DS Solvent

Safety Data Sheet

according to the WHS Regulations

Issue date: 1/11/2019 Date of revision: 21/03/2023 Supersedes: 1/11/2019 Version: 1.1

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture

Product name : DS Solvent

Product code : 12332 12333

1.2. Other means of identification

Synonyms : 12332 DS Solvent; 12333 DS Solvent 20Lt; Marking Ink Solvent; Conditioner.

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Solvent for thinning and cleaning signet DS Ink, signet Rola ink and similar stencilling inks, can be used for cleaning ink appliances and conditioning stamp pads, rollers, etc as well as replacing solvent lost in inks.

Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.4. Details of manufacturer or importer

Supplier

Signet Pty Ltd
56 Ingleston Rd
WAKERLEY, QLD 4154
Australia
T +61 (07) 3179 2100
sales@signet.net.au - www.signet.net.au

1.5. Emergency phone number

Emergency number : Office hours: +61 (07) 3179 2100
Poisons Information Centre (24 h): 13 11 26

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Flammable liquids, Category 4	H227
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Specific target organ toxicity – Repeated exposure, Category 2	H373

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :

Exclamation mark | Health hazard

Signal word (GHS AU) : Warning

Contains : ethylene glycol monobutyl ether (0 – 100 %)

Hazard statements (GHS AU) : H227 - Combustible liquid
H302+H332 - Harmful if swallowed or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS AU) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%
ethylene glycol monobutyl ether	111-76-2	0 – 100

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse immediately with plenty of water. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Symptoms caused by exposure

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

4.3. Medical attention and special treatment

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Unsuitable extinguishing media are not known.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.
General measures : No action shall be taken without appropriate training or involving any personal risk. Notify authorities if product enters sewers or public waters.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Keep upwind. Fight fire from safe distance and protected location.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No action shall be taken without appropriate training or involving any personal risk. Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

Storage conditions : Store in a well-ventilated place. Keep cool.

Information on mixed storage : Store away from incompatible materials and products. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.

Storage area : Keep out of direct sunlight.

Special rules on packaging : Position containers so that any labeling information is visible. Keep packaging closed when not in use. Check containers and packaging regularly for leaks and damage.

Packaging materials : Keep only in original packaging.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

ethylene glycol monobutyl ether (111-76-2)	
Australia - Occupational Exposure Limits	
Local name	2-Butoxyethanol (Butyl cellosolve; Butyl glycol; Ethylene glycol monobutyl ether; Glycol monobutyl ether)
OES TWA [1]	96.9 mg/m³
OES TWA [2]	20 ppm
OES STEL	242 mg/m³
OES STEL [ppm]	50 ppm
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.

ethylene glycol monobutyl ether (111-76-2)	
Regulatory reference	Workplace exposure standards for airborne contaminants (2019)

8.2. Monitoring methods

Monitoring methods : Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents. Gas detectors should be used when toxic gases may be released. Gas detectors should be used when flammable gases/vapours may be released.

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use spark-/explosionproof appliances and lighting system. Use grounded electrical/mechanical equipment.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment : Personal protective equipment (PPE) must be suited to the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.
Avoid all unnecessary exposure. Ocular shower with suitable liquid.

Hand protection : Wear protective gloves: Antistatic gloves

Eye protection : Wear eye protection: Chemical goggles or safety glasses

Skin and body protection : Wear protective clothing: Antistatic clothing, Flame retardant protective clothing. Wear foot protection

Respiratory protection : Wear appropriate mask: Combined gas/dust mask with filter type

Personal protective equipment symbol(s)

Consumer exposure controls : Personal protective equipment (PPE) is not required when handling individual retail pack.

Other information : PPE compliant to the recommended standards should be selected. The following Australian and New Zealand Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS2919, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210.

SECTION 9: Physical and chemical properties

Physical state : Liquid

Appearance : Clear yellowish colour liquid with mild sweet smelling odour.

Molecular mass : Not applicable

Colour : Colourless

Odour : Not available

Odour threshold : No data available

pH : Not available

pH solution : Not available

Relative evaporation rate (butylacetate=1) : No data available

Melting point / Freezing point : Melting point: Not available

Boiling point : 170.8 °C

Flash point : 68 °C

Auto-ignition temperature : Not available

Decomposition temperature : Not available

Flammability : No data available

Vapour pressure : Vapour pressure: 0.1 kPa

Relative density : Relative vapour density at 20°C: Not available. (Air=1).

