

### SECTION 1: Product identifier

#### 1.1. GHS Product identifier

Product name : DS Ink Black  
Product code : 12245 12250

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : Marking Ink  
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

Signet Pty Ltd  
56 Ingleston Rd  
WAKERLEY, QLD 4154  
Australia  
T +61 (07) 3179 2100  
[sales@signet.net.au](mailto:sales@signet.net.au) - [www.signet.net.au](http://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 3	H226
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity – Repeated exposure, Category 2	H373

#### 2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :



Flame

Exclamation  
mark

Health hazard

Signal word (GHS AU) :

Warning

Contains

: ethylene glycol monobutyl ether (≥ 60 %); propylene glycol monoethyl ether, alpha isomer (≥ 10 %)

Hazard statements (GHS AU) :

: H226 - Flammable liquid and vapour  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
H373 - May cause damage to organs through prolonged or repeated exposure  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 - Ground and bond container and receiving equipment.  
P241 - Use explosion-proof equipment.

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

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.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 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	≥ 60
propylene glycol monoethyl ether, alpha isomer	1569-02-4	≥ 10
Carbon black	1333-86-4	< 10

## 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.  
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all 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 : Call a poison center or a doctor if you feel unwell.

### 4.2. Symptoms caused by exposure

Symptoms/effects : May cause drowsiness or dizziness.  
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 : Flammable liquid and vapour.  
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.

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Hazchem Code	: * 3Y

### 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.
<b>6.1.1. For non-emergency personnel</b>	
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.
<b>6.1.2. For emergency responders</b>	
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. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. 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	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
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

##### Carbon black (1333-86-4)

##### Australia - Occupational Exposure Limits

Local name	Carbon black
OES STEL	7 mg/m <sup>3</sup>

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

### Carbon black (1333-86-4)

Regulatory reference	Workplace exposure standards for airborne contaminants (2019)
----------------------	---

### 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/m <sup>3</sup>
OES TWA [2]	20 ppm
OES STEL	242 mg/m <sup>3</sup>
OES STEL [ppm]	50 ppm
Remark (AU)	Sk - Absorption through the skin may be a significant source of exposure.
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 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 foot protection: antistatic boots. Wear protective clothing: Antistatic clothing, Flame retardant protective clothing
Respiratory protection	: Wear appropriate mask

#### Personal protective equipment symbol(s)



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	: No data available
Colour	: Black
Odour	: Solvent
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: Melting point: Not applicable

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: Density: $\approx 0.924$ kg/l
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
Fat solubility	: No data available

### SECTION 10: Stability and reactivity

Reactivity	: Flammable liquid and vapour.
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)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### 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

#### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

LD50 oral rat	4400 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	8100 mg/kg
LC50 Inhalation - Rat	> 9.59 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Remarks on results: other:
LC50 Inhalation - Rat [ppm]	10000 ppm

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.

#### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

#### Carbon black (1333-86-4)

LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male
---	---

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

Carbon black (1333-86-4)	
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure (inhalation).
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.
propylene glycol monoethyl ether, alpha isomer (1569-02-4)	
LOAEC (inhalation, rat, vapour, 90 days)	8.36 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	< 1792 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	1800 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	1266 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
Carbon black (1333-86-4)	
Animal studies and expert judgment for classification	False
ethylene glycol monobutyl ether (111-76-2)	
Animal studies and expert judgment for classification	False
propylene glycol monoethyl ether, alpha isomer (1569-02-4)	
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
propylene glycol monoethyl ether, alpha isomer (1569-02-4)	
LC50 - Fish [1]	560 – 1000 mg/l Test organisms (species): Poecilia reticulata

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	> 180 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 260 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '21 d'
Partition coefficient n-octanol/water (Log Pow)	0

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### ethylene glycol monobutyl ether (111-76-2)

Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA
---	-------------------

#### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

Partition coefficient n-octanol/water (Log Pow)	0
---	---

### 12.4. Mobility in soil

#### ethylene glycol monobutyl ether (111-76-2)

Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA
---	-------------------

#### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

Partition coefficient n-octanol/water (Log Pow)	0
---	---

### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : No additional information available

#### DS Ink Black

Fluorinated greenhouse gases	False
------------------------------	-------

#### Carbon black (1333-86-4)

Fluorinated greenhouse gases	False
------------------------------	-------

#### ethylene glycol monobutyl ether (111-76-2)

Fluorinated greenhouse gases	False
------------------------------	-------

#### propylene glycol monoethyl ether, alpha isomer (1569-02-4)

Fluorinated greenhouse gases	False
------------------------------	-------

## SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapours may accumulate in the container.




## SECTION 14: Transport information

ADG	IMDG	IATA
<b>14.1. UN number</b>		
1210	1210	1210

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

ADG	IMDG	IATA
<b>14.2. UN Proper Shipping Name</b>		
PRINTING INK	PRINTING INK	Printing ink
<b>14.3. Transport hazard class(es)</b>		
3	3	3
		
<b>14.4. Packing group</b>		
III - Substances presenting low danger	III	III
<b>14.5. Environmental hazards</b>		
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

UN-No. (ADG) : 1210  
Special provision (ADG) : 163, 223, 367  
Limited quantities (ADG) : 5I  
Excepted quantities (ADG) : E1  
Packing instructions (ADG) : P001, IBC03, LP01  
Special packing provisions (ADG) : PP1  
Portable tank and bulk container instructions (ADG) : T2  
Portable tank and bulk container special provisions (ADG) : TP1

#### Transport by sea

UN-No. (IMDG) : 1210  
Special provisions (IMDG) : 163, 223, 367, 955  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
Special packing provisions (IMDG) : PP1  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T2  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS  
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS  
Stowage category (IMDG) : A  
Properties and observations (IMDG) : Fluid or viscous liquid containing colouring matter in solution or suspension. Miscibility with water depends upon the solvent.

#### Air transport

UN-No. (IATA) : 1210  
PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y344  
PCA limited quantity max net quantity (IATA) : 10L  
PCA packing instructions (IATA) : 355  
PCA max net quantity (IATA) : 60L



# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

CAO packing instructions (IATA) : 366  
CAO max net quantity (IATA) : 220L  
Special provisions (IATA) : A3, A72, A192  
ERG code (IATA) : 3L

### 14.8. Hazchem or Emergency Action Code

Hazchem Code : \* 3Y

## 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) : All the chemicals contained in this product are listed introductions  
Inventory) status

#### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Relevant Poisons Schedule number : Unscheduled

### 15.2. International agreements

No additional information available

## SECTION 16: Other information

### Indication of changes

Section	Changed item	Change	Comments
	Supersedes	Added	
	Date of revision	Added	
2.2	Precautionary statements (GHS AU)	Modified	
3	Composition/information on ingredients	Modified	

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).

Date of revision : 22/02/2023

# DS Ink Black

## Safety Data Sheet

according to the WHS Regulations

Classification	
Flam. Liq. 3	H226
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 3	H336
STOT RE 2	H373

Full text of H-statements	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), 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
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 3	Flammable liquids, Category 3
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
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour
H227	Combustible liquid
H302	Harmful if swallowed
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
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.