

# SAFETY DATA SHEET



## EMULSIFIER PLUS

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP455

Version No: 2.1

Issue date: 22/02/2021

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	EMULSIFIER PLUS
Product code	AP455
Pack sizes	5L & 20L

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

Relevant identified uses	Extraction Liquid Concentrate for Carpet cleaning
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#### Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
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. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Eye Irritation Category 1 <i>Classification drawn from HCIS and ECHA C&amp;L Inventory.</i>

#### Label elements

Hazard pictograms	
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SIGNAL WORD	<b>WARNING</b>
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#### Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye irritation

#### Precautionary statement(s) Prevention

P280	Wear protective gloves and eye protection.
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### Precautionary statement(s) Response

P305+P310 +P351+P338	IF IN EYES: Immediately call a POISON CENTRE or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352+P362+P332+P313	IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice / attention.

### Precautionary statement(s) Storage

Not applicable

### Precautionary statement(s) Disposal

Not applicable

This SDS and the hazard classifications contained herein only apply to the product in its concentrated form as supplied. When diluted as recommended and ready-to-use, they no longer apply. However, good hygiene and housekeeping practices should be adhered to.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
141-43-5	<10	monoethanolamine
2809-21-4	<10	phosphonates
64-02-8	<10	EDTA tetrasodium salt
7320-34-5	<10	Potassium pyrophosphate
7758-29-4	<10	Sodium tripolyphosphate
Trade secret	<10	Proprietary surfactant 1
Trade secret	<10	Proprietary surfactant 2
Trade secret	<10	Proprietary surfactant 3

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

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. 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. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
<b>Skin Contact</b>	<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.</p>
<b>Inhalation</b>	<p>If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.</p>
<b>Ingestion</b>	<p>Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</p>

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

Treat symptomatically.

## SECTION 5 FIREFIGHTING MEASURES

### Extinguishing media

<b>Extinguishing media</b>	The product contains a substantial amount of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas
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### Special hazards arising from the substrate or mixture

<b>Fire incompatibility</b>	None known
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#### Advice for firefighters

<b>Fire Fighting</b>	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. <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.
<b>Fire/Explosion Hazard</b>	The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers emit acrid smoke. Decomposes on heating and produces toxic fumes of: carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ), phosphorus oxides (PO <sub>x</sub> ) and other pyrolysis products typical of burning organic material May emit corrosive fumes.
<b>HAZCHEM</b>	Not applicable

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

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

<b>Minor Spills</b>	Flush away with copious amounts of water.
<b>Major Spills</b>	Prevent, by any means available, spillage from entering drains or water course. 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.
<b>PPE</b>	Personal Protective Equipment advice is contained in Section 8 of the SDS.

#### SECTION 7 HANDLING AND STORAGE

##### Precautions for safe handling

<b>Safe handling</b>	Avoid all personal contact. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. <b>When handling, DO NOT eat, drink or smoke.</b> Keep containers securely sealed when not in use. Avoid physical damage to containers.
<b>Other information</b>	

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

<b>Suitable container</b>	Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
<b>Storage incompatibility</b>	None known

#### 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	monoethanolamine	ethanolamine	7.5 mg/m <sup>3</sup> / 3 ppm	15 mg/m <sup>3</sup> / 6 ppm	Not Available	Not Available

###### EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
monoethanolamine	ethanolamine	6 ppm	6 ppm	1000 ppm
hydroxyethanediphosphonic acid	Hydroxyethylidene-1,1-diphosphonic acid, 1-; (Hydroxyethylidene bisphosphonic acid, 1-)	7.2 mg/m <sup>3</sup>	79 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>
EDTA tetrasodium salt	Ethylenediaminetetraacetic acid, tetrasodium salt; (Tetrasodium EDTA)	75 mg/m <sup>3</sup>	830 mg/m <sup>3</sup>	5000 mg/m <sup>3</sup>
potassium pyrophosphate	Tetrapotassium diphosphorate	61 mg/m <sup>3</sup>	680 mg/m <sup>3</sup>	1,200 mg/m <sup>3</sup>
sodium tripolyphosphate	sodium tripolyphosphate	0.61 mg/m <sup>3</sup>	6.8 mg/m <sup>3</sup>	620 mg/m <sup>3</sup>

