

# SAFETY DATA SHEET



## DEFENDER CSD 50

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP677

Version No: 1.3

Issue date: 03/02/2017

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 CSD 50
Synonyms	AP677
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	Stone consolidator / strengthening water repellent
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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 1126
Other emergency telephone numbers	Not Available

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

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

Poisons Schedule	5
GHS Classification [1]	Aspiration Hazard Category 1, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - single exposure Category 3 (narcotic effects),
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)

H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness.
AUH066	Repeated exposure may cause skin dryness and cracking

#### Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection / face protection.
P261	Avoid breathing mist / vapours / spray.

#### Precautionary statement(s) Response

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
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.
P304+P340+P312	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
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#### Precautionary statement(s) Disposal

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

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name
64742-48-9	30-60	<u>naphtha petroleum, isoparaffin, hydrotreated</u>
77-58-7	<1	<u>dibutyltin dilaurate</u>
78-10-4	30-60	<u>tetraethyl silicate</u>

### SECTION 4 FIRST AID MEASURES

#### Description of first aid measures

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

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

Treat symptomatically.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation.

If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

### SECTION 5 FIREFIGHTING MEASURES

#### Extinguishing media

Extinguishing media	<p>Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.</p>
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#### Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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#### Advice for firefighters

<b>Fire Fighting</b>	<p>Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. <b>DO NOT</b> approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.</p>
<b>Fire/Explosion Hazard</b>	<p><b>WARNING:</b> In use may form flammable/ explosive vapour-air mixtures. Combustible. Slight fire hazard when exposed to heat or flame. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. May emit acrid smoke. Mists containing combustible materials may be explosive. 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 May emit corrosive fumes.</p>

### SECTION 6 ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

<b>Minor Spills</b>	<p>Environmental hazard - contain spillage. Remove all ignition sources. 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 spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.</p>
<b>Major Spills</b>	<p>Moderate environmental hazard - contain spillage. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. 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.</p>
	<p>Personal Protective Equipment advice is contained in Section 8 of the SDS.</p>

### SECTION 7 HANDLING AND STORAGE

#### Precautions for safe handling

<b>Safe handling</b>	<p>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. Contains low boiling substance: Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically Always release caps or seals slowly to ensure slow dissipation of vapours Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. 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. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers and check regularly for leaks.</p>
<b>Other information</b>	<p>Store in original containers. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Observe manufacturer's storage and handling recommendations contained within this SDS.</p>

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

<b>Suitable container</b>	<p>Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.</p>
<b>Storage incompatibility</b>	<p>Ethyl silicate: reacts slowly with water forming ethanol reacts violently with strong oxidisers is incompatible with acids, nitrates attacks some plastics and rubber avoid reaction with oxidising agents</p>

## 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	naphtha petroleum, isoparaffin, hydrotreated	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	dibutyltin dilaurate	Tin, organic compounds (as Sn)	0.1 mg/m3	0.2 mg/m3	Not Available	Sk
Australia Exposure Standards	tetraethyl silicate	Ethyl silicate	85 mg/m3 / 10 ppm	Not Available	Not Available	Not Available

#### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
naphtha petroleum, isoparaffin, hydrotreated	Oil mist, refined mineral	171 ppm	171 ppm	570 ppm
dibutyltin dilaurate	Tin, organic compounds (as Sn)	1.1 mg/m3	3.3 mg/m3	5.2 mg/m3
tetraethyl silicate	Ethyl silicate	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
naphtha petroleum, isoparaffin, hydrotreated	Not Available	Not Available
dibutyltin dilaurate	Unknown mg/m3 / Unknown ppm	25 mg/m3
tetraethyl silicate	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, e.g. PVC. The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
<b>Thermal hazards</b>	Not Available

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Clear colourless liquid		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	Not Available
<b>Odour</b>	Mild solvent	<b>Viscosity (cSt)</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 Applicable	<b>Partition coefficient n-octanol / water</b>	Not Applicable
<b>Initial boiling point and boiling range (°C)</b>	Not Applicable	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Applicable
<b>Flash point (°C)</b>	Not Applicable	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Applicable	<b>Molecular weight (g/mol)</b>	Not Available
<b>Lower Explosive Limit(%)</b>	Not Applicable	<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>	Partly miscible	<b>pH as a solution (1%)</b>	Not Available
<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>	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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 high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.
<b>Ingestion</b>	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.
<b>Skin Contact</b>	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. The material may accentuate any pre-existing dermatitis condition 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>	This material can cause eye irritation and damage in some persons.
<b>Chronic</b>	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

## SECTION 12 ECOLOGICAL INFORMATION

### Toxicity

Harmful to aquatic organisms.  
**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
dibutyltin dilaurate	HIGH	HIGH
tetraethyl silicate	HIGH	HIGH

### Bio accumulative potential

Ingredient	Bioaccumulation
dibutyltin dilaurate	LOW (BCF = 110)
tetraethyl silicate	LOW (LogKOW = 0.0362)

### Mobility in soil

Ingredient	Mobility
dibutyltin dilaurate	LOW (KOC = 64610000)
tetraethyl silicate	LOW (KOC = 8766)

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Product / packaging disposal</b>	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
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**SECTION 14 TRANSPORT INFORMATION****Labels Required**

					
<b>Marine Pollutant</b>	NO				
<b>HAZCHEM</b>	3Y				
<b>UN number</b>	1993				
<b>Packing group</b>	III				
<b>UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S.				
<b>Environmental hazard</b>	No relevant data				
<b>Transport hazard class</b>	<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				
<b>Special precautions for user</b>	<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****NAPHTHA PETROLEUM, ISOPARAFFIN, HYDROTREATED (64742-48-9.) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards  
Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)  
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

**DIBUTYL TIN DILAURATE (77-58-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

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

**TETRAETHYL SILICATE (78-10-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

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

**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
BEL:	Biological Exposure Index

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**End of SDS**