

Signet One Shot Lacquer (Various Colours)

GENERAL PRODUCT INFORMATION		
Product form:	Mixture	
Code:	7260, 7261, 7262, 7263, 7264, 7265	
Colours:	 Black Red Blue Green Yellow White 	
Recommended use:	Quick flowing stencilling ink. For use through "oneshot" stencilling systems. FC-75 FC-40 Rollers and KC-40 Brush. Packed in sealed cartridges. Use according to manufacturer's directions.	
Restrictions on use:	Not to be used for any purpose other than the one the product was designed for	

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 – Single exposure, Category 3, Respiratory tract irritation	H335	
Specific target organ toxicity – Repeated exposure, Category 2	H373	
Aspiration hazard, Category 1	H304	





GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Hazard pictograms (GHS AU)	Flame Exclamation Health hazard mark
Signal word (GHS AU)	Danger
Contains	4-hydroxy-4-methylpentan-2-one; diacetone alcohol (≥ 60 %); Toluene (< 30 %); Carbon black (< 60 %); xylene (< 30 %); ethylbenzene (< 30 %); propyl acetate (< 100 %)
Hazard statements (GHS AU)	H226 - Flammable liquid and vapour H304 - May be fatal if swallowed and enters airways

SAFETY DATA SHEET (according to the WHS Regulations)		
Precautionary statements (GHS AU)	 H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H336 - May cause drowsiness or dizziness H373 - May cause damage to organs through prolonged or repeated exposure (inhalation) 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. P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof equipment. 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. 	
Signal word (GHS AU)	Danger	
Contains	4-hydroxy-4-methylpentan-2-one; diacetone alcohol (≥ 60 %); Toluene (< 30 %); Carbon black (< 60 %); xylene (< 30 %); ethylbenzene (< 30 %); propyl acetate (< 100 %)	
dHazard statements (GHS AU)	H226 - Flammable liquid and vapour H304 - May be fatal if swallowed and enters airways	









NAME	CAS-No.	PERCENTAGE
4-Hydroxy-4-Methylpentan-2-one; Diacetone Alcohol	123-42-2	≥ 60
Toluene	108-88-3	< 30
Carbon black	1333-86-4	< 60
Xylene	1330-20-7	< 30
Ethylbenzene	100-41-4	< 30
Ethanol	64-17-5	< 100

DESCRIPTION OF NECESSARY FIRST-AID MEASURES		
First-aid measures general:	Call a physician immediately.	
First-aid measures after inhalation:	Remove the 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:	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 physician immediately. Do not induce vomiting.	

SYMPTOMS CAUSED BY EXPOSURE		
Symptoms/effects:	May cause drowsiness or dizziness	
Symptoms/effects after inhalation:	May cause respiratory irritation	
Symptoms/effects after skin contact:	Irritation	
Symptoms/effects after eye contact:	Eye irritation	
Symptoms/effects after ingestion:	Risk of lung oedema	







MEDICAL ATTENTION AND SPECIAL TREATMENT

Other medical advice or treatment	Treat symptomatically
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EXTINGUISHING MEDIA		
Suitable extinguishing media:	Water spray. Dry powder. Foam. Carbon dioxide.	
Unsuitable extinguishing media:	Unsuitable extinguishing media are not known.	

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 the product enters sewers or public waters.	
Hazardous decomposition products in case of fire	Toxic fumes may be released.	

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS		
Firefighting instructions:	Exercise caution when fighting any chemical fire. Keep upwind. Fight fire from a 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.	
Hazchem Code:	* 3Y	

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".









Avoid release to the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP Take up liquid spill into absorbent material. Notify authorities if Methods for cleaning up: product enters sewers or public waters.

ENVIRONMENTAL PRECAUTIONS

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.

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 the 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.











CONTROL PARAMETERS - EXPOSURE STANDARDS Ethanol (64-17-5) Australia - Occupational Exposure Limits Ethyl alcohol (Ethanol) Local name 1880 mg/m³ OES TWA [1] OES TWA [2] 1000 pp Regulatory reference Workplace exposure standards for airborne contaminants (2019) Carbon black (1333-86-4) Australia - Occupational Exposure Limits Carbon black Local name **OES STEL** 7 mg/m^3 Regulatory reference Workplace exposure standards for airborne contaminants (2019) Ethylbenzene (100-41-4) Australia - Occupational Exposure Limits Local name Ethyl benzene

Monitoring methods:

Regulatory reference

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.

