

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

1.1. Product identifier

Product code : Hygienfresh Wet&Fresh Wool & Silk

Trades code : A39-545

Product line: Hygienfresh

UFI: 2M42-Q0GP-E00N-YASY

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

Concentrated liquid detergent to WET CLEANING for washing woollens, silks and delicate

Sectors of use:

Industrial Manufacturing[SU3], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112

Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266

London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS07

Hazard Class and Category Code(s):

Skin Irrit. 2, Eye Irrit. 2

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

If brought into contact with eyes, the product causes significant irritations which may last for more than 24 hours, if brought into contact with skin, it causes significant inflammation with erythema, scabs, or edema

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS07 - Warning



Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Supplemental Hazard statement Code(s):

EUH208 - Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Precautionary statements:

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 - IF ON SKIN: Wash with plenty of water and soap.

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.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Contains:

Coconut diethanolamide, diethanolamine, Steareth-21, Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7]; 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 4-tert-butylcyclohexyl acetate, α -Hexylcinnamaldehyde, linalool, 1',2',3',4',5',6',7',8'- octahydro-2',3',8',8'-tetramethyl-2'-acetonaphthone, Methyl Ionone Gamma, Citronellol, Geraniol, 2,2,2-trichloro-1-phenylethylacetate, 1-(1,2,3,4,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, Coumarin, Eugenol, 10-Undecenal, Dodecanal, 2,4-DIMETHYL-3-CYCLOHEXENE CARBOXALDEHYDE, 2-Methylundecanal, p- cresol

Contains (Reg.EC 648/2004):

$\geq 15\% < 30\%$ anionic surfactants, $\geq 5\% < 15\%$ non-ionic surfactants, $< 5\%$ perfumes, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), enzymes, Hexyl cinnam-aldehyde, Linalool, Citronellol, Geraniol, Coumarin, Eugenol

For professional use only

UFI: 2M42-Q0GP-E00N-YASY

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

No information on other hazards

57.1%

method: OECD TG 301 and

Remark: Inherently Biodegradable

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1).	>= 15 < 25%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 1.653,000 mg/kg ATE dermal = 4.199,000 mg/kg	ND	27323-41-7	248-406-9	ND
Alcohols, C13-15, branched and linear, ethoxylated	>= 5 < 10,00%	Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412 Limits: Eye Irrit. 2, H319 3<= %C <10; Eye Dam. 1, H318 %C >10; 1 1 ATE oral > 300,000 mg/kg	ND	157627-86-6	ND	ND
Sodium dodecylbenzenesulfonate	>= 1 < 5%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 438,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	25155-30-0	246-680-4	ND
2-(2-butoxyethoxy)ethanol	>= 1 < 5%	Eye Irrit. 2, H319 ATE oral = 1.720,000 mg/kg ATE dermal = 2.700,000 mg/kg ATE inhal = 374,000 mg/l/4 h	603-096-00-8	112-34-5	203-961-6	ND
Coconut diethanolamide	>= 1 < 3,00%	Skin Irrit. 2, H315; Eye Dam. 1, H318 ATE oral = 5.000,000 mg/kg	ND	68603-42-9	271-657-0	ND
sodium cumenesulphonate	>= 1 < 5%	Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 5.200,000 mg/kg ATE dermal =	ND	28348-53-0	248-983-7	ND

SAFETY DATA SHEET

Hygienefresh Wet&Fresh Wool & Silk

Issued on 12/18/2023 - Rel. # 3 on 12/18/2023

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In conformity to Regulation (EU) 2020/878

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		2.000,000 mg/kg ATE inhal = 5.000,000 mg/l/4 h				
2-aminoethanol, monoester with boric acid	>= 0,1 < 1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 2.000,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	10377-81-8	233-829-3	ND
4-tert-Butylcyclohexyl acetate - FEMA 0	< 0,1%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	32210-23-4	250-954-9	01-2119976 286-24
α-Hexylcinnamaldehyde	< 0,1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,000 mg/kg	ND	101-86-0	202-983-3	01-2119533 092-50
Linalool	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.790,000 mg/kg ATE dermal = 5.610,000 mg/kg ATE inhal = 307,000 mg/l/4 h	603-235-00-2	78-70-6	201-134-4	01-2119474 016-42-000 0
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone - FEMA 0	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410 1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg	ND	54464-57-2	259-174-3	01-2119489 989-04
Methyl Ionone Gamma	< 0,1%	Skin Sens. 1B, H317; Aquatic Chronic 2, H411 1 1	ND	1322-70-9	ND	ND
Citronellol	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; STOT SE 3, H335 ATE oral = 3.450,000 mg/kg ATE dermal = 2.650,000 mg/kg ATE inhal = 1,300 mg/l/4 h	ND	106-22-9	203-375-0	01-2119453 995-23-000 0
1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	< 0,1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 1, H410	ND	68155-66-8	268-978-3	01-2119489 989-04-000 0

