



Rely+On™ Perasafe®

Version 4.0 (replaces: Version 3.0)

Revision Date 29.05.2015

Ref. 130000099907

This Safety Data Sheet adheres to the standards and regulatory requirements of Great Britain and may not meet the regulatory requirements in other countries.

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

1.1. Product identifier

Product name : Rely+On™ Perasafe®

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

Use of the Substance/Mixture : Disinfectant

1.3. Details of the supplier of the safety data sheet

Company : Antec International Limited
Windham Road
Chilton Industrial Estate
Sudbury / Suffolk - CO10 2XD
United Kingdom

Telephone : +44 (0) 1787 377 305

Telefax : +44 (0) 1787 310 846

E-mail address : sds-support@che.dupont.com

1.4. Emergency telephone number

Emergency telephone number : +(44)-870-8200418

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Self-reactive substances and mixtures, Type E	H242: Heating may cause a fire.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Irritant	R41: Risk of serious damage to eyes.

2.2. Label elements





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|| Danger

|| H242 Heating may cause a fire.
|| H318 Causes serious eye damage.

|| P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
|| P234 Keep only in original container.
|| P280 Wear protective gloves/ eye protection/ face protection.
|| P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
|| P310 Immediately call a POISON CENTER/doctor.
|| P403 + P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Registration number	Classification according to Directive 67/548/EEC	Classification according to Regulation (EU) 1272/2008 (CLP)	Concentration (% w/w)
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Disodium carbonate, compound with hydrogen peroxide (2:3) (CAS-No.15630-89-4) (EC-No.239-707-6)

01-2119457268-30	O;R 8 Xn;R22 Xi;R41	Acute Tox. 4; H302 Eye Dam. 1; H318 Ox. Sol. 3; H272	>= 30 - <= 50 %
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Citric acid (CAS-No.77-92-9) (EC-No.201-069-1)

01-2119457026-42	Xi;R36	Eye Irrit. 2; H319	>= 10 - <= 20 %
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Sodium carbonate (CAS-No.497-19-8) (EC-No.207-838-8)

	Xi;R36	Eye Irrit. 2; H319	< 10 %
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The above products are compliant to REACH registration obligations; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.



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SECTION 4: First aid measures

4.1. Description of first aid measures

- General advice : Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Remove to fresh air. Artificial respiration and/or oxygen may be necessary. Keep patient warm and at rest. Consult a physician.
- Skin contact : Wash off immediately with plenty of water. If skin irritation persists, call a physician.
- Eye contact : Remove contact lenses. Rinse thoroughly with plenty of water, also under the eyelids. Seek medical advice.
- Ingestion : Do NOT induce vomiting. If conscious, drink plenty of water. Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position.

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

- Symptoms : Skin contact may provoke the following symptoms: Irritation, Discomfort, itching, redness, or swelling.
- : Eye contact may provoke the following symptoms: Irritation, Tearing, pain, redness, swelling, ulceration, visual impairment, or blindness., Risk of serious damage to eyes.
- : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam, Dry powder, Carbon dioxide (CO₂), Water spray

5.2. Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Dust may form explosive mixture in air.
- : Nitrogen oxides (NO_x) Carbon oxides Sulphur oxides Hazardous combustion products: phosphorous oxides

5.3. Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.



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Further information : Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas. Use personal protective equipment.

6.2. Environmental precautions

Environmental precautions : Prevent product from entering drains.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water.

Other information : Dispose of in accordance with local regulations.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Avoid dust formation in confined areas. For personal protection see section 8. Avoid contact with skin and eyes.

Advice on protection against fire and explosion : Dust may form explosive mixture in air. Avoid dust formation in confined areas. Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect from contamination. Store in original container. Keep in a dry, cool place.

Advice on common storage : Keep away from: Combustible material

Storage temperature : ≤ 25 °C

7.3. Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



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If sub-section is empty then no values are applicable.

Components with workplace control parameters

Type Form of exposure	Control parameters	Update	Regulatory basis	Remarks
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Hydrogen peroxide solution...% (CAS-No. 7722-84-1)

Time Weighted Average (TWA):	1.4 mg/m3 1 ppm	2007	UK. EH40 Workplace Exposure Limits (WELs)	
Short term exposure limit	2.8 mg/m3 2 ppm	2007	UK. EH40 Workplace Exposure Limits (WELs)	

Acetic acid (CAS-No. 64-19-7)

Time Weighted Average (TWA):	25 mg/m3 10 ppm	12 2009	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU	Indicative
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Derived No Effect Level (DNEL)