Density : Relative density: 0.902 (Water = 1).

Solubility : No data available

Partition coefficient n-octanol/water (Log Pow) : Not available

Viscosity, kinematic : Not available

Explosive properties : No data available

Explosive limits : No data available

Minimum ignition energy	:	No data available
VOC content	:	Not available
Fat solubility	:	No data available

SECTION 10: Stability and reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials	:	Strong acids. Strong bases. Strong oxidizers.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity (oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Harmful if inhaled.

DS Solvent	
ATE AU (oral)	1414 mg/kg bodyweight
ATE AU (dust,mist)	1.5 mg/l/4h

ethylene glycol monobutyl ether (111-76-2)	
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
LD50 dermal rat	> 2000 mg/kg Source: ECHA

Skin corrosion/irritation	:	Causes skin irritation. pH: Not available
Serious eye damage/irritation	:	Causes serious eye irritation. pH: Not available
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	May cause damage to organs through prolonged or repeated exposure.

ethylene glycol monobutyl ether (111-76-2)	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study), Remarks on results: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

DS Solvent	
Viscosity, kinematic	Not available

ethylene glycol monobutyl ether (111-76-2)	
Animal studies and expert judgment for classification	False

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

ethylene glycol monobutyl ether (111-76-2)	
LC50 - Fish [1]	1474 mg/l Source: ECHA
EC50 - Crustacea [1]	1800 mg/l Source: ECHA
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 100 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'
Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

DS Solvent	
Partition coefficient n-octanol/water (Log Pow)	Not available

ethylene glycol monobutyl ether (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA

12.4. Mobility in soil

DS Solvent	
Partition coefficient n-octanol/water (Log Pow)	Not available

ethylene glycol monobutyl ether (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

DS Solvent	
Fluorinated greenhouse gases	False

ethylene glycol monobutyl ether (111-76-2)	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

ADG	IMDG	IATA
14.1. UN number		
Not regulated for transport	Not regulated for transport	Not regulated for transport

ADG	IMDG	IATA
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail
No data available

Transport by sea
No data available

Air transport
No data available

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Australian Industrial Chemicals Introduction Scheme (AICIS)
Australian Inventory of Industrial Chemicals (AICIS Inventory) status : Listed

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
Relevant Poisons Schedule number : Schedule 6

15.2. International agreements

No additional information available

SECTION 16: Other information

Indication of changes:
Update of the SDS from former GHS version to the 7th edition of the GHS (GHS 7).

Data sources : Safe Work Australia - Code of Practice - Preparation of Safety Data Sheets for Hazardous Chemicals
Safe Work Australia - Code of Practice - Labelling of Workplace Hazardous Chemicals
Safe Work Australia - Workplace Exposure Standards for Airborne Contaminants
Safe Work Australia - Hazardous Chemical Information System (HCIS)
Australian Inventory of Industrial Chemicals (AICIS Inventory)
Environmental Protection Authority - Hazardous Substances (Hazard Classification) Notice 2020
Environmental Protection Authority - Hazardous Substances (Safety Data Sheets) Notice 2017
Environmental Protection Authority - Hazardous Substances (Labelling) Notice 2017
New Zealand - Chemical Classification and Information Database (CCID)
New Zealand - Inventory of Chemicals (NZIoC)
European Chemicals Agency (ECHA) - Annex VI (C&L Inventory)
European Chemicals Agency (ECHA) - REACH Study Results
European Chemicals Agency (ECHA) - REACH Registration Dossiers
United Nations - Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Uniform Scheduling of Medicines and Poisons (SUSMP)
United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG Model Regulation)
Australian Dangerous Goods Code (ADG Code)
International Air Transport Association Dangerous Goods Regulations (IATA DGR)
International Maritime Dangerous Goods (IMDG Code).

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Classification	
Flam. Liq. 4	H227
Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT RE 2	H373

Full text of H-statements	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 4	Flammable liquids, Category 4
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

Full text of H-statements	
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), Australia

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.