

**Compalox® AN/V-801 N 1.0; Compalox® AN/V-802 N 1.0; Compalox® AN/V-813 N 0.5; Compalox® AN/V-813 N 0.6; Compalox® AN/V-813 N 1.0**

Globally Harmonized System (GHS)

Measures on the Management of Toxic Chemical Substances Labelling and Safety Data Sheets. December 11, 2014.

Issue Date: 17/Oct/2016  
Print Date: 06/Jan/2017Revision Number: 1.2  
Page 1 of 10**SECTION 1: Identification: Product identifier and chemical identity****1.1. Product identifier****Product Name:** Compalox® AN/V-801 N 1.0; Compalox® AN/V-802 N 1.0; Compalox® AN/V-813 N 0.5; Compalox® AN/V-813 N 0.6; Compalox® AN/V-813 N 1.0**Pure substance/mixture** Substance**Aluminum oxide****CAS Number** 1344-28-1  
**Weight-%** >99**1.2. Relevant identified uses of the substance or mixture and uses advised against****Recommended Use** Chemical industry (raw material for the production of other aluminium compounds), etc. Absorbent, purification of process liquids and gases, etc.**1.3. Details of the supplier of the safety data sheet****Company:** MARTINSWERK GmbH  
Kölner Strasse 110  
50127 Bergheim  
Germany  
Tel. : +49-2271-90.22.78  
Fax. : +49-2271-90.27.17**Internet** www.hubermaterials.com**E-mail** hubermaterials@huber.com**1.4. Emergency telephone number** CHEMTREC: +1 800 424 9300 or International +1 703 527 3887**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Pure substance/mixture** Substance**GHS Classification** This product is not classified as hazardous according to the UN GHS guideline

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## Safety Data Sheet

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and labeling is not required

### Hazards identification

Physical Hazard	Not classified
Health Hazards	Not classified
Environmental Hazard	Not classified

### 2.2. Label elements

Symbols/Pictograms	None
Signal Word	None
Hazard Statements	None

### Precautionary Statements

Prevention	Employ good industrial hygiene practice Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust
Response	IF ON SKIN: Wash with plenty of soap and water IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing If swallowed, rinse mouth with water (only if the person is conscious) Drink plenty of water
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/containers in accordance with local regulations.

Additional Information: None.

2.3. Other hazards No information available.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances Substance

Chemical Name	CAS Number	Taiwan	Taiwan - GHS	REACH registration number	Weight-%
Aluminum oxide	1344-28-1	X	Not classified	01-2119529248-35-xx xx -- 01-2119529248-35-00 17 (MARTINSWERK GmbH)	>99

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General Advice</b>	When in doubt or if symptoms are observed, get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Inhalation</b>	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Aspiration hazard</b>	Not an expected route of exposure.
<b>Notes to Physician</b>	Treat symptomatically.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treatment should be symptomatic and supportive.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media**

Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media**

None known.

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

None known.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**Fire-fighting measures**

In case of fire and/or explosion do not breathe fumes.

## SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid dust formation. Keep unauthorized personnel away.
- For non-emergency personnel** Keep unauthorized personnel away.
- For emergency responders** Keep unauthorized personnel away. Use personal protection recommended in Section 8.
- 6.2. Environmental precautions** Avoid runoff to waterways and sewers.
- 6.3. Methods and material for containment and cleaning up** Methods for Containment : Prevent further leakage or spillage if safe to do so  
Methods for Clean-up : Sweep up and shovel into suitable containers for disposal
- 6.4. Reference to other sections** Section 8: Exposure controls and personal protection. See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Minimize dust generation and accumulation  
Provide local exhaust ventilation  
Handle in accordance with good industrial hygiene and safety practice
- 7.2. Conditions for safe storage, including any incompatibilities** Store away from incompatible materials  
Keep container tightly closed and dry
- 7.3. Specific end use(s)** No information available.

## SECTION 8: Exposure controls/personal protection

### Engineering Controls:

### Exposure Limit Values

#### Aluminum oxide

Taiwan	5 mg/m <sup>3</sup> (respirable dust) 10 mg/m <sup>3</sup> (total dust)
ACGIH	TWA: 10 mg/m <sup>3</sup>
ACGIH TLV	TWA: 1 mg/m <sup>3</sup> respirable fraction
OSHA	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction

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### Engineering Measures

Do not handle until all safety precautions have been read and understood  
Ensure adequate ventilation, especially in confined areas  
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)  
Use exhaust ventilation to keep airborne concentrations below exposure limits  
In case of insufficient ventilation, wear suitable respiratory equipment

### Personal Protective Equipment

#### Eye Protection

Safety glasses with side shields

#### Skin and Body Protection

Use suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure.

#### Hand Protection

Impervious gloves: chemical resistant EN 420

#### