

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

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

1.1 Product identifier

Trade name : ROTOVARIO Aqua 622 022 Silver

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

This information is not available.

1.3 Details of the supplier of the safety data sheet

Company : ECKART GmbH
Guentersthal 4
91235 Hartenstein
Telephone : +499152770
Telefax : +499152777008
E-mail address : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number

GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
From outside US: : (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free) : 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation , Category 2 H315: Causes skin irritation.
Serious eye damage , Category 1 H318: Causes serious eye damage.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Signal word	:	Danger	
Hazard statements	:	H315 H318	Causes skin irritation. Causes serious eye damage.
Precautionary statements	:	Prevention: P264 P280	Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
		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 or doctor/ physician.
		P332 + P313	If skin irritation occurs: Get medical advice/ attention.
		Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

97468-33-2 Phosphoric acid, mono- and bis(C16-20-branched and linear alkyl) esters

Additional Labelling:

EUH208 Contains: mixture 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), 5-Chloro-2-methyl-3(2H)isothiazole mixt. with 2-Methyl-3(2H)isothiazolone; May produce an allergic reaction.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
aluminium	7429-90-5	F; R11	Flam. Sol. 1; H228	>= 50 - <= 100

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

	231-072-3 01-2119529243-45			
Phosphoric acid, mono- and bis(C16-20-branched and linear alkyl) esters	97468-33-2 306-986-1	C; C; R34	Skin Corr. 1B; H314	>= 1 - < 5
ethanol	64-17-5 200-578-6 01-2119457610-43	F; R11	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 3 - < 10

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.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

This information is not available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Do not flush with water.
Keep in suitable, closed containers for disposal.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

6.4 Reference to other sections

This information is not available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Avoid dust formation.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	TWA (Inhalable)	10 mg/m ³	2011-12-01	GB EH40
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust				

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

		or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
aluminium	7429-90-5	TWA (Respirable)	4 mg/m3	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
aluminium	7429-90-5	TWA (Inhalable)	10 mg/m3	2005-04-06	GB EH40
Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
aluminium	7429-90-5	TWA (Respirable)	4 mg/m3	2005-04-06	GB EH40

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m ³	2005-04-06	GB EH40
Further information		Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			

DNEL:

ethanol (64-17-5)

End Use: Workers
 Exposure routes: Inhalation
 Potential health effects: short term – local effects
 Value: 1900 mg/m³

DNEL:

ethanol (64-17-5)

End Use: Workers
 Exposure routes: Skin contact
 Potential health effects: long term – systemic effects
 Value: 343 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

DNEL:

ethanol (64-17-5)

End Use: Workers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 950 mg/m³

DNEL:

ethanol (64-17-5)

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: short term – local effects
Value: 950 mg/m³

DNEL:

ethanol (64-17-5)

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: long term – systemic effects
Value: 87 mg/kg

DNEL:

ethanol (64-17-5)

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: long term – systemic effects
Value: 206 mg/kg

DNEL:

ethanol (64-17-5)

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: long term – systemic effects
Value: 114 mg/m³

PNEC:

ethanol (64-17-5)

:
Soil
Value: 0.63 mg/kg

PNEC:

ethanol (64-17-5)

:
Fresh water
Value: 0.96 mg/l

PNEC:

ethanol (64-17-5)

:
Fresh water sediment
Value: 3.6 mg/kg

PNEC:

ethanol (64-17-5)

:
Marine water
Value: 0.79 mg/l

PNEC:

:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

ethanol (64-17-5) Marine sediment
Value: 2.9 mg/kg

PNEC:
ethanol (64-17-5) : STP
Value: 580 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection

: Dust impervious protective suit
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Environmental exposure controls

General advice : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : solid
Colour : silver
Odour : characteristic
pH : no data available
Freezing point : no data available
Boiling point/boiling range : 100 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Flash point	: no data available
Bulk density	: no data available
Flammability (solid, gas)	: The product is not flammable.
Auto-flammability	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Density	: 2.18 g/cm ³
Water solubility	: no data available
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Flow time	: no data available

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : no data available

10.5 Incompatible materials

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Materials to avoid : no data available

10.6 Hazardous decomposition products

Other information : no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

7429-90-5 :

Acute inhalation toxicity : LC50 rat: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Skin corrosion/irritation

Product

Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product

May cause irreversible eye damage.

Respiratory or skin sensitisation

no data available

Carcinogenicity

no data available

Toxicity to reproduction/fertility

no data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Reprod.Tox./Development/Teratogenicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

Further information

Product

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

no data available

12.6 Other adverse effects

Product:

Additional ecological information : no data available

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

:

IATA

: Not permitted for transport

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

Not dangerous goods

IATA :
Not permitted for transport

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA : Not permitted for transport

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

(Cargo) : Not permitted for transport

(Passenger) : Not permitted for transport

14.5 Environmental hazards

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

Due to the risk of hydrogen development we recommend to refrain from airfreighting this/these product(s).

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

SECTION 15: Regulatory information

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

Water contaminating class : WGK 1 slightly water endangering
(Germany)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROTOVARIO Aqua 622 022 Silver

Version 1.0

Revision Date 20.02.2014

Print Date 20.11.2018

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of R-Phrases

R11	Highly flammable.
R34	Causes burns.

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H228	Flammable solid.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.