

# SAFETY DATA SHEET



## DEFENDER SV GOLD

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP674

Version No: EP 1.4

Issue date: 18/11/2016

Safety Data Sheet according to WHS and ADG requirements

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

#### Product Identifier

Product name	DEFENDER SV GOLD
Synonyms	AP674
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Other means of identification	Not Available

#### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Solvent sealer for the protection of construction and architectural concrete
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#### Details of the supplier of the safety data sheet

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Fax	(02) 4966 5510
Website	www.actichem.com.au
Email	info@actichem.com.au

#### Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available



### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification [1]	Skin Corrosion/Irritation Category 2, STOT - SE (Narcosis) Category 3, Flammable Liquid Category 2, Eye Irritation Category 2A
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

#### Label elements

GHS label elements	 
SIGNAL WORD	<b>DANGER</b>

#### Hazard statement(s)

H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation

#### Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P241	Use explosion-proof electrical / ventilating / lighting / intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist / vapours / spray.
P280	Wear protective gloves and eye protection.

#### Precautionary statement(s) Response

P305+P351+P338+P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.
P303+P361+P353+P352+P332+P313	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower and soap. If skin irritation occurs, get medical advice / attention.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.

#### Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
P410+P235	Protect from sunlight. Keep cool.

#### Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local government regulations
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### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name
64-17-5.	30-60	<u>ethanol, denatured</u>
17980-47-1	30-60	<u>isobutyltriethoxysilane</u>
123-86-4	<10	<u>n-butyl acetate</u>
78-93-3	<10	<u>methyl ethyl ketone</u>
108-65-6.	<10	<u>propylene glycol monomethyl ether acetate, alpha isomer</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

### SECTION 4 FIRST AID MEASURES

#### Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <p>Wash out immediately with fresh running water for 10 to 15 minutes.</p> <p>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.</p> <p>If pain persists or recurs seek medical attention.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
Skin Contact	<p>If skin contact occurs:</p> <p>Immediately remove all contaminated clothing, including footwear.</p> <p>Flush skin and hair with running water (and soap if available).</p> <p>Seek medical attention in event of irritation.</p>
Inhalation	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</p> <p>Obtain medical advice / attention without delay.</p> <p>If necessary, transport to hospital, or doctor.</p>
Ingestion	<p><b>If swallowed do NOT induce vomiting.</b></p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>Seek medical advice.</p>

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5 FIREFIGHTING MEASURES

### Extinguishing media

Extinguishing media	Alcohol stable foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.
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### Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid strong oxidising agents i.e. nitrates, oxidising acids, pool chlorine, chlorine bleach, etc. as ignition or explosion may occur
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### Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. <b>Do not approach containers suspected to be hot.</b>
Fire/Explosion Hazard	Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ), silicon dioxide (SiO <sub>2</sub> ) and other pyrolysis products typical of burning organic material.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Minor Spills	Remove all ignition sources. <b>NO SMOKING</b> Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Major Spills	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. NO SMOKING, naked lights or ignition sources. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse /absorb vapour. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
	Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

Safe handling	Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. <b>DO NOT allow clothing wet with material to stay in contact with skin</b> Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. <b>DO NOT enter confined spaces until atmosphere has been checked.</b> <b>Avoid smoking, naked lights, heat or ignition sources</b> <b>When handling DO NOT eat, drink or smoke.</b> Vapour may ignite on pumping or pouring due to static electricity.
Other information	Store in original containers in approved flame-proof area. <b>No smoking, naked lights, heat or ignition sources.</b> <b>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</b> Keep containers securely sealed. Store away from incompatible materials in a cool, dry and well ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

**Conditions for safe storage, including any incompatibilities**

<b>Suitable container</b>	Packaging as supplied by the manufacturer. Plastic containers may only be used if they are approved for containing flammable liquids. Check that containers are properly labelled and free from leaks.
<b>Storage incompatibility</b>	Avoid caustics, strong acids oxidising agents and nitrates. Dissolves rubber, many plastics, resins and some coatings.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control parameters**

**OCCUPATIONAL EXPOSURE LIMITS (OEL)**

**INGREDIENT DATA**


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethanol, denatured	Ethyl alcohol	1880 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available
Australia Exposure Standards	n-butyl acetate	n-Butyl acetate	713 mg/m3 / 150 ppm	950 mg/m3 / 200 ppm	Not Available	Not Available
Australia Exposure Standards	methyl ethyl ketone	Methyl ethyl ketone (MEK)	445 mg/m3 / 150 ppm	890 mg/m3 / 300 ppm	Not Available	Not Available

**EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethanol, denatured	Ethyl alcohol; (Ethanol)	Not Available	Not Available	Not Available
n-butyl acetate	Butyl acetate, n-	Not Available	Not Available	Not Available
methyl ethyl ketone	Butanone, 2-; (Methyl ethyl ketone; MEK)	Not Available	Not Available	Not Available
naphtha petroleum, light aromatic solvent	Aromatic hydrocarbon solvents; (High flash naphtha distillates; Solvent naphtha (petroleum), light aromatic)	3.1 ppm	34 ppm	410 ppm

Ingredient	Original IDLH	Revised IDLH
ethanol, denatured	15,000 ppm	3,300 [LEL] ppm
isobutytriethoxysilane	Not Available	Not Available
n-butyl acetate	10,000 ppm	1,700 [LEL] ppm
methyl ethyl ketone	3,000 ppm	3,000 [Unch] ppm
naphtha petroleum, light aromatic solvent	Not Available	Not Available

**Exposure controls**

<b>Appropriate engineering controls</b>	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
<b>Personal protection</b>	
<b>Eye and face protection</b>	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. 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.
<b>Skin protection</b>	See Hand protection below
<b>Hands/feet protection</b>	Wear chemical protective gloves. PE/EVAL/PE, Teflon or PVA are recommended for this application.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	Overalls. PVC Apron. Eyewash unit.
<b>Thermal hazards</b>	Not Available

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Clear water white liquid		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	0.85
<b>Odour</b>	Mild solvent odour	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	Not Applicable	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	80	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	>20	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	HIGHLY FLAMMABLE.	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water (g/L)</b>	Immiscible	<b>pH as a solution (1%)</b>	Not Applicable
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available

## SECTION 10 STABILITY AND REACTIVITY

<b>Reactivity</b>	See section 7
<b>Chemical stability</b>	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

<b>Inhaled</b>	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
<b>Ingestion</b>	Accidental ingestion of the material may be damaging to the health of the individual.
<b>Skin Contact</b>	The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
<b>Eye</b>	There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. Discomfort may last 2 days but usually the injury heals without treatment.
<b>Chronic</b>	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

## SECTION 12 ECOLOGICAL INFORMATION

### Toxicity

Slightly hazardous to the environment.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethanol, denatured	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
isobutyltriethoxysilane	HIGH	HIGH
n-butyl acetate	LOW	LOW
methyl ethyl ketone	LOW (Half-life = 14 days)	LOW (Half-life = 26.75 days)

### Bio accumulative potential

Ingredient	Bioaccumulation
ethanol, denatured	LOW (LogKOW = -0.31)
isobutyltriethoxysilane	LOW (LogKOW = 2.2015)
n-butyl acetate	LOW (BCF = 14)
methyl ethyl ketone	LOW (LogKOW = 0.29)

### Mobility in soil

Ingredient	Mobility
ethanol, denatured	HIGH (KOC = 1)
isobutyltriethoxysilane	LOW (KOC = 13550)
n-butyl acetate	LOW (KOC = 20.86)
methyl ethyl ketone	MEDIUM (KOC = 3.827)

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

Product / packaging disposal	
	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.

## SECTION 14 TRANSPORT INFORMATION

### Labels Required

	
Marine Pollutant	NO
HAZCHEM	+3Y

### Land transport (ADG)

UN number	1993				
Packing group	III				
UN proper shipping name	FLAMMABLE LIQUID, N.O.S.				
Environmental hazard	No relevant data				
Transport hazard class	<table border="1"> <tr> <td>Class</td> <td>3</td> </tr> <tr> <td>Sub risk</td> <td>Not Applicable</td> </tr> </table>	Class	3	Sub risk	Not Applicable
Class	3				
Sub risk	Not Applicable				
Special precautions for user	<table border="1"> <tr> <td>Special provisions</td> <td>223 274</td> </tr> <tr> <td>Limited quantity</td> <td>5 L</td> </tr> </table>	Special provisions	223 274	Limited quantity	5 L
Special provisions	223 274				
Limited quantity	5 L				

## SECTION 15 REGULATORY INFORMATION

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

#### ETHANOL, DENATURED (64-17-5.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Exposure Standards
- Australia Inventory of Chemical Substances (AICS)
- Australia Hazardous Substances Information System - Consolidated Lists

**ISOBUTYLTRIETHOXSILANE (17980-47-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)

**N-BUTYL ACETATE (123-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards  
Australia Inventory of Chemical Substances (AICS)  
Australia Hazardous Substances Information System - Consolidated Lists

**METHYL ETHYL KETONE (78-93-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards  
Australia Inventory of Chemical Substances (AICS)  
Australia Hazardous Substances Information System - Consolidated Lists

**NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT (64742-95-6.) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)

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## SECTION 16 OTHER INFORMATION

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: [www.chemwatch.net](http://www.chemwatch.net)

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

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**End of SDS**