



MATERIAL SAFETY DATA SHEET
Duet Plus

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

1.1. Product identifier

Product Name Duet Plus

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Car maintenance product. - Auto shampoo.

Uses Advised Against For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

1.3. Details of the supplier of the safety data sheet

Supplier Autosmart Australia
11 Darrambal Close
Rathmines
NSW 2283
Australia
www.autosmartinternational.com
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST) (General Information. Transport Information. Mild Medical Information)
autosmart@autosmartaustralia.com.au

Contact Person Mr. Russell Butler

Manufacturer Autosmart Australia
11 Darrambal Close
Rathmines
NSW 2283
Australia
www.autosmartinternational.com
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST) (General Information. Transport Information. Mild Medical Information)
autosmart@autosmartaustralia.com.au

1.4. Emergency telephone number

Emergency No: +44 7808 971321 (24hrs) (Autosmart International, UK)

General Information. Transport Information. Mild medical Information:-

Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

SECTION 2: HAZARDS IDENTIFICATION

Risk Phrases

NC Not classified.

Safety Phrases

P13 Safety data sheet available for professional user on request.
P14 Contains 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol. May produce an allergic reaction.
S24/25 Avoid contact with skin and eyes.

2.1. Classification of the substance or mixture

Human health

The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.

2.2. Label elements

Duet Plus**Detergent Labelling:**

< 5%	amphoteric surfactants cationic surfactants non-ionic surfactants
Contains	TRIS(N-HYDROXYETHYL) HEXAHYDROTRIAZINE

Risk Phrases

NC Not classified.

Safety Phrases

P13 Safety data sheet available for professional user on request.
P14 Contains 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol. May produce an allergic reaction.
S24/25 Avoid contact with skin and eyes.

2.3. Other hazards

This product does not contain any PBT or vPvB Substances.

Statement Of Hazardous Nature

NON-HAZARDOUS SUBSTANCE (According to criteria of NOHSC). NON-DANGEROUS GOODS (According to ADG Code).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

NONYLPHENOL ETHOXYLATE	5-10%
CAS-No.: 9016-45-9	EC No.:
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Aquatic Chronic 4 - H413	Classification (67/548) Xi;R36/38. R53.
ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE	2-5%
CAS-No.: 61789-40-0	EC No.: 263-058-8
Classification (EC 1272/2008) Eye Irrit. 2 - H319	Classification (67/548) Xi;R36.
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides	1-2%
CAS-No.: 61789-77-3	EC No.: 263-087-6
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Corr. 1B - H314 Aquatic Acute 1 - H400	Classification (67/548) Xn;R22. C;R34. N;R50.
PROPAN-2-OL	0.2-0.5%
CAS-No.: 67-63-0	EC No.: 200-661-7
	Registration Number: 01-2119457558-25-xxxx
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548) F;R11 Xi;R36 R67

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2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol		0.1-0.2%
CAS-No.: 4719-04-4	EC No.: 225-208-0	
Classification (EC 1272/2008)	Classification (67/548)	
Acute Tox. 4 - H302	T;R23.	
Acute Tox. 2 - H330	Xn;R22.	
Skin Sens. 1 - H317	R43.	

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

Susdp First Aid Instructions

For advice, contact a Poisons Information Centre (Phone 13 1126) or a doctor.

4.1. Description of first aid measures

Inhalation

Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing. Rinse with water. Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

No specific symptoms noted.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact

Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Specific hazards

Oxides of: Carbon. Nitrogen.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

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SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

For personal protection, see section 8.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses. To prevent release, place container with damaged side up.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Do not contaminate water sources or sewer. Small quantities may be flushed to drains with plenty of water.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
PROPAN-2-OL	NOHSC	400 ppm	983 mg/m ³	500 ppm	1230 mg/m ³	

NOHSC = The National Occupational Health and Safety Commission.

Duet Plus**PROPAN-2-OL (CAS: 67-63-0)****DNEL**

Industry	Inhalation.	Long Term	Systemic Effects	500 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	319 mg/kg/day
Consumer	Oral	Long Term	Systemic Effects	26 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	89 mg/m3
Industry	Dermal	Long Term	Systemic Effects	888 mg/kg/day

PNEC

Freshwater	140.9	mg/l
Marinewater	140.9	mg/l
Intermittent release	140.9	mg/l
Sediment (Freshwater)	552	mg/kg
Sediment (Marinewater)	552	mg/kg
STP	2251	mg/l
Soil	28	mg/kg

Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)**Ingredient Comments**

No exposure limits noted for ingredient(s).

DNEL

Professional	Dermal	Long Term	Systemic Effects	12.75 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	27 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	7.65 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	8 mg/m3
Consumer	Oral	Long Term	Systemic Effects	2.3 mg/kg/day

PNEC

Freshwater	0.013	mg/l
Marinewater	0.0013	mg/l
STP	1.2	
Sediment (Freshwater)	8.8	mg/kg
Sediment (Marinewater)	0.88	mg/kg
Soil	7	mg/kg

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**Ingredient Comments**

No exposure limits noted for ingredient(s).

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol (CAS: 4719-04-4)**Ingredient Comments**

No exposure limits noted for ingredient(s).

8.2. Exposure controls**Protective equipment****Process Conditions**

Provide eyewash station.

Engineering measures

No particular ventilation requirements.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. PVC gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Not relevant. Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Duet Plus

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Reddish.
Odour	Mild.
Solubility	Soluble in water.
Boiling Point (°C)	~ 100 @ 760 mm Hg
Melting point (°C)	~ 0
Relative density	~ 1.020 (20°C)
Vapour density (air=1)	Not applicable.
Vapour pressure	Not applicable.
Evaporation rate	Not available.
pH-Value, Conc. Solution	~ 7.0
pH-Value, Diluted Solution	~ 7.0 @ 1%
Viscosity	~ 350 cSt @ 20°C

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point (°C)

Not applicable.

Auto Ignition Temperature (°C)

Not applicable.

Flammability Limit - Lower(%)

Not applicable.

Flammability Limit - Upper(%)

Not applicable.

**Partition Coefficient
(N-Octanol/Water)**

Not available.

Oxidising properties

Not applicable.

Other Information

Information declared as "Not available" or "Not applicable" is not considered to be justified for enabling proper control measures to be taken.

9.2. Other information

Volatile Organic Compound (VOC) ~ 2 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

Not relevant.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid frost.

10.5. Incompatible materials**Materials To Avoid**

Strong acids. Strong alkalis.

Duet Plus

10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Other Health Effects

This substance has no evidence of carcinogenic properties.

Skin Corrosion/Irritation

Human Skin Model Test

Scientifically unjustified.

Extreme pH

Moderate pH (> 2 and < 11.5)

Not irritating.

General information

This product has low toxicity. Only large volumes may have adverse impact on human health.

Inhalation

No specific health warnings noted.

Ingestion

May cause discomfort if swallowed.

Skin contact

May cause defatting of the skin, but is not an irritant. The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals after repeated contact.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings

Because of quantity and composition, the health hazard is small.

Route of entry

Skin and/or eye contact.

Medical Symptoms

No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Medical Considerations

Skin disorders and allergies.

Toxicological Information on Ingredients:

Duet Plus**PROPAN-2-OL (CAS: 67-63-0)****Other Health Effects**

This substance has no evidence of carcinogenic properties. IARC Not Listed. NTP Not Listed. OSHA Not Regulated.

Acute toxicity:**Acute Toxicity (Oral LD50)**

~ 5840 mg/kg Rat

Acute Toxicity (Dermal LD50)

~ 16.4 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 10000 ppmV (gas) Rat 4 hours

Skin Corrosion/Irritation

Not irritating.

Respiratory or Skin Sensitisation

Not sensitising.

Not Sensitising.

Aspiration Hazard**Inhalation**

Drowsiness, dizziness, disorientation, vertigo.

Ingestion

No specific health warnings noted.

Skin contact

No specific health warnings noted.

Eye contact

Irritating to eyes.

Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)**Toxic Dose 1 - LD 50**

960 mg/kg (oral rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**Toxic Dose 1 - LD 50**

5,000 mg/kg (oral rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

The product is not expected to be hazardous to the environment. The product is not expected to be hazardous to waste water treatment processes. The product contains a substance which is harmful to aquatic organisms. The product does not contain organically bound halogen. The product does not contain organic complexing agents with a DOC level of degradation of < 80% after 28 days.

Ecological Information on Ingredients:**PROPAN-2-OL (CAS: 67-63-0)****Ecotoxicity**

The product is not expected to be hazardous to the environment.

