

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

**SYMIC C321**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

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

Trade name : SYMIC C321  
Material number : 035670MJ0

**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)

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**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****SECTION 3: Composition/information on ingredients**

Substance name : symic c321

Substance No. :

No hazardous ingredients 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 : 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 with soap and water.
- In case of eye contact : Remove contact lenses.  
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**

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This information is not available.

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

This information is not available.

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

This information is not available.

**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 : 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 : 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 : Pick up and arrange disposal without creating dust.  
Sweep up and shovel.  
Keep in suitable, closed containers for disposal.

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**6.4 Reference to other sections**

This information is not available.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : 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 : Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No materials to be especially mentioned.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

This information is not available.

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**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Germany:**

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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	AGW (Inhalable fraction)	1 mg/m <sup>3</sup>	2009-07-02	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).Skin absorptionWhen there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	AGW (Inhalable fraction)	1 mg/m <sup>3</sup>	2009-07-02	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).Skin absorptionWhen there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2000-06-16	2000/39/EC
Further information	Indicative				
titanium dioxide	13463-67-7	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	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).				
titanium	13463-67-	AGW (Alveolate)	1,25 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900

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dioxide	7	fraction)			
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).			
titanium dioxide	13463-67-7	AGW (Inhalable fraction)	10 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values.Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
titanium dioxide	13463-67-7	AGW (Alveolate fraction)	1,25 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values.Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
diiron trioxide	1309-37-1	AGW (Inhalable fraction)	10 mg/m3	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).			
diiron trioxide	1309-37-1	AGW (Alveolate	1,25 mg/m3	2014-04-02	DE TRGS 900

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		fraction)			
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).				
diiron trioxide	1309-37-1	AGW (Alveolate fraction)	2,6 mg/m <sup>3</sup>	2009-02-16	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substances				

### United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2007-01-01	
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2007-01-01	
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2010-03-01	
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2010-03-01	
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA (Respirable fraction)	1 mg/m <sup>3</sup>	2013-03-01	
Fluorophlogopite	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	1989-01-19	

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(Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])					
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	1989-01-19	
Fluorophlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	PEL	2,5 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
titanium dioxide	13463-67-7	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
titanium dioxide	13463-67-7	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
titanium dioxide	13463-67-7	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
titanium dioxide	13463-67-7	TWA (Total dust)	10 mg/m <sup>3</sup>	1989-01-19	
titanium dioxide	13463-67-7	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	



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titanium dioxide	13463-67-7	TWA	10 mg/m <sup>3</sup>	2014-03-01	
diiron trioxide	1309-37-1	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
diiron trioxide	1309-37-1	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
diiron trioxide	1309-37-1	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	TWA (Respirable fraction)	5 mg/m <sup>3</sup>	2007-01-01	
diiron trioxide	1309-37-1	TWA (Fumes)	10 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (dust and fume)	5 mg/m <sup>3</sup>	2013-10-08	
diiron trioxide	1309-37-1	TWA (Fumes)	10 mg/m <sup>3</sup>	1989-01-19	
diiron trioxide	1309-37-1	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (Fumes)	5 mg/m <sup>3</sup>	2014-11-26	

### United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
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Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2007-01-01	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2007-01-01	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2010-03-01	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	2010-03-01	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA (Respirable fraction)	1 mg/m <sup>3</sup>	2013-03-01	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	1989-01-19	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	TWA	2,5 mg/m <sup>3</sup>	1989-01-19	
Fluorphlogopite (Mg <sub>3</sub> K[AlF <sub>2</sub> O(SiO <sub>3</sub> ) <sub>3</sub> ])	12003-38-2	PEL	2,5 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
titanium	13463-67-	TWA (respirable)	5 mg/m <sup>3</sup>	2012-07-01	

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dioxide	7	fraction)			
titanium dioxide	13463-67-7	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
titanium dioxide	13463-67-7	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
titanium dioxide	13463-67-7	TWA (Total dust)	10 mg/m <sup>3</sup>	1989-01-19	
titanium dioxide	13463-67-7	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
titanium dioxide	13463-67-7	TWA	10 mg/m <sup>3</sup>	2014-03-01	
diiron trioxide	1309-37-1	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
diiron trioxide	1309-37-1	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
diiron trioxide	1309-37-1	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	TWA (Respirable	5 mg/m <sup>3</sup>	2007-01-01	

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diiron trioxide	1309-37-1	fraction)			
diiron trioxide	1309-37-1	TWA (Fumes)	10 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2011-07-01	
diiron trioxide	1309-37-1	TWA (dust and fume)	5 mg/m <sup>3</sup>	2013-10-08	
diiron trioxide	1309-37-1	TWA (Fumes)	10 mg/m <sup>3</sup>	1989-01-19	
diiron trioxide	1309-37-1	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
diiron trioxide	1309-37-1	PEL (Fumes)	5 mg/m <sup>3</sup>	2014-11-26	

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Safety glasses

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : powder  
 Colour : No data available  
 Odour : odourless  
 pH : No data available  
 Freezing point : No data available

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Boiling point/boiling range	: No data available
Flash point	: No data available
Bulk density	: 0,27 g/cm3
Flammability (solid, gas)	: Will not burn
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 3,29 g/cm3
Water solubility	: No data available
Miscibility with water	: immiscible
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

**9.2 Other information**

No data available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

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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.

Dust may form explosive mixture in air.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : No data available

### 10.6 Hazardous decomposition products

Hazardous decomposition products : No data available

Other information : No data available

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## 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

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No data available

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

No data available

**Toxicity to reproduction/fertility**

No data available

**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

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**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**

No data available

**12.6 Other adverse effects****Product:**

Additional ecological information : No data available



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**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.

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

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**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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

**15.2 Chemical safety assessment**

No data available

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**SECTION 16: Other information**

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.

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