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		1 1 ATE oral = 5.000,000 mg/kg ATE dermal = 5.000,000 mg/kg				
Coumarin	< 0,1%	Acute Tox. 4, H302; Skin Sens. 1, H317; STOT RE 2, H373 ATE oral = 293,000 mg/kg ATE dermal = 242,000 mg/kg	ND	91-64-5	202-086-7	01-2119943 756-26-000 0
Eugenol	< 0,1%	Skin Sens. 1B, H317; Eye Irrit. 2, H319 ATE oral = 2.000,000 mg/kg	ND	97-53-0	202-589-1	01-2119971 802-33-000 0
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) Note: B	< 0,1%	EUH071; Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Corr. 1C, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Limits: Skin Corr. 1C, H314 %C >=0,6; Skin Irrit. 2, H315 0,06<= %C <0,6; Eye Dam. 1, H318 %C >=0,6; Eye Irrit. 2, H319 0,06<= %C <0,6; Skin Sens. 1A, H317 %C >=0,0015; 100 100	613-167-00-5	55965-84-9	ND	ND

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Take contaminated clothing Immediately off.
Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.
In case of contact with skin, wash immediately with water and soap.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear a mask, gloves and protective clothing. Suitable: latex, nitrile, PVC

Eliminate all open flames and possible sources of ignition. Not smoking.

Provide adequate ventilation.

Evacuate the danger area and, if necessary, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.

Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.

Prevent it from entering the sewer system.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Wear protective gloves/protective clothing/eye protection/face protection.

At work do not eat or drink.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool place, away from sources of heat and direct exposure of sunlight.

7.3. Specific end use(s)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

There are no data on occupational exposure limits.

- Substance: 2-(2-butoxyethoxy)ethanol

DNEL

Systemic effects Long term Workers inhalation = 67,5 (mg/m³)

Systemic effects Long term Workers dermal = 20 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 34 (mg/m³)

Systemic effects Long term Consumers dermal = 10 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 1,25 (mg/kg bw/day)

Local effects Long term Workers inhalation = 67,5 (mg/m³)

Local effects Long term Consumers inhalation = 34 (mg/m³)

Local effects Short term Workers inhalation = 101,2 (mg/m³)

Local effects Short term Consumers inhalation = 50,6 (mg/m³)

PNEC

Sweet water = 1 (mg/l)

sediment Sweet water = 4 (mg/kg/sediment)

Sea water = 0,1 (mg/l)

sediment Sea water = 0,44 (mg/kg/sediment)

STP = 200 (mg/l)

ground = 0,32 (mg/kg ground)

- Substance: Coconut diethanolamide

DNEL

Systemic effects Long term Workers inhalation = 73,4 (mg/m³)

Systemic effects Long term Workers dermal = 4,16 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 21,73 (mg/m³)

Systemic effects Long term Consumers dermal = 2,5 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 6,25 (mg/kg bw/day)

Local effects Long term Workers dermal = 0,09 (mg/kg bw/day)

Local effects Long term Consumers dermal = 0,0562 (mg/kg bw/day)

PNEC

Sweet water = 0,007 (mg/l)

sediment Sweet water = 0,195 (mg/kg/sediment)

Sea water = 0,001 (mg/l)

sediment Sea water = 0,019 (mg/kg/sediment)

STP = 830 (mg/l)

ground = 0,035 (mg/kg ground)

- Substance: sodium cumenesulphonate

DNEL

Systemic effects Long term Workers inhalation = 26,9 (mg/m³)

Systemic effects Long term Workers dermal = 136,25 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 6,6 (mg/m³)

Systemic effects Long term Consumers dermal = 68,1 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 3,8 (mg/kg bw/day)

Local effects Long term Workers dermal = 0,096 (mg/kg bw/day)

Local effects Long term Consumers dermal = 0,048 (mg/kg bw/day)

PNEC

Sweet water = 0,23 (mg/l)

sediment Sweet water = 0,862 (mg/kg/sediment)

