-1)

DNEL				
Workers	Dermal	Short Term	Systemic Effects	40 mg/kg/day
Workers	Inhalation.	Short Term	Systemic Effects	260 mg/m3
Workers	Inhalation.	Short Term	Local Effects	260 mg/m3
Workers	Dermal	Long Term	Systemic Effects	40 mg/kg/day
Workers	Inhalation.	Long Term	Local Effects	260 mg/m3
Consumer	Dermal	Short Term	Systemic Effects	8 mg/kg/day
Consumer	Inhalation.	Short Term	Local Effects	50 mg/m3
Workers	Oral	Long Term	Systemic Effects	8 mg/kg/day
Workers	Inhalation.	Long Term	Local Effects	50 mg/m3
PNEC				
Freshwater	154	mg/l		
Marinewater	15.4	mg/l		
Intermittent release	1540	mg/l		
STP	100	mg/l		
Sediment (Freshwater)	570.4			
Soil	23.5	mg/kg		

ETHANOL (CAS: 64-17-5)

DNEL				
Workers	Inhalation.	Short Term	Local Effects	1900 mg/m3
Workers	Dermal	Long Term	Systemic Effects	343 mg/kg/day
Workers	Inhalation.	Long Term	Systemic Effects	950 mg/m3
Consumer	Inhalation.	Short Term	Local Effects	950 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	206 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	114 mg/m3
Consumer	Oral	Long Term	Systemic Effects	87 mg/kg/day
PNEC				
Freshwater	0.96	mg/l		
Marinewater	0.79	mg/l		
Intermittent release	2.75	mg/l		
STP	580	mg/l		
Sediment (Freshwater)	3.6	mg/kg		
Soil	0.63	mg/kg		

8.2. Exposure controls

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Seek advice from supervisor on the companies' respiratory protection standards.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Deep violet.
Odour	Odour of alcohol.
Solubility	Soluble in water.

Initial boiling point and boiling range (°C)

Not determined.

Melting point (°C)
Not determined.
Relative density
Not determined.
Bulk Density
Not determined.
Vapour density (air=1)
Not determined.
Vapour pressure
Not determined.
Evaporation rate
Not determined.
Evaporation Factor
Not determined.
pH-Value, Conc. Solution
Not determined.
pH-Value, Diluted Solution
Not determined.
Viscosity
Not determined.
Solubility Value (G/100G H2O@20°C)
Not determined.
Decomposition temperature (°C)
Not determined.
Odour Threshold, Lower
Not determined.
Odour Threshold, Upper
Not determined.
Flash point (°C) ~ 25°C CC (Closed cup).
Auto Ignition Temperature (°C)
Not determined.
Flammability Limit - Lower(%)
Not determined.
Flammability Limit - Upper(%)
Not determined.
Partition Coefficient (N-Octanol/Water)
Not determined.
Explosive properties
Not determined.
Oxidising properties
Not determined.

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation
Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted.

10.6. Hazardous decomposition products

None at ambient temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Irritating to eyes.

Respiratory or skin sensitisation:

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Based on available data the classification criteria are not met.

Carcinogenicity:

Limited evidence of a carcinogenic effect.

Reproductive Toxicity:

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

Toxicological information on ingredients.

Acute toxicity:

Toxic by inhalation, in contact with skin and if swallowed.

Skin Corrosion/Irritation:

Dose

20 hr Rabbit

Erythema\eschar score

No erythema (0).

Oedema score

No oedema (0).

REACH dossier information

Not irritating. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Not Irritating. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Skin sensitisation

Guinea pig maximization test (GPMT): Guinea Pig

REACH dossier information

Not Sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity

NOAEC ≥ 1.3 mg/l Inhalation. Rat

REACH dossier information

This substance has no evidence of carcinogenic properties.

