DETARNET DOSE

Date: 13/07/2018 Page 1/10

Revision: N°2 (19/03/2018)

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name: DETARNET DOSE

Product code: 103343

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

Cleaner and discaler. Professional use.

1.3. Details of the supplier of the safety data sheet

Registered company name: IPC.

Address: 10 Quai Malbert.29200.BREST.FRANCE.

Telephone: +33 (0)2 98 43 45 44. Fax:.

ipc@ipc-sa.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

May produce an allergic reaction (EUH208).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

Detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:



GHS05

Signal Word : DANGER

Product identifiers:

EC 239-707-6 SODIUM CARBONATE PEROXYHYDRATE

Additional labeling:

EUH208 Contains LIMONENE. May produce an allergic reaction.

Hazard statements:

H315 Causes skin irritation.
H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention:

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.

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

Precautionary statements - Response:

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, a doctor.

Date: 13/07/2018 Page 2/10 Revision: N°2 (19/03/2018)

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DETARNET DOSE

P332 + P313

If skin irritation occurs: Get medical advice/attention.

(EC) 1272/2009

2.3. Other hazards

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
INDEX: 016-026-00-0	GHS07		50 <= x % < 100
CAS: 5329-14-6	Wng		
EC: 226-218-8	Eye Irrit. 2, H319		
REACH: 01-2119488633-28	Skin Irrit. 2, H315		
1227911 07 2779 100000 20	Aquatic Chronic 3, H412		
SULPHAMIDIC ACID	riquate chrome 3, 11112		
INDEX: 011-005-00-2	GHS07		10 <= x % < 25
CAS: 497-19-8	Wng		10 × X /0 × 25
EC: 207-838-8	Eye Irrit. 2, H319		
REACH: 01-2119485498-19	Eye IIII. 2, H319		
KEACH: 01-2119463496-19			
CODHIA CARRONATE			
SODIUM CARBONATE	CHOOL CHOOL CHOOL		2.5 . 0/ . 10
INDEX: 15630_89_4	GHS07, GHS05, GHS03		$2.5 \le x \% < 10$
CAS: 15630-89-4	Dgr		
EC: 239-707-6	Ox. Sol. 3, H272		
REACH: 01-2119457268-30	Acute Tox. 4, H302		
	Eye Dam. 1, H318		
SODIUM CARBONATE PEROXYHYDRATE			
INDEX: 7631 86 9		[1]	$0 \le x \% < 1$
CAS: 7631-86-9			
EC: 231-545-4			
SILICON DIOXIDE			
INDEX: I601029007A	GHS08, GHS02, GHS07, GHS09	[1]	$0 \le x \% < 0.5$
CAS: 5989-27-5	Dgr	[]	0 · A / 0 · 0.5
EC: 227-813-5	Asp. Tox. 1, H304		
REACH: 01-2119529223-47	Flam. Liq. 3, H226		
REACH. 01-2119329223-47	Skin Irrit. 2, H315		
LIMONENE	Skin Fint. 2, H313 Skin Sens. 1B, H317		
LIMONENE			
	Aquatic Acute 1, H400		
	M Acute = 1		
	Aquatic Chronic 1, H410		
	M Chronic = 1		
INDEX: I76_22_2	GHS02, GHS07, GHS08	[1]	$0 \le x \% < 0.1$
CAS: 76-22-2	Wng		
EC: 200-945-0	Flam. Sol. 2, H228		
REACH: 01-2119454789-19	Acute Tox. 4, H302		
	Acute Tox. 4, H332		
1,7,7-TRIMETHYLBICYCLO[2.2.1]HEPTAN-	2 STOT SE 2, H371		
-ONE	, in the second of the second		
INDEX: I128 37 0	GHS09	[1]	$0 \le x \% < 0.1$
CAS: 128-37-0	Wng	[.]	12.00.011
EC: 204-881-4	Aquatic Acute 1, H400		
201 001-4	M Acute = 1		
BUTYLATED HYDROXYTOLUENE	Aquatic Chronic 1, H410		
BUTTLATED HTDRUATIULUENE	M Chronic = 1		
T .	TWI CHRONIC = 1		1

(Full text of H-phrases: see section 16)

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

DETARNET DOSE

Date: 13/07/2018 Page 3/10

Revision: N°2 (19/03/2018)

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of an allergic reaction, seek medical attention.

In the event of massive inhalation, remove the person to fresh air and keep warm and at rest.

In the event of splashes or contact with eyes:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing:

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

Keep at rest. Do not induce vomiting.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- sulphur dioxide (SO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

Date: 13/07/2018 Page 4/10 Revision: N°2 (19/03/2018)

DETARNET DOSE

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

Avoid dust inhalation.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of the reach of children.

Storage

Recommended storage temperature: + 0°C to + 40°C

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
76-22-2	2 ppm	3 ppm		A4	
128-37-0	2 (IFV) mg/m3			A4	

- Germany - AGW (BAuA - TRGS 900, 29/01/2018):

CAS	VME:	VME:	Excess	Notes
7631-86-9		4 E mg/m ³		
5989-27-5		5 ppm		4(II)
		28 mg/m ³		
128-37-0		10 E mg/m ³		4(II)

⁻ France (INRS - ED984:2016):

Version: N°1 (19/03/2018)

IPC

DETARNET DOSE

Date: 13/07/2018 Page 5/10

Revision: N°2 (19/03/2018)

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
76-22-2	2	12	-	-	-	-
128-37-0	-	10	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA:	STEL:	Ceiling :	Definition:	Criteria:
76-22-2	2 ppm	3 ppm			
	13 mg/m3	19 mg/m3			
128-37-0	- ppm	- ppm			
	10 mg/m ³	- mg/m³			

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

SODIUM CARBONATE PEROXYHYDRATE (CAS: 15630-89-4)

Final use:

Exposure method:
Potential health effects:
DNEL:

Workers.