Ingredient	Original IDLH	Revised IDLH
monoethanolamine	1,000 ppm	30 ppm
hydroxyethanediphosphonic acid	Not Available	Not Available
EDTA tetrasodium salt	Not Available	Not Available
potassium pyrophosphate	Not Available	Not Available
sodium tripolyphosphate	Not Available	Not Available
Proprietary surfactant 1	Not Available	Not Available
Proprietary surfactant 2	Not Available	Not Available
Proprietary surfactant 3	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 elbow length chemical protective gloves. Neoprene or butyl are recommended for this application.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	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 tan liquid		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	Not Available
<b>Odour</b>	Fruity cinnamon	<b>Viscosity (cts)</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	9.6	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Available
<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>Surface Tension (dyn/cm or mN/m)</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>	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 is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
<b>Ingestion</b>	The material has <b>NOT</b> been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
<b>Skin Contact</b>	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material 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>	No relative data listed.

### Toxicological effects of ingredients

<b>monoethanolamine</b>	Acute toxicity	Oral LD50 (rat) 1089 mg/kg Dermal LD50 (rat) 2504 mg/kg Inhalation LC50 >1300 mg/m <sup>3</sup> 6h
	Skin corrosion/irritation	Causes severe skin burns and eye damage.
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No sensitizing effect
	Germ cell mutagenicity	The substance was not genotoxic in a test with mammals
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not classified
	STOT (single exposure)	May cause respiratory irritation
	STOT (repeated exposure)	The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies
	Aspiration toxicity	No aspiration hazard expected
<b>Hydroxyethane-diphosphonic acid</b>	Acute toxicity	Oral LD50 (Rats): 1,440 - 3,550 mg/kg - (Mice): 1,100 mg/kg
	Skin corrosion/irritation	Causes severe skin burns
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No information available
	Germ cell mutagenicity	Not considered to be genotoxic
	Carcinogenicity	No information available
	Reproductive toxicity	Not considered to cause reproductive or developmental toxicity
	STOT (single exposure)	Inhalation may cause burning of the nose and throat, nausea, vomiting and diarrhoea
	STOT (repeated exposure)	No information available
	Aspiration toxicity	No information available
<b>EDTA tetrasodium salt</b>	Acute toxicity	Oral LD50 (rat): >1780 - <2000 mg/kg
	Skin corrosion/irritation	Contact with skin may result in irritation
	Eye damage/irritation	Irritant (rabbit).
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	No adverse effect observed
	Carcinogenicity	Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
<b>Tetrapotassium pyrophosphate</b>	Acute toxicity	Oral LD50 (rabbit) >1000 mg/kg Dermal LD50 (rabbit) >4640 mg/kg
	Skin corrosion/irritation	Causes skin irritation. Irritation is likely to be more severe if the skin is moist or wet
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	EU/CLP • Classification criteria not met
	Germ cell mutagenicity	EU/CLP • Classification criteria not met
	Carcinogenicity	Does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens
	Reproductive toxicity	EU/CLP • Classification criteria not met
	STOT (single exposure)	EU/CLP • Classification criteria not met
	STOT (repeated exposure)	EU/CLP • Classification criteria not met
	Aspiration toxicity	EU/CLP • Classification criteria not met
<b>Sodium tripolyphosphate</b>	Acute toxicity	Oral LD50 (rat) 2000 mg/kg Inhalation LC50 (rat) 390 mg/kg Dermal LD50 (rat) 4640 mg/kg
	Skin corrosion/irritation	Not a skin irritant
	Eye damage/irritation	no adverse effect observed (not irritating)
	Respiratory/skin sensitization	no adverse effect observed (not sensitising)
	Germ cell mutagenicity	No adverse effect observed (negative)
	Carcinogenicity	This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
<b>Proprietary surfactant 1</b>	Acute toxicity	Oral LD50 (rat) 16800 mg/kg
	Skin corrosion/irritation	Skin irritation
	Eye damage/irritation	Eye irritation
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	No Data Available
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available