Appropriate engineering controls:

Ensure good ventilation of the workstation. Use spark-/explosionproof appliances and lighting system. Use grounded electrical/mechanical equipment.







Workplace exposure standards for airborne contaminants (2019)



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.

Eve 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: 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.

PHYSICAL AND CHEMICAL PROPERTIES	
Physical state:	Liquid
Appearance:	Coloured low viscosity flammable liquid with a pleasant characteristic odour.
Molecular mass:	Not applicable
Colour:	Various colours
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:	140 – 175 °C
Flashpoint:	34 °C
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Flammability:	No data available







Vapour pressure:	Vapour pressure: 13 kPa at 20°C.
Relative density:	Relative vapour density at 20°C: Not available. (Air=1).
Density:	Density: ≈ 0.95 kg/l Relative density: (Water = 1).
Solubility:	No data available
Partition coefficient n-octanol/water (Log Pow):	Not available
Viscosity, kinematic:	Not available
Viscosity, dynamic:	≈ 10 cP
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

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.

TOXICOLOGICAL INFORMATION	
Acute toxicity (oral):	Not classified
Acute toxicity (dermal):	Not classified
Acute toxicity (inhalation):	Not classified
Ethanol (64-17-5)	
LD50 oral rat	7060 mg/kg Source: ECHA
Xylene (1330-20-7)	
LD50 oral	4300 mg/kg bodyweight







Xylene (1330-20-7)		
LD50 dermal	> 5000 mg/kg bodyweight	
LC50 Inhalation - Rat (Dust/Mist)	> 10000 mg/l	
Ethylbenzene (100-41-4)		
LD50 oral	3500 mg/kg bodyweight	
LD50 dermal	15350 mg/kg bodyweight	
LC50 Inhalation - Rat (Dust/Mist)	17200 mg/l	

Skin corrosion/irritation: Causes skin irritation.

pH: Not available

Serious eye damage/irritation: Causes serious eye irritation.

pH: Not available

Not classified Respiratory or skin sensitisation:

Germ cell mutagenicity: Not classified

Not classified Carcinogenicity:

Reproductive toxicity: Not classified

STOT-single exposure: May cause drowsiness or dizziness.

May cause respiratory irritation.

Toluene (108-88-3)	
STOT- single exposure	May cause drowsiness or dizziness.
Xylene (1330-20-7)	
STOT- single exposure:	May cause respiratory irritation.
STOT- repeated exposure:	May cause damage to organs through prolonged or repeated exposure (inhalation)
Toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Ethanol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Remarks on results: other









Carbon black (1333-86-4)	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male
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).
Xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
Ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT- repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard:	May be fatal if swallowed and enters airways. Signet One

Signet One Shot Lacquer -Various Colours		
Viscosity, kinematic	Not available	
4-hydroxy-4-methylpentan-2-one; diacetone alcohol (123-42-2)		
Animal studies and expert judgment for classification	False	
Toluene (108-88-3)		
Animal studies and expert judgment for classification	False	
Ethanol (64-17-5)		
Animal studies and expert judgment for classification	False	
Viscosity, kinematic	1.366 mm ² /s	
Carbon black (1333-86-4)		
Animal studies and expert judgment for classification	False	
Xylene (1330-20-7)		
Aliphatic, alicyclic or aromatic hydrocarbon	Yes	
Animal studies and expert judgment for classification	False	
Ethylbenzene (100-41-4)		
Animal studies and expert judgment for classification	False	











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.

Ecotoxicity:

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

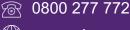
Hazardous to the aquatic environment, short-term (acute): Not classified

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

Ethanol (64-17-5)	
LC50 - Fish [1]	> 100 mg/l Source: SIDS 2005
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna
ErC50 algae	275 mg/l Source: ECHA
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC
Xylene (1330-20-7)	
EC50 - Other aquatic organisms [1]	350 mg/l waterflea
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'
Ethylbenzene (100-41-4)	
EC50 - Other aquatic organisms [1]	2.2 mg/l waterflea
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'

Persistence and degradability: No additional information available

BIOACCUMULATIVE POTENTIAL	
Signet One Shot Lacquer - Various Colours	
Partition coefficient n-octanol/water (Log Pow)	Not available
Ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC







