

ET Reflexal 5000

Version 2.0

Revision Date 07.12.2019

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

Trade name : ET Reflexal 5000
Material number : 021894G60

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**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**

Not a hazardous substance or mixture.

GHS-Labeling

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Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Hazardous components which must be listed on the label

Other hazards which do not result in classification

Combustible Solids

SECTION 3: Composition/information on ingredients

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	50 - 100

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.
No hazards which require special first aid measures.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.

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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, ABC powder, Carbon dioxide (CO₂)

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.

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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.
Remove all sources of ignition.
Avoid dust formation.

6.2 Environmental precautions

This information is not available.

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,
acid binder, universal binder, sawdust).
Sweep up and shovel.
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.

For personal protection see section 8. Smoking, eating and
drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of
ignition. Earthing of containers and apparatuses is essential.

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Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

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.

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	7429-90-5	AGW (Inhalable)	10 mg/m ³	2014-04-02	DE TRGS 900

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powder (stabilised)		fraction)			
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 (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 substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				

United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2012-07-01	
aluminium powder	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	

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(stabilised)					
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m ³	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m ³	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m ³	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m ³	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m ³	2013-10-08	
aluminium	7429-90-5	TWA	1 mg/m ³	2013-03-01	

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powder (stabilised)		(Respirable fraction)			
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m ³	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m ³	2017-10-02	

United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m ³	2014-11-26	
aluminium	7429-90-5	PEL (respirable dust fraction)	5 mg/m ³	2014-11-26	

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powder (stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m ³	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m ³	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m ³	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m ³	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m ³	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m ³	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m ³	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m ³	1989-01-19	

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aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m ³	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m ³	2017-10-02	

8.2 Exposure controls
Personal protective equipment

- Eye protection : Safety glasses
- Hand protection
- Material : Solvent-resistant gloves
- 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.
- 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.

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Environmental exposure controls

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	: No data available
Flash point	: No data available
Bulk density	: No data available
Flammability (solid, gas)	: Combustible Solids
Auto-flammability	: not auto-flammable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 1,3 - 2,0 g/cm ³
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available

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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

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 : 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.
Vapour/air-mixtures are explosive at intense warming.

Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : Do not allow to dry.
No data available

10.5 Incompatible materials

Materials to avoid : Acids

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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**

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Carcinogenicity

No data available

Toxicity to reproduction/fertility

No data available

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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

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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 : In accordance with local and national regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
In accordance with local and national regulations.

SECTION 14: Transport information**14.1 UN number****14.2 Proper shipping name****14.3 Transport hazard class**

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14.4 Packing group**14.5 Environmental hazards****14.6 Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

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**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

15.2 Chemical safety assessment

No data available

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

H228 : Flammable solid.

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

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