

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU

Revision Date: 01.06.2018

Specification: 132706

Material no.:

Date of first issue: 01.06.2018

Print Date: 07.06.2018

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

#### 1.1 Product identifier

Trade name : NITRALZ® 2,4-Dichlorobenzonitrile  
Registration number : 01-2120739670-53-0000  
CAS-No. : 6574-98-7  
EC-No. : 229-493-2

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

Use of the Sub-  
stance/Mixture : Raw material for industrial use, Intermediate

#### 1.3 Details of the supplier of the safety data sheet

Company : AlzChem Trostberg GmbH  
Dr.-Albert-Frank-Str. 32  
83308 Trostberg, Germany  
Telephone : +49 8621 86-3351  
E-mail address of person  
responsible for the SDS : alz-pst@alzchem.com

#### 1.4 Emergency telephone number

Emergency telephone num-  
ber : +49 8621 86-2776  
AlzChem Trostberg GmbH, Fire Brigade

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 : H302: Harmful if swallowed.  
Acute toxicity, Category 4 : H312: Harmful in contact with skin.  
Eye irritation, Category 2 : H319: Causes serious eye irritation.  
Chronic aquatic toxicity, Category 3 : H412: Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

Signal word	:	Warning
Hazard statements	:	H302 Harmful if swallowed. H312 Harmful in contact with skin. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	:	<b>Prevention:</b> P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. <b>Response:</b> P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. <b>Disposal:</b> P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

Exposure to the substance not as a solid, but e.g. in solution may endanger dermal absorption and toxic effects.

When handling hot molten mass::

Formation of flammable or explosive vapour/air mixtures possible.

Risk of skin burns caused by hot melt.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name : 2,4-dichlorobenzonitrile

#### Hazardous components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
2,4-dichlorobenzonitrile	6574-98-7 229-493-2	>= 98,5

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Seek medical advice in case of symptoms caused by eye or skin contact, inhalation or swallowing.  
The hot molten liquid causes severe damage to the eyes and

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

- burns
- If inhaled : Bring affected person outside and ensure that he/she is comfortable.
- In case of skin contact : Change contaminated, soaked clothes.  
Upon skin contact, wash with plenty of water and soap.  
Following contact with hot product, cool quickly with cold water until pain ceases. Do not remove congealed product from the skin.  
Call a physician immediately.
- In case of eye contact : Rinse thoroughly with plenty of water keeping eyelid open.  
Remove contact lenses if this can be easily done.
- If swallowed : Rinse out mouth, spit out liquid.  
Give small amounts of water to drink.

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

None known.

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

---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray, foam, CO<sub>2</sub>, dry powder.

### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrocyanic acid (HCN)  
hydrogen chloride (HCl)

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

---

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment; see section 8.  
Ensure adequate ventilation.  
Avoid dust formation.

### 6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

### 6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Sweep up and shovel.  
Avoid dust formation.  
Melt:  
Allow to solidify, use mechanical handling equipment.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : The substance must be handled under strictly controlled conditions according to Article 18 of the REACH regulation.  
Provide sufficient ventilation and exhaust at the workplace.  
Do not allow individual / bulk containers to stand open  
Avoid dust formation.
- Advice on protection against fire and explosion : If dusts develop, explosive dust/air mixtures may form. When handling hot molten mass:: Vapours can form explosive mixtures with air. Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.
- Hygiene measures : Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep containers tightly closed in a cool, well-ventilated place.

### 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Personal protective equipment

- Eye protection : Safety glasses  
When handling hot molten mass::  
Tightly fitting safety goggles
- Hand protection
- Material : Nitrile rubber, Recommendation: Camatril 730
- Break through time : 10 min
- Glove thickness : 0,6 mm
- Directive : 4-Chlorobenzonitrile - melt (conclusion by analogy)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

Manufacturer	:	Kächele-Cama Latex GmbH (KCL), Germany
Material	:	Fluorinated rubber (Viton), Recommendation: Vitoject 890
Break through time	:	480 min
Glove thickness	:	0,7 mm
Directive	:	4-Chlorobenzonitrile - melt (conclusion by analogy)
Manufacturer	:	Kächele-Cama Latex GmbH (KCL), Germany
Remarks	:	When handling hot material, use heat resistant gloves.
Skin and body protection	:	Protective clothing
Respiratory protection	:	Do not inhale gases, vapours, aerosols or dust - use respiratory protection equipment. Respirator with ABEK-P2 combination filter

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	:	crystalline
Colour	:	white
Odour	:	slight
Melting point/range	:	60 - 62 °C
Flash point	:	> 100 °C (conclusion by analogy)
Vapour pressure	:	ca. 20 hPa (124 - 125 °C) Method: literature
Solubility(ies)	:	
Water solubility	:	insoluble
Solubility in other solvents	:	870 g/l Solvent: Acetone
Partition coefficient: n-octanol/water	:	log Pow: 3,02

### 9.2 Other information

Molecular weight	:	172,06 g/mol
------------------	---	--------------

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

|| See section 10.3

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reactions known.