12.1. Toxicity**Acute Toxicity - Fish**

Not determined.

Acute Toxicity Aquatic Invertebrates

Not determined.

Acute Toxicity - Aquatic Plants

Not determined.

Duet Plus**Acute Toxicity - Microorganisms**

Not determined.

Acute Toxicity - Terrestrial

Not determined.

Ecological Information on Ingredients:**PROPAN-2-OL (CAS: 67-63-0)****Acute Toxicity - Fish**

LC50 96 hours ~ 9640 mg/l Pimephales promelas (Fat-head Minnow)

Acute Toxicity Aquatic Invertebrates

EC50 > 1000 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours > 1000 mg/l Scenedesmus subspicatus

Acute Toxicity - Microorganisms

EC50 > 1000 mg/l Activated Sludge

Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)**LC 50, 96 Hrs, Fish mg/l**

0.195

EC 50, 48 Hrs, Daphnia, mg/l

0.01-0.1

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**LC 50, 96 Hrs, Fish mg/l**

9.6

Acute Toxicity - Fish

LC50 72 hours ~ 9.6 mg/l Leuciscus idus (Golden orfe)

EC 50, 48 Hrs, Daphnia, mg/l

21.5

IC 50, 72 Hrs, Algae, mg/l

30

12.2. Persistence and degradability**Degradability**

The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

Ecological Information on Ingredients:**PROPAN-2-OL (CAS: 67-63-0)****Degradability**

The product is expected to be biodegradable.

Biodegradation

Degradation (95%): 21 days

Biological Oxygen Demand~ 1171 g O₂/g substance**Chemical Oxygen Demand**~ 2294 g O₂/g substance**Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)****Degradability**

The product is not readily biodegradable.

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**Degradability**

The product is biodegradable.

12.3. Bioaccumulative potential**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

Partition coefficient

Not available.

Duet Plus**Ecological Information on Ingredients:****PROPAN-2-OL (CAS: 67-63-0)****Bioaccumulative potential**

Will not bio-accumulate.

Partition coefficient

log Pow 0.05

Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil**Mobility:**

The product is soluble in water.

Ecological Information on Ingredients:**PROPAN-2-OL (CAS: 67-63-0)****Mobility:**

The product is soluble in water.

Adsorption/Desorption Coefficient

Soil Koc ~ 1.1

Henry's Law Constant0.00000338 atm m³/mol 25°C**Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides (CAS: 61789-77-3)****Mobility:**

The product is soluble in water.

ALKYL AMIDO PROPYL DIMETHYLAMINE BETAINE (CAS: 61789-40-0)**Mobility:**

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Ecological Information on Ingredients:**PROPAN-2-OL (CAS: 67-63-0)**

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

The packaging must be empty (drop-free, when inverted).

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADG).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

Duet Plus

14.3. Transport hazard class(es)

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

Poisons Schedule Number No allocated Poison schedule number.

National Regulations And References

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). National Code of Practice for the Preparation of Material Safety Data Sheets. Approved Criteria for Classifying Hazardous Substances. Exposure Standards for Atmospheric Contaminants in the Occupational Environment. Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment. National Code of Practice for the Labelling of Workplace Substances. National Model Regulations for the Control of Workplace Hazardous Substances. National Code of Practice for the Control of Workplace Hazardous Substances. National Standard for the Storage and Handling of Workplace Dangerous Goods. National Code of Practice for the Storage and Handling of Workplace Dangerous Goods. Guidance Note for Placarding Stores for Dangerous Goods and Specified Hazardous Substances. Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace. National Standard for the Control of Major Hazard Facilities. National Code of Practice for the Control of Major Hazard Facilities.

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

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Health And Environmental Listings

Regulation EC 689/2008 concerning the export and import of dangerous chemicals.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 08/10/2013

Revision 3

Supersedes date 13/10/2011

Duet Plus**Risk Phrases In Full**

R34	Causes burns.
R22	Harmful if swallowed.
R11	Highly flammable
R36/38	Irritating to eyes and skin.
R36	Irritating to eyes.
R53	May cause long-term adverse effects in the aquatic environment.
R43	May cause sensitisation by skin contact.
NC	Not classified.
R23	Toxic by inhalation.
R67	Vapours may cause drowsiness and dizziness.
R50	Very toxic to aquatic organisms.

Hazard Statements In Full

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.