Dermal contact.
Short term local effects.
12.8 mg of substance/cm2

Exposure method: Inhalation.

Potential health effects: Long term local effects.

DNEL: 5 mg of substance/m3

Final use:

Exposure method:

Potential health effects:

DNEL:

Consumers.

Dermal contact.

Short term local effects.

6.4 mg of substance/cm2

SULPHAMIDIC ACID (CAS: 5329-14-6)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 10 mg/kg body weight/day

Final use: Consumers. Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 5 mg/kg body weight/day

Predicted no effect concentration (PNEC):

SODIUM CARBONATE PEROXYHYDRATE (CAS: 15630-89-4)

Environmental compartment: Fresh water. PNEC : 35 μ g/l

Environmental compartment: Fresh water sediment.

PNEC: $10 \mu g/l$

Environmental compartment: Waste water treatment plant.

PNEC: 16 mg/l

SULPHAMIDIC ACID (CAS: 5329-14-6)

Environmental compartment: Soil.

PNEC: 0.00638 mg/kg

 $\begin{array}{ll} Environmental \ compartment: & Fresh \ water. \\ PNEC: & 0.048 \ mg/l \end{array}$

Environmental compartment: Sea water. PNEC: 0.0048 mg/l

Environmental compartment: Fresh water sediment.

Revision : N°2 (19/03/2018)

Date: 13/07/2018 Page 6/10

PNEC: 0.173 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.0173 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 2 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

DETARNET DOSE

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

These clothes shall be chosen to ensure there is no inflammation or irritation of the skin at the neck and wrist by contact with the powder Suitable type of protective clothing:

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing dust.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Solid.

Appearance : tablet White color Odor : mint

Important health, safety and environmental information

pH: Not relevant. 2.5 à 1% pH (aqueous solution): Boiling point/boiling range: Not specified. Flash point interval: Not relevant. Vapour pressure (50°C): Not relevant. Density: Not stated. Water solubility: Soluble. Not specified. Melting point/melting range:

DETARNET DOSE

Date: 13/07/2018 Page 7/10

Revision: N°2 (19/03/2018)

Self-ignition temperature : Not specified.

Decomposition point/decomposition range : Not specified.

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- formation of dusts
- humidity

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from:

- bases

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- sulphur dioxide (SO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

11.1.1. Substances

Acute toxicity:

1,7,7-TRIMETHYLBICYCLO[2.2.1]HEPTAN-2-ONE (CAS: 76-22-2)
Oral route:
LD50 = 1500 mg/kg

SODIUM CARBONATE PEROXYHYDRATE (CAS: 15630-89-4)

Oral route: LD50 = 1034 mg/kg

Species: Rat

 $Dermal \ route: \\ LD50 > 2000 \ mg/kg$

Species: Rabbit

11.1.2. Mixture

Respiratory or skin sensitisation:

Contains at least one sensitising substance. May cause an allergic reaction.

Monograph(s) from the IARC (International Agency for Research on Cancer):

CAS 5989-27-5: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

CAS 5989-27-5: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

DETARNET DOSE

Date: 13/07/2018 Page 8/10 Revision: N°2 (19/03/2018)

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

SODIUM CARBONATE PEROXYHYDRATE (CAS: 15630-89-4)

Fish toxicity: LC50 = 70.7 mg/l

Species: Pimephales promelas Duration of exposure: 96 h

Crustacean toxicity: EC50 = 4.9 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Aquatic plant toxicity: ECr50 = 2.62 mg/l

Species: Others

Duration of exposure: 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

The surfactants contained in this preparation 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 Member States and will be provided with their request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

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14.2. UN proper shipping name

14.3. Transport hazard class(es)

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DETARNET DOSE

Date: 13/07/2018 Page 9/10

Revision: N°2 (19/03/2018)

14.4. Packing group

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14.5. Environmental hazards

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14.6. Special precautions for user

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SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

No data available.

- Particular provisions:

No data available.

- Labelling for detergents (EC Regulation No. 648/2004,907/2006):

- less than 5 % : anionic surfactants
- less than 5 %: nonionic surfactants
- 5 % or over but less than 15 %: oxygenbased bleaching agents
- perfumes
- allergenic fragrances:

limonene

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Changes from the previous version:

- Section 2 : 8ème ATP

H226

Wording of the phrases mentioned in section 3:

11220	riammaoie nquiu and vapour.
H228	Flammable solid.
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H371	May cause damage to organs .
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.

Flammable liquid and vanour

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods.

SAFETY DATA SHEET (REGULATION (EC) n° 1907/2006 - REACH)

Version: N°1 (19/03/2018)

DETARNET DOSE

Date: 13/07/2018 Page 10/10 Revision: N°2 (19/03/2018)

IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

GHS05 : Corrosion

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC : Substances of very high concern.