



SAFETY DATA SHEET

Swarfega Powerwash Formula

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Swarfega Powerwash Formula

Product number PFO1000L, PFO200L, PFO25L, PFO761HB, PFO76ASC, PFO76LSC, PFO84FCE, PWF125, PWF200, 7225, 7299

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

Identified uses Detergent. For full details regarding recommended uses please refer to the product label.

1.3. Details of the supplier of the safety data sheet

Supplier Deb Ltd
Denby Hall Way
Denby
Derbyshire
DE5 8JZ
Main Tel. 01773 855100
Technical Tel 01773 855105
sdsuk@debgroup.com

1.4. Emergency telephone number

Emergency telephone National Poisons Information Service (UK) 0344 8920111 (Health Professionals only)
National Poisons Information Centre (Eire) 01-8092566/8379964

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H315 Causes skin irritation.
H318 Causes serious eye damage.

Swarfega Powerwash Formula

Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	TETRASODIUM ETHYLENE DIAMINE TETRAACETATE, SODIUM HYDROXIDE, 3-C12-14-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide
Detergent labelling	< 5% amphoteric surfactants, < 5% cationic surfactants, < 5% EDTA and salts thereof, < 5% non-ionic surfactants
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE			1-5%
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01-2119486762-27-XXXX	
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318			
SODIUM HYDROXIDE			1-5%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX	
Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318			
3-C12-14-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide			1-5%
CAS number: —	EC number: 939-581-9	REACH registration number: 01-2119978229-22-XXXX	
M factor (Acute) = 1			
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412			

Swarfega Powerwash Formula

ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE			0.13%
CAS number: 68424-85-1	EC number: 270-325-2	REACH registration number: 01-2119970550-39-XXXX	
M factor (Acute) = 10	M factor (Chronic) = 1		
Classification Met. Corr. 1 - H290 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

TRISODIUM NITRILOTRIACETATE			<1%
CAS number: 5064-31-3	EC number: 225-768-6	REACH registration number: 01-2119519239-36-XXXX	
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Carc. 2 - H351			

ETHANEDIOL			<1%
CAS number: 107-21-1	EC number: 203-473-3		
Classification Acute Tox. 4 - H302			

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Skin irritation.
Eye contact	Irritation of eyes and mucous membranes.

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

Swarfega Powerwash Formula

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid contamination of ponds or watercourses with washing down water.

6.4. Reference to other sections

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

Usage precautions Wear appropriate clothing to prevent skin contamination. Avoid contact with skin and eyes. Avoid spilling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in closed original container at temperatures between 0°C and 30°C.

Storage class Chemical storage.

7.3. Specific end use(s)

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

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 20 ppm 10 mg/m³

Sk

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³

Swarfega Powerwash Formula

WEL = Workplace Exposure Limit
Sk = Can be absorbed through skin.

Ingredient comments None.

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

DNEL	Professional - Inhalation; Short term systemic effects: 2.8 mg/m ³ Professional - Inhalation; Short term local effects: 2.5 mg/m ³ Consumer - Inhalation; Long term local effects: 1.5 mg/m ³ Consumer - Oral; Long term systemic effects: 28 mg/kg/day Consumer - Inhalation; Short term systemic effects: 1.5 mg/m ³ Professional - Inhalation; Short term systemic effects: 2.5 mg/m ³ Professional - Inhalation; Long term systemic effects: 2.5 mg/m ³ Professional - Inhalation; Long term local effects: 2.5 mg/m ³
PNEC	- Marine water; 0.22 mg/l - ; Intermittent release 1.2 mg/l - STP; 43 mg/l - Fresh water; 2.2 mg/l - Soil; 0.72 mg/kg

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Industry - Inhalation; Long term local effects: 1 mg/m ³ Consumer - Inhalation; Long term local effects: 1 mg/m ³
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3-C12-14-(even numbered)-alkylamido-N,N-dimethylpropan-1-amino oxide

DNEL	Workers - Inhalation; Long term systemic effects: 3.52 mg/m ³ Workers - Dermal; Long term systemic effects: 5 mg/kg/day Workers - Dermal; Long term local effects: 0.27 % General population - Inhalation; Long term systemic effects: 0.87 mg/m ³ General population - Dermal; Long term systemic effects: 2.5 mg/kg/day General population - Dermal; Long term local effects: 0.27 % General population - Oral; Long term systemic effects: 0.25 mg/kg/day
PNEC	- Fresh water; 30.3 µg/L - Marine water; 3.04 µg/L - Intermittent release; 3.4 µg/L - STP; 9.7 mg/l - Sediment (Freshwater); 0.214 mg/kg - Sediment (Marinewater); 0.021 mg/kg - Soil; 0.025 µg/kg

REACTION PRODUCTS OF C12-18-(EVEN NUMBERED)-ALKYLAMINES & ACRYLIC ACID & SODIUM HYDROXIDE

DNEL	Professional - Dermal; Long term systemic effects: 5.3 mg/kg/day Professional - Inhalation; Long term systemic effects: 3.8 mg/m ³ Consumer - Dermal; Long term systemic effects: 2.7 mg/kg/day Consumer - Inhalation; Long term systemic effects: 0.9 mg/m ³ Consumer - Oral; Long term systemic effects: 0.3 mg/kg/day
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Swarfega Powerwash Formula

PNEC

- Marine water; 0.0003 mg/l
- Soil; 0.0041 mg/kg
- Fresh water; 0.03 mg/l
- Sediment (Freshwater); 0.108 mg/kg
- Intermittent release; 0.042 mg/l
- STP; 9.9 mg/l
- Sediment (Marinewater); 0.0108 mg/kg

ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE (CAS: 68424-85-1)

DNEL

Workers - Inhalation; Long term systemic effects: 3.96 mg/m³
 Workers - Dermal; Long term systemic effects: 5.7 mg/kg/day
 General population - Inhalation; Long term systemic effects: 1.64 mg/m³
 General population - Dermal; Long term systemic effects: 3.4 mg/kg/day
 General population - Oral; Long term systemic effects: 3.4 mg/kg/day

PNEC

- Fresh water; 0.0009 mg/l
- Marine water; 0.00096 mg/l
- Intermittent release; 0.00016 mg/l
- STP; 0.4 mg/l
- Sediment (Freshwater); 12.27 mg/kg
- Sediment (Marinewater); 13.09 mg/kg
- Soil; 7 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Reddish.

