

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : ROTOVARIO 530 944
Material number : 053608FX0

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 :

Telephone :
Telefax :
E-mail address : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number**NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

SECTION 2: Hazards identification**GHS Classification**

: Flammable solids, Category 1, H228
Skin irritation, Category 3, H316
Eye irritation, Category 2A, H319

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

ROTOVARIO 530 944


Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Specific target organ toxicity - single exposure, Category 3,
Central nervous system, H336

GHS-Labeling

- Symbol(s) : 
- Signal word : Danger
- Hazard statements : H228: Flammable solid.
H316: Causes mild skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
- Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P261 Avoid breathing vapours.
P280 Wear protective gloves/ 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.
P312 Call a POISON CENTER/doctor if you feel unwell.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label

Identification CAS-No.
ethyl acetate 141-78-6

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

SECTION 3: Composition/information on ingredients

Substance name : rvario 503_1

Substance No. :

Hazardous components

| Chemical name | CAS-No. EINECS-No. | Classification and labelling | Concentration[%] |
|-----------------------------------------------------------------------------|------------------------|-----------------------------------------------------------|------------------|
| aluminium powder (stabilised) | 7429-90-5 231-072-3 | Flam. Sol.;1;H228 | 60 - 100 |
| ethyl acetate | 141-78-6 205-500-4 | Flam. Liq.;2;H225 Eye Irrit.;2A;H319 STOT SE;3;H336 | 30 - 60 |
| Poly(oxy-1,2-ethanediyl), alphaisotridecyl-omega-hydroxy- , phosphate | 73038-25-2 | ;2;H315 ;1;H318 Aquatic Chronic;3;H412 | 1 - 5 |

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 the victim to fresh air.
Do not leave the victim unattended.

Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

- If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Wash off immediately with soap and plenty of water.

If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.

Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

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**

Suitable extinguishing media : Dry sand, Special powder against metal fire

Unsuitable extinguishing media : Water, Foam, Carbon dioxide (CO₂), ABC powder

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

5.2 Special hazards arising from the substance or mixture

This information is not available.

5.3 Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment.

Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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.
Use personal protective equipment.
Avoid dust formation.
Remove all sources of ignition.**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 : Use mechanical handling equipment.
Soak up with inert absorbent material (e.g. sand, silica gel,

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

acid binder, universal binder, sawdust).

Do not flush with water.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage
7.1 Precautions for safe handling

Advice on safe handling : Keep away from heat and sources of ignition. Avoid dust formation. Ensure adequate ventilation.

Avoid formation of respirable particles. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Earthing of containers and apparatuses is essential. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.

Avoid dust formation. Keep away from open flames, hot surfaces and sources of ignition.

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 : Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep container closed when not in use. Keep away from sources of ignition - No smoking.

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

- Further information on storage conditions : Protect from humidity and water. Do not allow to dry.
- Advice on common storage : Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
- 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
Germany:

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Update | Basis |
|-----------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-------------|
| aluminium powder (stabilised) | 7429-90-5 | AGW (Inhalable fraction) | 10 mg/m ³ | 2014-04-02 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | | 2;(II) | | | |
| Further information | | Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health | | | |

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

| | | | | | |
|-----------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------|-------------|
| | | (MAK-commission). | | | |
| aluminium powder (stabilised) | 7429-90-5 | AGW (Alveolate fraction) | 1,25 mg/m ³ | 2014-04-02 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | | 2;(II) | | | |
| Further information | | Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission). | | | |
| ethyl acetate | 141-78-6 | AGW | 200 ppm 730 mg/m ³ | 2017-06-08 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | | 2;(I) | | | |
| Further information | | Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child | | | |
| ethyl acetate | 141-78-6 | STEL | 400 ppm 1 468 mg/m ³ | 2017-02-01 | 2017/164/EU |
| Further information | | Indicative | | | |
| ethyl acetate | 141-78-6 | TWA | 200 ppm 734 mg/m ³ | 2017-02-01 | 2017/164/EU |
| Further information | | Indicative | | | |

8.2 Exposure controls

Personal protective equipment

Eye protection : Wear face-shield and protective suit for abnormal processing problems.

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Hand protection

Material : Solvent-resistant gloves (butyl-rubber)

Remarks

: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

The exact break through time can be obtained from the protective glove producer and this has to be observed.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Recommended preventive skin protection

Skin should be washed after contact.

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

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

Skin and body protection

 : Long sleeved clothing
 Safety shoes

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

Respiratory protection

: Use suitable breathing protection if workplace concentration requires.

: In the case of dust or aerosol formation use respirator with an

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

approved filter.