Acute toxicity:

Acute Toxicity (Oral LD50)

10470 mg/kg Rat

REACH dossier information

Acute Toxicity (Inhalation LC50)

116.9 mg/l (vapours) Rat 4 hours

REACH dossier information

Skin Corrosion/Irritation:

Dose

0.2 mL 24 day Rabbit

Primary dermal irritation index (PDI)

0

REACH dossier information

Not irritating. Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Inconclusive.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: NOAEL 15 % in water Oral Mouse P

REACH dossier information

Based on available data the classification criteria are not met.

Reproductive Toxicity - Development

Developmental toxicity: LOAEL 8200 mg/kg/day Oral Rat

REACH dossier information

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 10 ml/kg of 16.25% ethanol Oral Rat

REACH dossier information

Not classified as a specific target organ toxicant after repeated exposure.

Acute toxicity:

Acute Toxicity (Oral LD50)

670 mg/kg Rat

REACH dossier information

Harmful if swallowed.

Skin Corrosion/Irritation:

Dose

3 day Human

Primary dermal irritation index (PDI)

< 3

REACH dossier information

Slightly irritating. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Risk of serious damage to eyes.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Based on available data the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Fish Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

METHANOL (CAS: 67-56-1)

96 hours 15400 mg/l Lepomis macrochirus (Bluegill)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 10000 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 96 hours ~ 22000 mg/l Freshwater algae

REACH dossier information

Acute Toxicity - Microorganisms

IC50 3 hours > 1000 mg/l Activated sludge

ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish

LC50 96 hours 15300 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

LC50 48 hours 5012 mg/l Ceriodaphnia dubia

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 96 hours 675 mg/l Chlorella vulgaris

REACH dossier information

C.I. BASIC VIOLET 3 (CAS: 548-62-9)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 0.24 - 0.5 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 72 hours 0.025 - 0.8 mg/l Selenastrum capricornutum

REACH dossier information

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

METHANOL (CAS: 67-56-1)

Phototransformation

Air. DT50 17.2 days

REACH dossier information

Biodegradation

Water Degradation (71.5%) 5 days

REACH dossier information

Water Degradation (95%) 20 days

REACH dossier information

The substance is readily biodegradable.

ETHANOL (CAS: 64-17-5)

Biodegradation

Water Degradation (95%) 15 days

Water Degradation (74%) 10 days

REACH dossier information

The substance is readily biodegradable.

Chemical Oxygen Demand

1.99 g O2/g substance

REACH dossier information

C.I. BASIC VIOLET 3 (CAS: 548-62-9)

Biodegradation

Water Degradation (3.6%) 28 days

REACH dossier information

The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not determined.

Ecological information on ingredients.

METHANOL (CAS: 67-56-1)

Partition coefficient

log Pow -0.77

REACH dossier information

ETHANOL (CAS: 64-17-5)

Partition coefficient

log Pow -0.35 @ 24 °C

C.I. BASIC VIOLET 3 (CAS: 548-62-9)

Partition coefficient

log Pow 1.172 @ 25 °C

REACH dossier information

12.4. Mobility in soil

Mobility:

The product is soluble in water.

Ecological information on ingredients.

METHANOL (CAS: 67-56-1)

Mobility:

No mobility data available for substance.

ETHANOL (CAS: 64-17-5)

Surface tension

24.5 mN/m @ 20 °C
REACH dossier information

C.I. BASIC VIOLET 3 (CAS: 548-62-9)

Surface tension

44.2 mN/m
REACH dossier information

12.5. Results of PBT and vPvB assessment

Not determined.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993

14.2. UN proper shipping name

Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (ETHANOL, C.I. BASIC VIOLET 3)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3

Transport Labels

14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

14.6. Special precautions for user

EMS	F-E, S-E
Emergency Action Code	•3Y
Hazard No. (ADR)	30
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

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 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

Reissued according to Regulation (EU) No 453/2010.

Revision Date	11-2012
Revision	7
Supersedes date	11-2011

Risk Phrases In Full

R10	Flammable.
R22	Harmful if swallowed.
R11	Highly flammable
R36	Irritating to eyes.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H370	Causes damage to organs <<Organs>>.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H351	Suspected of causing cancer.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H411	Toxic to aquatic life with long lasting effects.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.