MOBILITY IN SOIL		
Signet One Shot Lacquer - Various Colours		
Partition coefficient n-octanol/water (Log Pow)	Not available	
Ethanol (64-17-5)		
Partition coefficient n-octanol/water (Log Pow)	-0.32 Source: ICSC	

Other adverse effects

Not classified Ozone:

Other adverse effects: No additional information available

Signet One Shot Lacquer - Various Colours		
Fluorinated greenhouse gases	False	
4-hydroxy-4-methylpentan-2-one; diacetone alcohol (123-42-2)		
Fluorinated greenhouse gases	False	
Toluene (108-88-3)		
Fluorinated greenhouse gases	False	
Ethanol (64-17-5)		
Fluorinated greenhouse gases	False	
Carbon black (1333-86-4)		
Fluorinated greenhouse gases	False	
4-hydroxy-4-methylpentan-2-one; diacetone alcohol (123-42-2)		
Fluorinated greenhouse gases	False	
Xylene (1330-20-7)		
Fluorinated greenhouse gases	False	
Ethylbenzene (100-41-4)		
Fluorinated greenhouse gases	False	

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.











TRANSPORT INFORMATION		
ADG	IMDG	IATA
·	UN number	
1210	1210	1210
	UN Proper Shipping Name	
Printing ink	Printing ink	Printing ink
·	Transport hazard class(es)	
3	3	3

Packing group		
III - Substances presenting low danger	III - Substances presenting low danger	III - Substances presenting low danger
Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

Special precautions for user

Specific storage requirement: No data available

Shock sensitivity: No data available

Additional information

Other information: No supplementary information is available

Transport by road and rail

UN-No. (ADG): 1210

Special provision (ADG): 163, 223, 367

Limited quantities (ADG): 51 Excepted quantities (ADG):

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): 5L Excepted quantities (IMDG): E1

P001, LP01 Packing instructions (IMDG): Special packing provisions (IMDG): PP1 IBC packing instructions (IMDG): IBC03 Tank instructions (IMDG): T2

TP1 Tank special provisions (IMDG):

EmS-No. (Fire): F-E - fire schedule Echo

- non-water-reactive flammable liquids





EmS-No. (Spillage):

Stowage category (IMDG):

Properties and observations (IMDG):

Air transport

UN-No. (IATA): PCA Excepted quantities (IATA):

PCA Limited quantities (IATA): PCA limited quantity max net quantity (IATA):

PCA packing instructions (IATA): PCA max net quantity (IATA): CAO packing instructions (IATA):

CAO max net quantity (IATA): Special provisions (IATA):

ERG code (IATA):

Hazchem or Emergency Action Code

Hazchem Code:

* 3Y

the solvent.

1210

E1 Y344

10L

355

60L

366

220L

A3, A72, A192

Regulatory information - 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:

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

Relevant Poisons Schedule number:

Unscheduled

Listed

S-D - spillage schedule Delta - flammable liquids

Fluid or viscous liquid containing colouring matter in

solution or suspension. Miscibility with water depends upon

International agreements:

No additional information available

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. 3	H226			
Skin Irrit. 2	H315			
Eye Irrit. 2A	H319			
STOT SE 3	H336			
STOT SE 3	H335			
STOT RE 2	H373			
CLASSIFICATION				
Asp. Tox. 1	H304			
	FULL TEXT OF H-STATEMENTS			
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4			
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4			
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard, Category 2			
Asp. Tox. 1	Aspiration hazard, Category 1			
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A			
Flam. Liq. 2	Flammable liquids, Category 2			
Flam. Liq. 3	Flammable liquids, Category 3			
Repr. 2	Reproductive toxicity, Category 2			
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			
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation			
H225	Highly flammable liquid and vapour			
H226	Flammable liquid and vapour			
H304	May be fatal if swallowed and enters airways			
H312	Harmful in contact with skin			
H315	Causes skin irritation			
H319	Causes serious eye irritation			
H332	Harmful if inhaled			
H335	May cause respiratory irritation			
H336	May cause drowsiness or dizziness			
H361	Suspected of damaging fertility or the unborn child			
H373	May cause damage to organs through prolonged or repeated exposure			
H401	Toxic to aquatic life			

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.





