COMBAT 333

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 18-09-2025 Version : 13 Print date: 18-09-2025

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

1.1 Product identifier

Product identifier : 4810333
Name: COMBAT 333

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

Relevant identified uses: Coating material

1.3 Details of the supplier of the safety data sheet

Supplier: San Marco Group Spa
Address: Via Alta, 10
Postal code/City: 30020 - Marcon (VE)
Country: Italy
Telephone: +39 041 4569322
E-mail (competent person): sicurezza.prodotti@sanmarcogroup.it

1.4 Emergency telephone number

Emergency phone number
Malta: Emergency number: 112 (24/7)
Luxembourg: (+352) 8002 5500 Free telephone number with a 24/7 access

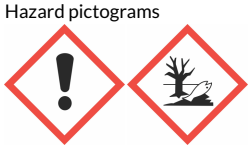
SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]
Skin Irrit. 2, H315
Eye Irrit. 2, H319
Skin Sens. 1A, H317
Aquatic Acute 1, H400
Aquatic Chronic 2, H411
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 [CLP]
Hazard pictograms



Signal word: Warning
Contains: 2-octyl-2H-isothiazol-3-one.
Hazard statements
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H317 - May cause an allergic skin reaction.
H400 - Very toxic to aquatic life.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P273 - Avoid release to the environment.

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P280 - Wear protective gloves/clothing and eye/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.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents / container in accordance with national regulations.
Supplemental hazard information
This information is not available.

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous ingredients

Name	Product identifier	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL, M-factor, ATE
quaternary ammonium compounds,benzyl-C12-C16-alkyldimethyl, chlorides	CAS No. : 68424-85-1 EC No.: 270-325-2	1.0% <= C < 3.0%	oral Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Eye Dam. 1, H318 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410 /	ATE (oral):350.0 mg/kg bw / M (acute) =10 / M (chronic) =1
2-octyl-2H-isothiazol-3-one	CAS No. : 26530-20-1 EC No.: 247-761-7 Index No.: 613-112-00-5	0.05% <= C < 0.1%	oral Acute Tox. 3, H301 / dermal Acute Tox. 3, H311 / inhalation Acute Tox. 2, H330 / Skin Corr. 1, H314 / Eye Dam. 1, H318 / Skin Sens. 1A, H317 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410 / EUH071, /	Skin Sens. 1A ; H317: C >= 0.0015% / ATE (oral):125.0 mg/kg bw / ATE (dermal):311.0 mg/kg bw / ATE (inhalation, dust/mist):0.27 mg/L / M (acute) =100 / M (chronic) =100

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Following inhalation :
Remove casualty to fresh air and keep warm and at rest.

Following skin contact :
After contact with skin, wash immediately with plenty of water and soap.
Remove contaminated, saturated clothing immediately.
Wash thoroughly the body (shower or bath).

After eye contact :
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Protect uninjured eye.

Following ingestion :
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

There are no specific information on symptoms and effects caused by the product. Delayed effects: based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed

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Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water

Carbon dioxide (CO2)

Unsuitable extinguishing media

No special measures are necessary.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
Move undamaged containers from immediate hazard area if it can be done safely.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Use personal protection equipment.

Remove persons to safety.

6.1.2 For emergency responders

Use personal protection equipment.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment

Suitable material for taking up:

Absorbing material, organic

Sand

6.3.2 For cleaning up

Wash with plenty of water.

6.3.3 Other information

No data available

6.4 Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective measures

Handle and open container with care.

7.1.2 Advices on general occupational hygiene

Avoid contact with skin, eyes and clothes.
Remove contaminated, saturated clothing.
Wash hands and face before breaks and after work and take a shower if necessary.
When using do not eat, drink, smoke, sniff.

7.1.3 Measures to prevent aerosol and dust generation
This information is not available.

7.1.4 Environmental precautions
No special measures are necessary.

7.1.5 Measures to prevent fire
No special fire protection measures are necessary.

7.2 Conditions for safe storage, including any incompatibilities

7.2.1 Technical measures and storage conditions
Keep in a cool, well-ventilated place.

7.2.2 Requirements for storage rooms and vessels
This information is not available.

7.2.3 Packaging materials:
This information is not available.

7.2.4 Storage class
This information is not available.

7.3 Specific end use(s)

7.3.1 Recommendation
Observe instructions for use.

7.3.2 Industrial sector specific solutions
This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values
This information is not available.

Monitoring and observation processes
This information is not available.

DNEL values
This information is not available.

PNEC
This information is not available.

Biological limit values
This information is not available.

8.2 Exposure controls

Appropriate engineering controls
See section 7 of the safety data sheet.

Personal protection equipment
Skin protection
Body protection:
For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).
Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at neck and wrists through contact with the product are avoided.

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Breakthrough times and swelling properties of the material must be taken into consideration.

Hand protection

Tested protective gloves must be worn

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye/face protection

Face protection shield

Do not wear contact lenses.

Respiratory protection

Usually no personal respirative protection necessary.

Thermal hazards

This information is not available.