Sea water = 0,023 (mg/l)

sediment Sea water = 0,086 (mg/kg/sediment)

STP = 100 (mg/l)

ground = 0,037 (mg/kg ground)

- Substance: 2-aminoethanol, monoester with boric acid

DNEL

Systemic effects Long term Workers inhalation = 5,9 (mg/m³)

Systemic effects Long term Workers dermal = 3,3 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 1,4 (mg/m³)

Systemic effects Long term Consumers dermal = 1,7 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 1,7 (mg/kg bw/day)

PNEC

Sweet water = 0,026 (mg/l)

sediment Sweet water = 0,054 (mg/kg/sediment)

Sea water = 0,003 (mg/l)

sediment Sea water = 0,005 (mg/kg/sediment)

STP = 10 (mg/l)

ground = 0,014 (mg/kg ground)

- Substance: α -Hexylcinnamaldehyde

DNEL

Systemic effects Long term Workers inhalation = 0,000078 (mg/m³)

Systemic effects Short term Workers inhalation = 0,00628 (mg/m³)

PNEC

Sweet water = 0,03 (mg/l)
sediment Sweet water = 47,7 (mg/kg/sediment)
Sea water = 0,003 (mg/l)
sediment Sea water = 4,77 (mg/kg/sediment)
ground = 9,51 (mg/kg ground)

- Substance: Linalool

DNEL

Systemic effects Long term Workers inhalation = 2,8 (mg/m³)
Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 0,7 (mg/m³)
Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone

DNEL

Systemic effects Long term Workers inhalation = 1,76 (mg/m³)
Systemic effects Long term Workers dermal = 1,73 (mg/kg bw/day)
Systemic effects Short term Workers inhalation = 1,76 (mg/m³)
Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)

PNEC

Sweet water = 0,0028 (mg/l)
sediment Sweet water = 3,73 (mg/kg/sediment)
Sea water = 0,00028 (mg/l)
sediment Sea water = 0,75 (mg/kg/sediment)
ground = 0,705 (mg/kg ground)

- Substance: Citronellol

DNEL

Systemic effects Long term Workers inhalation = 161,6 (mg/m³)

- Substance: 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

DNEL

Systemic effects Short term Workers inhalation = 1,76 (mg/m³)
Systemic effects Short term Workers dermal = 1,73 (mg/kg bw/day)

PNEC

Sweet water = 0,0028 (mg/l)
sediment Sweet water = 3,73 (mg/kg/sediment)
Sea water = 0,00028 (mg/l)
sediment Sea water = 0,75 (mg/kg/sediment)
ground = 0,705 (mg/kg ground)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen

Individual protection measures:



(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Handle with gloves. Gloves must be checked before use. Use a technique suitable for removing gloves (without touching the outer surface of the glove) to avoid the skin contact with this product. Dispose of contaminated gloves after use in accordance with current legislation and good laboratory practices. Wash and dry your hands. The selected protective gloves have to satisfy the requirements of EU directive 89/686 / EEC and the resulting EN 374 standards.

Full contact

Material: Nitrile rubber

minimum thickness: 0.11 mm

breakthrough time: 480 min

The choice of an appropriate glove depends not only on the material but also on other quality characteristics which vary from one manufacturer to another.

For the choice of the type of gloves to use, consult the supplier / manufacturer of the gloves.

Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Liquid	
Colour	straw yellow	
Odour	Characteristic	
Odour threshold	irrelevant	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	not determined	
Flammability	nonflammable	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	6 - 7	
Kinematic viscosity	not determined	

Physical and chemical properties	Value	Determination method
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	1,00 - 1,06 gr/cm ³	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

9.2. Other information

Content of VOC ready to use condition: 0,20 %

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity**10.1. Reactivity**

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Related to contained substances:
2-(2-butoxyethoxy)ethanol:
Avoid contact with air.

10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.
It can generate toxic gases to contact with inorganic sulfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = 3.614,0 mg/kg

ATE(mix) dermal = 69.930,1 mg/kg

ATE(mix) inhal = ∞

(a) acute toxicity: 4-tert-Butylcyclohexyl acetate: Rats (10 per dose, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate by gavage at 5000 mg/kg-bw. No information on mortality was reported
Rabbits (4, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate dermally at 5000 mg/kg-bw. One rabbit died.