<b>Proprietary surfactant 2</b>	Acute toxicity	(Estimates based on ingredients.) Oral 300 – 2000 mg/kg Dermal >2000 mg/kg Inhalation 20 mg/L
	Skin corrosion/irritation	Contact with skin may result in irritation
	Eye damage/irritation	A severe eye irritant. Corrosive to eyes: contact can cause corneal burns.
	Respiratory/skin sensitization	Not a respiratory or skin sensitiser
	Germ cell mutagenicity	classified as non-hazardous
	Carcinogenicity	classified as non-hazardous
	Reproductive toxicity	classified as non-hazardous
	STOT (single exposure)	classified as non-hazardous
	STOT (repeated exposure)	classified as non-hazardous
	Aspiration toxicity	classified as non-hazardous
<b>Proprietary surfactant 3</b>	Acute toxicity	No available data
	Skin corrosion/irritation	No available data
	Eye damage/irritation	No available data
	Respiratory/skin sensitization	No available data
	Germ cell mutagenicity	No available data
	Carcinogenicity	No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP above the threshold of 0.1%
	Reproductive toxicity	No available data
	STOT (single exposure)	No available data
	STOT (repeated exposure)	No available data
	Aspiration toxicity	No available data

## SECTION 12 ECOLOGICAL INFORMATION

### Toxicity

	Endpoint	Duration (Hr.)	Species	Value
<b>hydroxyethanediphosphonic acid</b>	LC50	96	Fish	195mg/L
	EC50	48	Crustacea	409mg/L
	EC50	96	Algae or other aquatic plants	3mg/L
	EC0	24	Crustacea	=39.6mg/L
	NOEC	504	Crustacea	0.1mg/L
<b>EDTA tetrasodium salt</b>	LC50	96	Fish	41mg/L
	EC50	48	Crustacea	140mg/L
	EC50	72	Algae or other aquatic plants	=1.01mg/L
	EC10	72	Algae or other aquatic plants	=0.48mg/L
	NOEC	33	Algae or other aquatic plants	0.0003802-mg/L
<b>potassium pyrophosphate</b>	LC50	96	Fish	>100mg/L
	EC50	48	Crustacea	>100mg/L
	EC50	72	Algae or other aquatic plants	>100mg/L
	NOEC	72	Algae or other aquatic plants	>100mg/L
<b>sodium tripolyphosphate</b>	EC50	48	Crustacea	>70.7-<101.3mg/L
	EC50	96	Algae or other aquatic plants	69.2mg/L
<b>monoethanolamine</b>	LC50	96	Fish	2-70mg/L
	EC50	48	Crustacea	32.6mg/L
	EC50	72	Algae or other aquatic plants	2.1mg/L
	NOEC	504	Crustacea	0.85mg/L
<b>Proprietary surfactant 1</b>	LC50	96	Fathead minnow (Pimephales promelas).	60.6 mg/l
	LC50	24	Fathead minnow (Pimephales promelas).	100 – 250 mg/l

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
monoethanolamine	LOW	LOW

### Bio accumulative potential

Ingredient	Bioaccumulation
monoethanolamine	LOW (LogKOW = -1.31)

### Mobility in soil

Ingredient	Mobility
monoethanolamine	HIGH (KOC = 1)

## 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**

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

**SECTION 15 REGULATORY INFORMATION****Safety, health and environmental regulations / legislation specific for the substance or mixture****MONOETHANOLAMINE (141-43-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5  
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6  
Australian Inventory of Industrial Chemicals (AIIC)

**HYDROXYETHANEDIPHOSPHONIC ACID (2809-21-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  
Australian Inventory of Industrial Chemicals (AIIC)

**EDTA TETRASODIUM SALT IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  
Australian Inventory of Industrial Chemicals (AIIC)

**POTASSIUM PYROPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australian Inventory of Industrial Chemicals (AIIC)

**SODIUM TRIPOLYPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australian Inventory of Industrial Chemicals (AIIC)

**SECTION 16 OTHER INFORMATION****Revision Schedule**

Revision Date	22/02/2021
Initial Date	07/12/2016

**SDS Version Summary**

Version	Issue Date	Sections Updated
2.1	22/02/2021	Sections 2, 3, 11, 12, 15, 16 have been updated or corrected

**Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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**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**