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. |
| Water | : | The product should not be allowed to enter drains, water courses or the soil. |
| | : | |

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties

| | | |
|-----------------------------|---|-----------------------------------------------------------------------|
| Appearance | : | Pasty solid |
| Colour | : | silver |
| Odour | : | characteristic |
| pH | : | No data available |
| Freezing point | : | No data available |
| Boiling point/boiling range | : | 76 °C |
| Flash point | : | No data available |
| Bulk density | : | No data available |
| Flammability (solid, gas) | : | The substance or mixture is a flammable solid with the category 1. |

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

| | |
|----------------------------------------|--------------------------------------------------------------|
| Auto-flammability | : not auto-flammable |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : No data available |
| Density | : No data available |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Miscibility with water | : No data available |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| 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 |
| Explosive properties | : Not explosive Vapours may form explosive mixture with air. |

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.

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with alkalis, acids, halogenes and oxidizing agents.
Contact with acids and alkalis may release hydrogen.
Mixture reacts slowly with water resulting in evolution of hydrogen.
Vapours may form explosive mixture with air.

Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : Do not allow to dry.

Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Acids
Bases
Oxidizing agents
Highly halogenated compounds

10.6 Hazardous decomposition products

Hazardous decomposition products : No data available

Other information : No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Components:****ethyl acetate :**

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Acute oral toxicity : Rat: 5 620 mg/kg

Acute inhalation toxicity : LC50 Rat: 56 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 Rabbit: > 18 000 mg/kg

Skin corrosion/irritation**Product**

May cause skin irritation and/or dermatitis.

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

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

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**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.,
Concentrations substantially above the TLV value may cause narcotic effects., Solvents may
degrease the skin.

SECTION 12: Ecological information**12.1 Toxicity****Components:****ethyl acetate (141-78-6) :**

Toxicity to daphnia and other : (Daphnia (water flea)): 717 mg/l
aquatic invertebrates

Poly(oxy-1,2-ethanediyl), alphaisotridecyl-omega-hydroxy-, phosphate (73038-25-2) :**Ecotoxicology Assessment**

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Long-term (chronic) aquatic hazard : Harmful to aquatic life with long lasting effects.

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

No data available

12.6 Other adverse effects**Product:**

Additional ecological information : No data available

SECTION 13: Disposal considerations**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.

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Do not re-use empty containers.
 Do not burn, or use a cutting torch on, the empty drum.
 In accordance with local and national regulations.

SECTION 14: Transport information
14.1 UN number

ADR : 1325
 TDG : 1325
 CFR : 1325
 IMDG : 1325
 IATA : 1325

14.2 Proper shipping name

ADR : FLAMMABLE SOLID, ORGANIC, N.O.S.
 (Aluminium pigment paste)
 TDG : FLAMMABLE SOLID, ORGANIC, N.O.S.
 (Aluminium pigment paste)
 CFR : FLAMMABLE SOLIDS, ORGANIC, N.O.S.
 (Aluminum pigment paste)
 IMDG : FLAMMABLE SOLID, ORGANIC, N.O.S.
 (,Aluminium pigment paste)
 IATA : FLAMMABLE SOLID, ORGANIC, N.O.S.
 (Aluminium pigment paste)

14.3 Transport hazard class

ADR : 4.1

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

TDG : 4.1
CFR : 4.1
IMDG : 4.1
IATA : 4.1

14.4 Packing group
ADR

Packaging group : II
 Classification Code : F1
 Hazard Identification Number : 40
 Labels : 4.1
 Tunnel restriction code : (E)

TDG

Packaging group : II
 Labels : 4.1

CFR

Packaging group : II
 Labels : 4.1

IMDG

Packaging group : II
 Labels : 4.1
 EmS Number : F-G, S-G

IATA

Packing instruction (cargo aircraft) : 448
 Packing instruction (passenger aircraft) : 445
 Packing instruction (LQ) : Y441

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Packaging group : II
Labels : 4.1

14.5 Environmental hazards

IMDG :

14.6 Special precautions for user**IMDG Code- segregation group:**

: IMDG Code segregation group 15 - Powdered metals

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****Prohibition/Restriction**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

15.2 Chemical safety assessment

No data available

ROTOVARIO 530 944

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

SECTION 16: Other information**Full text of H-Statements**

| | |
|------|---------------------------------------|
| H225 | : Highly flammable liquid and vapour. |
| H228 | : Flammable solid. |
| H315 | : Causes skin irritation. |
| H316 | : Causes mild skin irritation. |
| H318 | : Causes serious eye damage. |
| H319 | : Causes serious eye irritation. |
| H336 | : May cause drowsiness or dizziness. |

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.