- Disodium carbonate, compound with hydrogen peroxide (2:3) : Type of Application (Use): Workers
Exposure routes: Skin contact
Health Effect: Acute - local effects
Value: 12.8 mg/cm2
- : Type of Application (Use): Workers
Exposure routes: Inhalation
Health Effect: Long-term - local effects
Value: 5 mg/m3
- : Type of Application (Use): Consumers
Exposure routes: Skin contact
Health Effect: Acute - local effects
Value: 6.4 mg/cm2

Predicted No Effect Concentration (PNEC)

- Disodium carbonate, compound with hydrogen peroxide (2:3) : Value: 0.035 mg/l
Compartment: Fresh water
- : Value: 16.24 mg/l
Compartment: Sewage treatment plants

8.2. Exposure controls

- Engineering measures : Ensure adequate ventilation.
- Eye protection : Tightly fitting safety goggles conforming to EN166.
- Hand protection : Material: Nitrile rubber
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.



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- Skin and body protection : Wear as appropriate:
- Boots
 - DuPont™ Tyvek® overall Chemical resistant apron
- Hygiene measures : Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. Wash contaminated clothing before re-use.
- Respiratory protection : No personal respiratory protective equipment normally required. Respirator must be worn if exposed to dust. Recommended Filter type: Half mask with a particle filter P3 (EN 143).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Form : powder
- Colour : off-white
- Odour : characteristic
- pH : ca. 7.9 at 1.62 g/l
- Boiling point : Not applicable
- Flash point : no data available
- Thermal decomposition : The product is a self-reactive substance or mixture classified as type E.
- Self-Accelerating decomposition temperature (SADT) : 60 °C
- Oxidizing properties : The substance or mixture is not classified as oxidizing.
- Bulk density : 0.89 g/cm³
- Water solubility : ca. 30 g/l , soluble

9.2. Other information

no data available

SECTION 10: Stability and reactivity

- 10.1. Reactivity** : Stable under recommended storage conditions.
- 10.2. Chemical stability** : No decomposition if stored and applied as directed.



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- 10.3. Possibility of hazardous reactions** : Dust may form explosive mixture in air. Contact with water liberates hydrogen peroxide and peracetic acid. Self-accelerating decomposition may occur at elevated temperatures.
- 10.4. Conditions to avoid** : Exposure to moisture Direct sources of heat.
- 10.5. Incompatible materials** : Strong acids and strong bases
Powdered metal salts
Reducing agents
- 10.6. Hazardous decomposition products** : Carbon oxides
Nitrogen oxides (NO_x)
sulphur oxides
phosphorous oxides
Products that support combustion:
Hydrogen peroxide solution...%
Peracetic acid...%
Acetic acid
Oxygen

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Discriminating dose / Rat : 500 mg/kg

Method: Fixed Dose Method

The toxicological data has been taken from products of similar composition.

Acute toxicity estimate : > 2,000 mg/kg

Method: Calculation method

- Disodium carbonate, compound with hydrogen peroxide (2:3)
LD50 / Rat : 1,034 mg/kg
- Citric acid
LD50 / Rat : 11,700 mg/kg

Acute inhalation toxicity

- Disodium carbonate, compound with hydrogen peroxide (2:3)
LC50 / Rat : > 4.58 mg/l

Acute dermal toxicity

- Disodium carbonate, compound with hydrogen peroxide (2:3)
LD50 / Rabbit : > 2,000 mg/kg
- Citric acid
LD50 / Rat : > 2,000 mg/kg



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Skin irritation

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Rabbit
Classification: Not classified as irritant
Result: Slight or no skin irritation
- Citric acid
Rabbit
Classification: Not classified as irritant
Result: No skin irritation

Eye irritation

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Rabbit
Classification: Risk of serious damage to eyes.
Result: Severe eye irritation
- Citric acid
Rabbit
Classification: Irritating to eyes.
Result: Eye irritation
- Sodium carbonate
Rabbit
Classification: Irritating to eyes.
Result: Irritation to eyes, reversing within 21 days

Sensitisation

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Guinea pig
Classification: Not a skin sensitizer.
Result: Animal test did not cause sensitization by skin contact.

Repeated dose toxicity

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Oral Mouse
No adverse effects expected.

Mutagenicity assessment

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Animal testing did not show any mutagenic effects.
- Citric acid
Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells.
Tests on mammalian cell cultures showed mutagenic effects.

Carcinogenicity assessment



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- Disodium carbonate, compound with hydrogen peroxide (2:3)
Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.

Toxicity to reproduction assessment

- Disodium carbonate, compound with hydrogen peroxide (2:3)
No toxicity to reproduction Animal testing showed no reproductive toxicity.