Environmental exposure controls

This information is not available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point	Not applicable
Freezing point	<0 °C Remark: waterfall
Softening point	Not applicable
Boiling point or initial boiling point and boiling range	>100 °C Remark: waterfall
flammability	Non-flammable.
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
pH	7.0
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	This information is not available.
Water solubility	dispersible

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Fat solubility (Oil)	Not applicable
Solubility (Ethanol)	This information is not available.
Partition coefficient n-octanol/water (log value)	This information is not available.
Vapour pressure	Not applicable
Density	1,0 kg/L
Relative vapour density	Not applicable
refraction index	This information is not available.
Particle size	Not applicable
Particle size distribution range	Not applicable
Shape and aspect ratio	Not applicable
Aggregation and agglomeration state	Not applicable
Specific surface area	Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes
This information is not available.

9.2.2 Other safety characteristics
This information is not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No known hazardous reactions.
Further risks: see subsection 2.3.

10.4 Conditions to avoid

Stable under recommended storage and handling conditions.
Further information on storage conditions: see subsection 7.2.

10.5 Incompatible materials

No further relevant information available.

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10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixtures

Acute toxicity

ate (oral):14285.714 mg/kg bw

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Assessment/classification: Skin Irrit. 2/H315

Serious eye damage/irritation

Assessment/classification: Eye Irrit. 2/H319

Respiratory or skin sensitisation

Assessment/classification: Skin Sens. 1A/H317

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

This information is not available.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow uncontrolled discharge of product into the environment.

There are no data available on the mixture itself.

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

Mixtures

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

Substances

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

Aquatic acute toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Daphnia magna (Big water flea)	48h	0.32 mg/L				

Acute (short-term) toxicity to algae and cyanobacteria

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50		72h	0.084 mg/L	algae			

Acute (short-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
LC50	Oncorhynchus mykiss (Rainbow trout)		0.047 mg/L				

Chronic (long-term) fish toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Oncorhynchus mykiss (Rainbow trout)		0.022 mg/L				

Aquatic chronic toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
NOEC	Daphnia magna (Big water flea)		0.0016 mg/L				

quaternary ammonium compounds,benzyl-C12-C16-alkyldimethyl, chlorides - CAS: 68424-85-1

Aquatic acute toxicity

Effective dose	Species	Test duration	Value	Notes	Method	Source	Considerations
EC50	Daphnia magna (Big water flea)	48h	0.016 mg/L				
EC50	Pseudokirchneriella subcapitata	72h	0.026 mg/L				
LC50	Danio rerio (zebrafish)	96h	0.85 mg/L				
NOEC	Daphnia magna (Big water flea)		0.025 mg/L	21d			

12.2 Persistence and degradability

Mixtures

This information is not available.

Substances

This information is not available.

12.3 Bioaccumulative potential

Mixtures

This information is not available.

Substances

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

Assessment/classification	Test type	Test duration	Species:	Value	Method	Remark
Does not accumulate in organisms.	Partition coefficient n-octanol/water (log value)			2,45		

12.4 Mobility in soil

Mixtures

This information is not available.

Substances

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

Assessment/classification	Test type	Test duration	parameter	Value	Method	Remark
	Log Koc			2120		

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

This information is not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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Waste codes/waste designations according to EWC/AVV

NO English translation

13.1.1 Disposal operations

Non-contaminated packages must be recycled or disposed of.

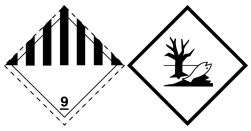
Dispose of waste according to applicable legislation.

13.1.2 Other disposal recommendations

Recycle according to official regulations.

SECTION 14: Transport information

Hazard pictograms



14.1 UN number

ADR/RID/ADN:	UN3082
IMDG:	UN3082
ICAO-TO/IATA-DGR:	UN3082

14.2 UN proper shipping name

ADR/RID/ADN:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one)
ICAO-TO/IATA-DGR:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-octyl-2H-isothiazol-3-one)

14.3 Transport hazard class(es)

ADR/RID/ADN:	9
IMDG:	9
ICAO-TO/IATA-DGR:	9

14.4 Packing group

ADR/RID/ADN:	III
IMDG:	III
ICAO-TO/IATA-DGR:	III

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14.5 Environmental hazards

ADR/RID/ADN:	ENVIRONMENTALLY HAZARDOUS
IMDG:	ENVIRONMENTALLY HAZARDOUS Marine pollutant: Yes.
ICAO-TO/IATA-DGR:	ENVIRONMENTALLY HAZARDOUS

14.6 Special precautions for user

ADR/RID/ADN:

Limited quantity (LQ)	5 L
Excepted Quantities (EQ)	E1
Special Provisions	274 335 375 601
Classification code:	M6
Transport category	3
Tunnel restriction code	-
Hazard identification number (Kemler No.)	90

IMDG:

Limited quantity (LQ)	5 L
Excepted Quantities (EQ)	E1
Special Provisions	274 335 969
Segregation group	-
Stowage	Category A
EmS-No.	F-A , S-F

ICAO-TO/IATA-DGR:

Limited quantity (LQ)	5 L
Excepted Quantities (EQ)	E1
Special Provisions	A97 A158 A197 A215
Subsidiary Risks	-
Emergency Response Guide Number	9L
Passenger Aircraft/Rail	964
Cargo Aircraft only	964

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to 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 and subsequent amendments

Regulation (EC) No 1272/2008 (CLP) and subsequent amendments

Latest amendment

Commission delegated Regulation (EU) 2024/2865

Regulation (EU) No. 2020/878

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

Not relevant

Other regulations (EU)

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This information is not available.