α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone: TOXIC DOSE 1-LD > 50 5000 mg/kg (oral rat)

TOXIC DOSE 2-LD > 50 5000 mg/kg (skn-rbt)

Citronellol: orl-rat LD50:3450 mg/kg

skn-rbt LD50:2650 mg/kg

ihl-rat LCLo:1.3 mg/m3/4H

(b) skin corrosion/irritation: If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Dodecylbenzenesulphonic acid, compound with 2,2',2''nitrilotriethanol (1:1): Irritating

Sodium dodecylbenzenesulfonate: Skin irritation-not irritating (2.5%), moderate irritation (5%), moderate-severe irritation (47-50%).

Coconut diethanolamide: Irritating

2-aminoethanol, monoester with boric acid: Irritation of the skin:

Rabbit (New Zealand White): non-irritant, (1993). Eye irritation:

Rabbit (New Zealand White): moderately irritating, 1998

Bovine (in vitro study): not severely irritating or corrosive, 2010

4-tert-Butylcyclohexyl acetate: Rabbits (species, sex and number not specified) were administered 4-tert-butylcyclohexyl acetate dermally to the ears and backs. Observations of the backs included slight erythema after 1 and 5 min, severe erythema and slight edema at 15 min, and severe erythema and edema at 20 hours. On day 8, slight redness and severe scaling were observed. Observations of the ears included severe erythema and edema with blistering after 20 hours. Severe necrosis was recorded on day 8. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit skin

Citronellol: skn-rbt 100 mg/24H SEV

Skin - Human - Skin irritation - 48 h

(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

Dodecylbenzenesulphonic acid, compound with 2,2',2''nitrilotriethanol (1:1): Irritating

Sodium dodecylbenzenesulfonate: Eye irritation-mild irritation (1%); moderate irritation (5%), and severe irritation (47-50%)

2-(2-butoxyethoxy)ethanol: Eyes-rabbit Result: Mild eye irritation-24h

Coconut diethanolamide: Acute Irritazione\Corrosione eyes

4-tert-Butylcyclohexyl acetate: Albino rabbits (3/sex dose not specified) were instilled 0.1 mL aliquot of 0.625% solution (vehicle not reported) into the right eye of each rabbit with no further treatment while the left eye served as control. Scores were recorded according to the Draize scale. Slight to moderate irritation with conjunctival chemosis and discharge were observed in all three rabbits (mean score for redness and 1.9 for 1 chemosis). All eyes cleared by day 4. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit eyes.

(d) respiratory or skin sensitisation: Coconut diethanolamide: Non-sensitizing

Citronellol: mouse - May cause sensitization by skin contact.

Coumarin: Test: Inhalation Sensitization Route: Inhalation Species: Rat = 293 mg/kg

Test: Inhalation Sensitization Route: Inhalation Species: Mouse = 196 mg/kg

(e) germ cell mutagenicity: 2-(2-butoxyethoxy)ethanol: Mutagenicity-Bacterial,: negative +/-activation

Chromosomal aberration,: negative +/-activation

Mutagenicity-Mammalian,: negative +/-activation

4-tert-Butylcyclohexyl acetate: Salmonella typhimurium strains TA98, TA100, TA1535, TA1537 and Ta 1538 were exposed to 4-tert-butylcyclohexyl acetate at 8 to 5000 g/plate in a bacterial reverse mutation assay in the presence and absence of metabolic activation. Positive and negative controls were used but their response was not provided. Cytotoxicity was observed at and above 200 g/plate.

4-tert-Butylcyclohexyl acetate was not mutagenic in this assay.

(f) carcinogenicity: Sodium dodecylbenzenesulfonate: IARC: no component of this product present at levels greater than or equal to 0.1% identified as known or anticipated carcinogen by IARC.

Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans

(g) eproductivetoxicity: based on available data, the classification criteria are not met.

(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposureDodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1): Rabbit 90-day dermal NOAEL > 5 mg/kg bw (only dose tested)

4-tert-Butylcyclohexyl acetate: In a modified developmental toxicity screening test (OCED TG 421), Crl: CD pregnant (SD) rats were administered 4-tert-butylcyclohexyl acetate (a mixture of 71% 28% trans and cis) in corn oil by gavage at 0, 40, 160 or 640 mg/kg-bw per day during gestation days 7 20. Rats were Caesarean-sectioned on day 21 of gestation and examined for number and distribution of corpora lutea, implantation sites and placenta. Live and dead fetuses and early and late resorptions were recorded. Fetuses were examined for sex ratio, gross external alterations and skeletal and soft tissue alterations. There were no effects on maternal body weights, weight gain, food consumption or organ weights. Pup viability, body weights, external observations and microscopic examination showed no significant alterations that could be related to the administration of the test substance.