### 10.4 Conditions to avoid

Conditions to avoid : When handling hot molten mass::  
Keep away from sources of ignition - No smoking.

### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents  
Strong acids

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.  
see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Product:

Acute oral toxicity : Assessment: Harmful if swallowed.

Acute dermal toxicity : Assessment: Harmful in contact with skin.

##### Components:

##### **2,4-dichlorobenzonitrile:**

Acute oral toxicity : Assessment: Harmful if swallowed.  
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Acute inhalation toxicity : Assessment: Based on available data, the classification criteria are not met.  
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Acute dermal toxicity : Assessment: Harmful in contact with skin.  
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

#### Skin corrosion/irritation

##### Components:

##### **2,4-dichlorobenzonitrile:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : The data are derived from the evaluations or test results

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

achieved with similar products (conclusion by analogy).

### Serious eye damage/eye irritation

#### Product:

Assessment : Causes serious eye irritation.

#### Components:

##### **2,4-dichlorobenzonitrile:**

Assessment : Causes serious eye irritation.  
Remarks : The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

### Respiratory or skin sensitisation

#### Components:

##### **2,4-dichlorobenzonitrile:**

Remarks : no data available

### Germ cell mutagenicity

#### Components:

##### **2,4-dichlorobenzonitrile:**

Germ cell mutagenicity- Assessment : no data available

### Carcinogenicity

#### Components:

##### **2,4-dichlorobenzonitrile:**

Carcinogenicity - Assessment : no data available

### Reproductive toxicity

#### Components:

##### **2,4-dichlorobenzonitrile:**

Reproductive toxicity - Assessment : no data available

### STOT - single exposure

#### Components:

##### **2,4-dichlorobenzonitrile:**

Remarks : no data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU  
Revision Date: 01.06.2018

Specification: 132706  
Material no.:

Date of first issue: 01.06.2018  
Print Date: 07.06.2018

### STOT - repeated exposure

#### Components:

##### 2,4-dichlorobenzonitrile:

Remarks : no data available

### Aspiration toxicity

#### Components:

##### 2,4-dichlorobenzonitrile:

No data available

### Further information

#### Product:

Remarks : Other dangerous properties can not be excluded.  
The product has not yet been tested. The indicated data are derived from products with similar composition.

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

##### Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.  
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

#### Components:

##### 2,4-dichlorobenzonitrile:

Toxicity to fish : 10 - 100 mg/l  
Test Type: LC50  
Method: QSAR-Method  
Remarks: calculated

### 12.2 Persistence and degradability

#### Components:

##### 2,4-dichlorobenzonitrile:

Biodegradability : Remarks: Expected to be not readily biodegradable.  
The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

### 12.3 Bioaccumulative potential

no data available



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU

Revision Date: 01.06.2018

Specification: 132706

Material no.:

Date of first issue: 01.06.2018

Print Date: 07.06.2018

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

### 12.6 Other adverse effects

#### Product:

Additional ecological information : No ecotoxicological studies with the product available. Prevent uncontrolled release in the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.

Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

## SECTION 14: Transport information

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Remarks : Not classified as dangerous in the meaning of transport regulations.

**ADR**  
Remarks : Not regulated as a dangerous good  
: Not classified as dangerous in the meaning of transport regulations.

**RID**  
Remarks : Not regulated as a dangerous good  
: Not classified as dangerous in the meaning of transport regulations.

**IMDG**  
Remarks : Not regulated as a dangerous good  
: Not classified as dangerous in the meaning of transport regulations.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU

Revision Date: 01.06.2018

Specification: 132706

Material no.:

Date of first issue: 01.06.2018

Print Date: 07.06.2018

**IATA (Cargo)** : Not regulated as a dangerous good  
Remarks : Not classified as dangerous in the meaning of transport regulations.

**IATA (Passenger)** : Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

### 15.2 Chemical safety assessment

No substance safety assessment is required for this product because it is an internal local intermediate product and/or a transported intermediate product.

## SECTION 16: Other information

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Develop-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## NITRALZ® 2,4-Dichlorobenzonitrile

Version 3.1 / REG\_EU

Revision Date: 01.06.2018

Specification: 132706

Material no.:

Date of first issue: 01.06.2018

Print Date: 07.06.2018

ment; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further 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.

REG\_EU / EN