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Mixtures

Use restriction according to REACH annex XVII, no.: 3

Other relevant ingredients

Use restriction according to REACH annex XVII, no.: 75

2-octyl-2H-isothiazol-3-one (CAS: 26530-20-1; EINECS: 247-761-7; INDEX: 613-112-00-5)

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer

not relevant

Regulation (EU) 2019/1148 (marketing and use of explosives precursors)

not relevant

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Hazard categories: E1

National regulations

This information is not available.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes

This safety data sheet has been completely updated

Abbreviations and acronyms

Abbreviations and acronyms	Description
ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AOX	Adsorbable Organic halogen compounds
ATE	Acute Toxicity Estimate
ATEmix	Acute Toxicity Estimate for Mixtures
BCF	Bioconcentration Factor
BLV	Biological Limit Value
BOD	Biochemical (Biological) Oxygen Demand
bw	body weight
CAS	Chemical Abstracts Service
CK	Peak concentration
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic, toxic for Reproduction
CO2	Carbon dioxide
COD	Chemical Oxygen Demand
COSHH	Control of Substances Hazardous to Health
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DGR	Dangerous Goods Regulations (IATA)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
DOC	Dissolved Organic Carbon
DU	Downstream User
EbC50	Effective Concentration 50 % reduction in biomass
EC	European Community
EC10	Effective Concentration 10%
EC50	Effective Concentration 50%

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ECHA	European Chemicals Agency
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %
ELINCS	European Inventory of Existing Commercial Chemical Substances
EmS	emergency procedures
EN	European Standard
ErC10	Effective Concentration 10 % reduction in growth rate
ErC50	Effective Concentration 50 % reduction in growth rate
ES	Exposure Scenario
EU	European Union
EWC	European Waste Catalogue
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
IC50	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International nomenclature of cosmetic ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
KOC	Partition coefficient n-octanol/water
LC50	Lethal (fatal) Concentration 50%
LD50	Lethal (fatal) Dose 50%
LDL0	Lowest Lethal (fatal) Dose
LL50	Lethal Loading 50 %
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observable Effect Concentration
LOEL	Lowest Observable Effect Level
M-factor	Multiplication factor
NOAEC	no observed adverse effect concentration
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
NOELR	No Observed Effect Level
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational exposure limit (EU)
PBT	persistent and bioaccumulative and toxic
PEC	Predicted Environmental Concentration
PEL	Permissible Exposure Limit
PNEC	Predicted No Effect Concentration
PROC	Process Category
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
STEL	Short-term Exposure Limit
STOT	Specific Target Organ Toxicity
STP	sewage treatment plant
SU	use category
SVHC	substance of very high concern
ThCO2	Theoretical carbon dioxide amount
TLV	Threshold Limit Value
TWA	Eight-hour time-weighted average exposure limit value
UN	United Nations
VOC	Volatile organic compounds

Key literature references and sources for data

Regulation (EC) No. 1272/2008 on the classification, labelling, and packaging (Classification, Labelling and Packaging) of substances and mixtures.

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Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/UE.
Guidance on the compilation of safety data sheets by ECHA
European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
International Maritime Dangerous Goods Code (IMDG)
IATA Dangerous Goods Regulations (IATA DGR)
The ED Lists (List I: Substances identified as endocrine disruptors at EU level, List II: Substances under evaluation for endocrine disruption under an EU legislation, List III: Substances considered, by the evaluating National Authority, to have endocrine disrupting properties)

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Classification according to Regulation (EC) No 1272/2008 [CLP]	**List of relevant hazard statements and/or precautionary statements from sections 2 to 15**
Skin Irrit. 2, H315	Causes skin irritation.
Eye Irrit. 2, H319	Causes serious eye irritation.
Skin Sens. 1A, H317	May cause an allergic skin reaction.
Aquatic Acute 1, H400	Very toxic to aquatic life.
Aquatic Chronic 2, H411	Toxic to aquatic life with long lasting effects.
oral Acute Tox. 3, H301	Toxic if swallowed.
dermal Acute Tox. 3, H311	Toxic in contact with skin.
inhalation Acute Tox. 2, H330	Fatal if inhaled.
Skin Corr. 1, H314	Causes severe skin burns and eye damage.
Eye Dam. 1, H318	Causes serious eye damage.
Aquatic Chronic 1, H410	Very toxic to aquatic life with long lasting effects.
oral Acute Tox. 4, H302	Harmful if swallowed.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]	**Classification procedure**
Skin Irrit. 2, H315	
Eye Irrit. 2, H319	
Skin Sens. 1A, H317	
Aquatic Acute 1, H400	
Aquatic Chronic 2, H411	