NOAEL (maternal or developmental toxicity) = 640 mg/kg-bw/day (based on no effects at the highest dose tested)

(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1):

LD50 (rat) Oral (mg/kg body weight) = 1653

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 4199

Alcohols, C13-15, branched and linear, ethoxylated:

LD50 (rat) Oral (mg/kg body weight) > 300

Sodium dodecylbenzenesulfonate:

LD50 (rat) Oral (mg/kg body weight) = 438

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

2-(2-butoxyethoxy)ethanol:

INHALATION RISK: A harmful contamination of air sar reached slowly for evaporation of this substance at 20 C;

However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to eyes the effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/symptoms dry SKIN.

EYE Redness. Pain.

LD50 (rat) Oral (mg/kg body weight) = 1720

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2700

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 374

Coconut diethanolamide:

Ingestion: oral rat LD50: > 2,000 mg/kg

Eye contact: irritating to the eye (rabbit). Can cause irreversible damage to the eye.

Skin contact: moderately irritating for a single application (4 h-rabbit)

Readily biodegradable in accordance with the criteria of Directive 67/548 and subsequent modifications.

LD50 (rat) Oral (mg/kg body weight) = 5000

sodium cumenesulphonate:

Oral LD50 (rat): 5.2 g/kg

Dermal LD 50 (rat): > 2.0 g/kg

LD 50 (inhalation, dust/mist, rat) > 5 mg/l/4:0

LD50 (rat) Oral (mg/kg body weight) = 5200

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5000

2-aminoethanol, monoester with boric acid:

Acute oral toxicity

Parameter: LD50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Orally

Species: Rat

Effective dose:> 2000 mg / kg

Acute dermal toxicity

Parameter: discriminating dose. (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Exposure route: Dermal

Species: Rat

Effective dose:> 2000 mg / kg

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

4-tert-Butylcyclohexyl acetate:

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

α -Hexylcinnamaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 2450

Linalool:

LD50 (rat) Oral (mg/kg body weight) = 2790

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5610

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 307

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Citronellol:

LD50 (rat) Oral (mg/kg body weight) = 3450

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2650

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,3

1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one:

Acute oral toxicity

LD50 rat

Dose: > 5,000 mg/kg

Method: OECD Test Guideline 401

Remarks: IFF

Acute dermal toxicity

LD50 rat

Dose: > 5,000 mg/kg

Method: OECD Test Guideline 402

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Coumarin:

Acute oral LD50 for rats: 293mg/kg

Acute oral LD50 for mice: 196mg/kg
Irritant data: Not determined
Inhalation data: Not determined
Mutagenicity data: Not determined
LD50 (rat) Oral (mg/kg body weight) = 293
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 242

Eugenol:
LD50 (rat) Oral (mg/kg body weight) = 2000

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Dodecylbenzenesulphonic acid, compound with 2,2',2''nitrilotriethanol (1:1):
C(E)L50 (mg/l) = 2,6

Alcohols, C13-15, branched and linear, ethoxylated:
C(E)L50 (mg/l) = 1

Sodium dodecylbenzenesulfonate:
C(E)L50 (mg/l) = 1,67

2-(2-butoxyethoxy)ethanol:

Toxic to fish Lc50-lepomis macrochirus-1,300 mg/l-96 h CL0-Leuciscus idus (dare or Golden)-> 1,000 mg/l-48 h Toxic to daphnia and other aquatic invertebrates: Ec50 Daphnia magna (water Flea grande)-2850 mg/l-48 h for Toxic Algae Desmodium subspicatus Cl50-(green)-100 mg/l >-12:0 am Toxic to bacteria Lc50-Acinetobacter-1,170 mg/l-4:0 pm
C(E)L50 (mg/l) = 1300 1

1

Coconut diethanolamide:

Acute/prolonged toxicity to fish: (83d) 2.52 mg/l (brachydanio rerio)
Acute toxicity to Aquatic Invertebrates: EC50 (12:0 am) 2.8 mg/l (daphnia Magna)
Primary: Biodegradability > 90% (OECD)
Easy Biodegradability: 60% > (manometric Tests, O2 consumption)
Theoretical O2 demand (thod) 2.52 mg O2/mg.
Chemical O2 demand (COD): 2.51 mg O2/mg.
C(E)L50 (mg/l) = 2,39 1

