

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

RRE-570

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

1.1. Product identifier

Product name : RRE-570
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
☎ +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
(1-hydroxyethylidene)bisphosphonic acid, potassium salt 01-2119510384-48	67953-76-8 267-956-0	C≤30%	Acute Tox. 4; H302	(1)	Constituent	

(1) For H- and EUH-statements in full: see section 16

RRE-570

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. Immediately consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

Headache. Vomiting. Diarrhoea. Abdominal pain. Drowsiness.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

On heating/burning: release of toxic and corrosive gases/vapours e.g.: phosphorus oxides, carbon monoxide - carbon dioxide.

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

RRE-570

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Protect against frost. Keep out of direct sunlight. Keep container in a well-ventilated place. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	12 mg/m ³	
	Long-term systemic effects dermal	34 mg/kg bw/day	

DNEL/DMEL - General population

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2.95 mg/m ³	
	Long-term systemic effects dermal	17 mg/kg bw/day	
	Long-term systemic effects oral	1.7 mg/kg bw/day	
	Acute systemic effects oral	1.7 mg/kg bw/day	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Respiratory protection not required in normal conditions.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.35 mm	Class 6	

c) Eye protection:

Eye protection not required in normal conditions.

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

3 / 8

RRE-570

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Colourless
Particle size	Not applicable (liquid)
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	1 mPa.s ; 20 °C
Kinematic viscosity	1 mm ² /s ; 40 °C
Melting point	0 °C
Boiling point	100 °C
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; complete
Relative density	1.17 ; 20 °C
Absolute density	1170 kg/m ³ ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	No data available in the literature
Flash point	No data available in the literature
pH	6.0

9.2. Other information

Evaporation rate	0.300 ; Butyl acetate
------------------	-----------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Heating increases the fire hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On heating/burning: release of toxic and corrosive gases/vapours e.g.: phosphorus oxides, carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

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

11.1.1 Test results

Acute toxicity

RRE-570

No (test)data on the mixture available

Judgement is based on the relevant ingredients

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	2850 mg/kg bw		Rat (male / female)	Experimental value	
Oral			category 4			Literature study	
Dermal	LD50	Equivalent to OECD 402	> 5000 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (dust)						Data waiving	

Conclusion

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

4 / 8

RRE-570

Not classified for acute toxicity

Corrosion/irritation

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified as irritating to the respiratory system
Not classified as irritating to the skin
Not classified as irritating to the eyes

Respiratory or skin sensitisation

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for inhalation
Not classified as sensitizing for skin

Specific target organ toxicity

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Mutagenicity (in vivo)

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

RRE-570

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

Judgement is based on the relevant ingredients
Not classified for aspiration toxicity

Toxicity other effects

RRE-570

No (test)data on the mixture available

Chronic effects from short and long-term exposure

RRE-570

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

5 / 8

RRE-570

SECTION 12: Ecological information

12.1. Toxicity

RRE-570

No (test)data on the mixture available

Judgement is based on the relevant ingredients

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	195 mg/l	96 h	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value; Locomotor effect
Acute toxicity crustacea	EC50	Equivalent to OECD 202	527 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	EPA 600/9-78-018	> 132 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	EPA 600/9-78-018	13 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	Equivalent to OECD 210	23 mg/l	60 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Read-across; GLP
Long-term toxicity aquatic crustacea	NOEC	US EPA	6.8 mg/l	28 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

RRE-570

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		< 7; Fresh weight	49 day(s)	Cyprinus carpio	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-3.5		Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

(1-hydroxyethylidene)bisphosphonic acid, potassium salt

(log) Koc

Parameter	Method	Value	Value determination
log Koc		4.2	Experimental value

Conclusion

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

RRE-570

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

6 / 8

RRE-570

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 30 (separately collected fractions (except 15 01): detergents other than those mentioned in 20 01 29). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number/ID number

Transport	Not subject
-----------	-------------

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

14.6. Special precautions for user

Special provisions	
Limited quantities	

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable, based on available data
--------------------------	---

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
0 %	
0 g/l	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

Ingredients according to Regulation (EC) No 648/2004 and amendments

15-30% phosphonates

National legislation Belgium

RRE-570

No data available

National legislation The Netherlands

RRE-570

Waterbezwaarlijkheid	B (4); Algemene Beoordelingsmethodiek (ABM)
----------------------	---

National legislation France

RRE-570

No data available

National legislation Germany

RRE-570

WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 (1-hydroxyethylidene)bisphosphonic acid, potassium salt
-----	---

TA-Luft	5.2.1
---------	-------

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

7 / 8

RRE-570

National legislation Austria

RRE-570

No data available

National legislation United Kingdom

RRE-570

No data available

Other relevant data

RRE-570

No data available

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.
(1-hydroxyethylidene)bisphosphonic acid, potassium salt

A chemical safety assessment has been performed.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H302 Harmful if swallowed.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: 4

Publication date: 2019-07-18

Date of revision: 2023-06-20

Revision number: 0101

BIG number: 61910

8 / 8