Swarfega Powerwash Formula

Odour	Characteristic.
Odour threshold	Not determined.
pH	pH (concentrated solution): 12-13
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.021-1.041 @ 25°C
Solubility(ies)	Soluble in water.
Partition coefficient	Scientifically unjustified.
Auto-ignition temperature	Scientifically unjustified.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Scientifically unjustified.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not relevant.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid freezing.
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10.5. Incompatible materials

Materials to avoid	Avoid contact with acids and alkalis.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

Swarfega Powerwash Formula

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 16,393.44

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Human skin model test Cell Viability (%) 79 4 hrs

Serious eye damage/irritation

Serious eye damage/irritation Irritating.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard based on chemical structure.

Inhalation May cause respiratory system irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

Toxicological information on ingredients.

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,780.0

Species Rat Rat

Swarfega Powerwash Formula

Notes (oral LD₅₀)	LD50 > 1780 < 2000 mg/kg bw
ATE oral (mg/kg)	1,780.0
<u>Acute toxicity - dermal</u>	
Species	Rat
ATE dermal (mg/kg)	3,300.0
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LOAEC ca. 30 mg/m ³ air
ATE inhalation (vapours mg/l)	11.0
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	H318
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Conclusive data but not sufficient for classification.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Conclusive data but not sufficient for classification.
Genotoxicity - in vivo	Conclusive data but not sufficient for classification.
<u>Carcinogenicity</u>	
Carcinogenicity	Conclusive data but not sufficient for classification.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Conclusive data but not sufficient for classification.
Reproductive toxicity - development	Conclusive data but not sufficient for classification.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Conclusive data but not sufficient for classification.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Conclusive data but not sufficient for classification.

ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	795.0
Species	Rat Rat
ATE oral (mg/kg)	795.0

Swarfega Powerwash Formula

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 1,560.0 mg/kg)

Species Rat

ATE dermal (mg/kg) 1,560.0

Skin corrosion/irritation

Animal data Primary dermal irritation index: 6.29

SECTION 12: Ecological Information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity The product is not expected to be toxic to aquatic organisms.

Ecological information on ingredients.

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >100 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: <100 mg/l, Algae

Acute toxicity - terrestrial LC₅₀, 14 days: 156 mg/kg, Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage , 28 days: >=36.9 mg/l, Brachydanio rerio (Zebra Fish)

Chronic toxicity - aquatic invertebrates , 21 days: 25 mg/l, Daphnia magna

SODIUM HYDROXIDE

Acute aquatic toxicity

Acute toxicity - fish , : ,
LC₅₀, 96 hours: 125 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, : 76 mg/l, Daphnia magna

Acute toxicity - microorganisms EC₅₀, : 22 mg/l,

ALKYL BENZYL DIMETHYL AMMONIUM CHLORIDE

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C50 ≤ 0.1

M factor (Acute) 10

Swarfega Powerwash Formula

Acute toxicity - fish	LC ₅₀ , < 96 hours: 1 mg/l,
Acute toxicity - aquatic invertebrates	EC ₅₀ , < 48 hours: 1 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , < 48 hours: 1 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 7.75 mg/l, Activated sludge
Acute toxicity - terrestrial	NOEC, 14 days: 1000 mg/l, mg/kg, Eisenia Fetida (Earthworm)
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Scientifically unjustified.

Ecological information on ingredients.

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE

Bioaccumulative potential : 1.8 (28d), Lepomis macrochirus (Bluegill)

12.4. Mobility in soil

Mobility The product is soluble in water. The product is non-volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment None known.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. No specific disposal method required. Reuse or recycle products wherever possible. The following information is provided from exposure scenario(s) received from suppliers for the listed substances. The figures have been calculated using EU standard models & are not based on local conditions. Note that more than one product used on site might contain these substances. Also note the Trade Effluent Consent and/or Environmental Permit may have restrictions below these figures so it is recommended that you consult your local waste water treatment company. Contains AMINES C12-18 ALKYLDIMETHYL, N-OXIDES Maximum discharge of product per day 330L

Swarfega Powerwash Formula

Waste class 20 01 29

SECTION 14: Transport information

Road transport notes Not classified.

Rail transport notes Not classified.

Sea transport notes Not classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

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 MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

EU legislation

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) (as amended).

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 (as amended).

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.

Key literature references and sources for data Where Exposure Scenarios for the substances listed in Section 3 are available they have been assessed for the uses identified in this data sheet or on the product label and the appropriate relevant information is incorporated into this Safety Data Sheet.

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

Revision date 15/06/2018

Swarfega Powerwash Formula

Revision	7
Supersedes date	03/01/2018
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H351 Suspected of causing cancer. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
Notes for Hazard Statements in Full	The full text for Hazard Statements in section 16 relates to the reference numbers in sections 2 and 3 and not necessarily the finished product classification.

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.