1

sodium cumenesulphonate:

-Species: Algae EC50 = 230 mg/l-h Duration: 96
-Species: Daphnia EC50 = 1000 mg/l-h Duration: 48
-Species: Fish LC50 = 1000 mg/l-h Duration: 96

2-aminoethanol, monoester with boric acid:

Acute (short-term) toxicity on fish
Parameter: LC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)
Species: Cyprinus carpio
Effective dose: = 617 mg / l

Exposure time: 96 h

Acute (short-term) toxicity to Daphnia

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: *Daphnia magna*

Effective dose: = 423 mg / l

Exposure time: 48 h

Acute (short-term) toxicity to algae

Parameter: EC50 (2-aminoethanol, monoester with boric acid; CAS No.: 10377-81-8)

Species: *Pseudokirchneriella subcapitata*

Effective dose: = 26 mg / l

Exposure time: 72 h

C(E)L50 (mg/l) = 26 1

1

4-tert-Butylcyclohexyl acetate:

Golden ide (*Leuciscus idus*) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 0, 10, 13, 16 and 20 mg/L under static conditions for 48 hours. EF Marlowet was used as a solubilizer. Mortality was 0, 10, 100 and 80% at 10, 13, 16 and 20 mg/L.

48-h LC50 = 14 mg/L

Water fleas (*Daphnia magna*) were exposed to 4-tert-butylcyclohexyl acetate at nominal concentrations of 2.8 to 28.4 mg/L (measured concentrations, 2.4 to 28.4 mg/L) under static conditions for 48 hours.

48-h EC50 = 23.4 mg/L

C(E)L50 (mg/l) = 14 1

1

α -Hexylcinnamaldehyde:

Freshwater Fish Toxicity: acute LC50 >1-10 mg/L

Freshwater Invertebrates Toxicity: acute EC <1 mg/L

Algal Toxicity: acute EC <1 mg/L.

C(E)L50 (mg/l) = 0,99

Linalool:

Fish: 96h LC50:39 mg/L (*Oryzias latipes*)

Crustacea: 48h EC50:52 mg/L (*Daphnia magna*)

Algae: 72h EC50:28 mg/L (*Selenastrum capricornutum*)

C(E)L50 (mg/l) = 27,799999 1

1

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:

Endpoint: LC50 species: *lepomismacrochirus* (fish-salt Bluegrill) = 1.30 mg/l-h Duration: 96-Note:: method: OECD 203 TG

Endpoint: EC50-species: *Daphnia magna* (Water flea) = 1.38 mg/l-h Duration: 48-comments:: semi-static test method: OECD TG 202

Endpoint: EC50 *Desmodesmus subspicatus*-species (green algae) = 2.60 mg/l-h Duration: 72-

Note:: static test method: OECD TG201

C(E)L50 (mg/l) = 1,3 1

1

Citronellol:

LC50 (96 h) 14,66 mg/l, *Leuciscus idus*

EC50 (48 h) 17 mg/l, *Daphnia magna*

EC50 (72 h) 2,4 mg/l, *Scenedesmus subspicatus*

C(E)L50 (mg/l) = 2,4 1

1

1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one:

Toxicity to fish:

semi-static test LC50

Species: *Lepomis macrochirus* (Bluegill sunfish)

Dose: 1.3 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates.:

semi-static test EC50

Species: *Daphnia magna* (Water flea)

Dose: 1.38 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

IFF

C(E)L50 (mg/l) = 1,3 1

NOEC (mg/l) = 100 1

Coumarin:

Toxicity to fish LC50 - *Poecilia reticulata* (guppy) - 56 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates LC50 - *Daphnia magna* (Water flea) - 3.5 mg/l - 48 h

C(E)L50 (mg/l) = 13,5 1

1

Eugenol:

Toxicity to fish Lc50-Danio rerio (zebrafish)-13 mg/l-96 h (OECD TEST GUIDELINE 203) Toxicity to daphnia and other aquatic invertebrates – *Daphnia* Ec50-1.13 mg/l-48 h

C(E)L50 (mg/l) = 1,13 1

1

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute toxicity to fish

The material is very toxic to aquatic organisms (LC50 / EC50 / IC50 below 1 mg / l for the most sensitive species).