Assessment teratogenicity

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Animal testing showed no developmental toxicity.
- Citric acid
Animal testing showed no developmental toxicity.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

- Disodium carbonate, compound with hydrogen peroxide (2:3)
LC50 / 96 h / Pimephales promelas (fathead minnow): 70.7 mg/l
- Citric acid
LC50 / 96 h / Pimephales promelas (fathead minnow): > 100 mg/l

Toxicity to aquatic plants

- Citric acid
NOEC / 8 d / Scenedesmus quadricauda (Green algae): 425 mg/l

Toxicity to aquatic invertebrates

- Disodium carbonate, compound with hydrogen peroxide (2:3)
EC50 / 48 h / Daphnia magna (Water flea): 4.9 mg/l
EC50 / 48 h / Daphnia pulex (Water flea): 4.9 mg/l
- Citric acid
EC50 / 48 h / Daphnia magna (Water flea): 100 mg/l

12.2. Persistence and degradability

Biodegradability

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Product is not expected to be biodegradable.
- Citric acid
rapidly biodegradable



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Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation

- Disodium carbonate, compound with hydrogen peroxide (2:3)
Bioaccumulation is unlikely.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

Additional ecological information

No data is available on the product itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product : Dispose of as special waste in compliance with local and national regulations.
The product should not be allowed to enter drains, water courses or the soil.
- Contaminated packaging : If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14: Transport information

ADR

- 14.1. UN number: 3228
- 14.2. UN proper shipping name: SELF-REACTIVE SOLID TYPE E (Disodium carbonate, compound with hydrogen peroxide (2:3))
- 14.3. Transport hazard class(es): 4.1
- 14.4. Packing group: Not applicable
- 14.5. Environmental hazards: For further information see Section 12.
- 14.6. Special precautions for user:
- Tunnel restriction code: (D)

IATA_C

- 14.1. UN number: 3228
- 14.2. UN proper shipping name: Self-reactive solid type E (Disodium carbonate, compound with hydrogen peroxide (2:3))
- 14.3. Transport hazard class(es): 4.1
- 14.4. Packing group: Not applicable
- 14.5. Environmental hazards : For further information see Section 12.
- 14.6. Special precautions for user:
no data available



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IMDG

- 14.1. UN number: 3228
- 14.2. UN proper shipping name: SELF-REACTIVE SOLID TYPE E (Disodium carbonate, compound with hydrogen peroxide (2:3))
- 14.3. Transport hazard class(es): 4.1
- 14.4. Packing group: Not applicable
- 14.5. Environmental hazards : For further information see Section 12.
- 14.6. Special precautions for user:
no data available
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not applicable

SECTION 15: Regulatory information

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

Other regulations : Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2. Chemical Safety Assessment

A Chemical Safety Assessment/Chemical Safety Report may not be required because: substance(s) are exempted from being registered under REACH, are not yet registered under REACH, are registered under another regulatory process (biocide uses, plant protection products), the volume is below the 10 tons/year threshold specified under Art. 14(1) of REACH, the concentration of substance(s) in a mixture is/are below the limits specified under Art. 14(2) of REACH.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

- R 8 Contact with combustible material may cause fire.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R41 Risk of serious damage to eyes.

Full text of H-Statements referred to under section 3.

- H272 May intensify fire; oxidizer.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.

Abbreviations and acronyms

- ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE Acute toxicity estimate
- CAS-No. Chemical Abstracts Service number
- CLP Classification, Labelling and Packaging
- EbC50 Concentration at which 50% reduction of biomass is observed
- EC50 Median effective concentration



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EN	European Norm
EPA	Environmental Protection Agency
ErC50	Concentration at which a 50% inhibition of growth rate is observed
EyC50	Concentration at which 50 % inhibition of yield is observed
IATA_C	International Air Transport Association (Cargo)
IBC	International Bulk Chemical Code
ICAO	International Civil Aviation Organization
ISO	International Standard Organization
IMDG	International Maritime Dangerous Goods
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No observed adverse effect level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
OPPTS	Office of Prevention, Pesticides and Toxic Substances
PBT	Persistent, Bioaccumulative and Toxic
STEL	Short term exposure limit
TWA	Time Weighted Average (TWA):
vPvB	very Persistent and very Bioaccumulative

Further information

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No ES Annex has been created as to the best of our knowledge and information available at the date of its publication no Exposure Scenario information is currently available for the substances within the mixture. Please see Sections 1 to 16 of the Safety Data Sheet.

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.