LC50, *Oncorhynchus mykiss* (rainbow trout), flow-through test, 96 Hour, 0.19 mg / l, OECD Test Guideline 203 or equivalent

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), Flow-through test, 48 h, 0.16 mg / l, OECD Test Guideline 202 or equivalent

Acute toxicity to algae / aquatic plants

EC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, 0.027 mg / l, OECD Test Guideline 201 or equivalent

NOEC, *Skeletonema costatum*, Static test, 72 h, Growth rate, 0.0014 mg / l

Chronic toxicity to fish

NOEC, Rainbow trout (*Oncorhynchus mykiss*), flow, 14 d, 0.05 mg / l

Chronic toxicity to aquatic invertebrates

NOEC, *Daphnia magna*, Flow-through test, 21 d, 0.1 mg / l

100

NOEC (mg/l) = 0,05 100

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

57.1%

method: OECD TG 301 and

Remark: Inherently Biodegradable

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The substance miscible in water and would leach into the groundwater, be lost in groundwater and be biologically degraded.

85% (28 d, Ready Biodegradability: Modified MITI Test (s)) readily biodegradable

2-aminoethanol, monoester with boric acid:

Parameter: Biodegradation

Effective dose: approx. 73%

Exposure time: 28 days

Parameter: Biodegradation

Effective dose: > 60%

Exposure time: 10 days

Easily biodegradable.

Linalool:

90 % (by BOD), 99 % (by TOC), 100 % (by GC)

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradation (aquatic metabolism): 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT):

t $\frac{1}{2}$ anaerobic = 0.2 days. t $\frac{1}{2}$ aerobic = 0.38 - 1.3 days. 2-methyl-4-isothiazolin-3-one (MIT): aerobic t $\frac{1}{2}$ = 0.38 - 1.4 days

Biodegradability: Considered to be rapidly degradable. The product is not readily biodegradable according to OECD / EC criteria.

Biodegradation: <50%

Exposure time: 10 d

Photodegradation

Atmospheric half-life: 0.38 - 1.3 d

12.3 Bioaccumulative potential

Partition coefficient: n-octanol / water (log Pow): 0.401 Method not specified.

12.3. Bioaccumulative potential

Related to contained substances:

Sodium dodecylbenzenesulfonate:

Bioaccumulation-28 leptomismacrochirus d -64 g/l

Bioconcentration factor (BCF): 220

2-(2-butoxyethoxy)ethanol:

The substance is not expected to bioaccumulate.

Linalool:

106

Coumarin:

Bioaccumulation Leuciscus idus melanotus - 3 d -46 µg/l

Bioconcentration factor (BCF): < 10

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Low potential for bioconcentration (FBC or Log Pow < 100 < 3).

12.4. Mobility in soil

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

The high idrosolubilit and low octanol/water partition coefficient indicates that adsorption to suspended solids and sediments are not significant

Linalool:

log Pow: 2.55

Soil adsorption (Koc): 75

Henry's Law constant(PaM3/mol): 2

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information**14.1. UN number or ID number**

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Related to contained substances:

2-(2-butoxyethoxy)ethanol:

Restrictions relating to the product or to substances contained in annex XVII to Regulation (EC) 1907/2006.

3 product section.

Substances.

Point. 55 BUTYL DIGLYCOL

REGULATION (EU) No 1357/2014 - waste:

HP4 - Irritant — skin irritation and eye damage

Substances in the Candidate List (REACH Article 59)

Based on available data, no SVHC substances are present

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 3.2 Mixtures, 8.1. Control parameters, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H302 = Harmful if swallowed.

H318 = Causes serious eye damage.

H412 = Harmful to aquatic life with long lasting effects.

H312 = Harmful in contact with skin.

H335 = May cause respiratory irritation.

H317 = May cause an allergic skin reaction.

H411 = Toxic to aquatic life with long lasting effects.

H410 = Very toxic to aquatic life with long lasting effects.

H373 = May cause damage to organs through prolonged or repeated exposure .

H301 = Toxic if swallowed.

H310 = Fatal in contact with skin.

H314 = Causes severe skin burns and eye damage.

H330 = Fatal if inhaled.

H400 = Very toxic to aquatic life.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H315 - Causes skin irritation. Classification procedure: Calculation method

H319 - Causes serious eye irritation. Classification procedure: Calculation method

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation 1272/2008/EC

Regulation 2010/453/EC

** The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.
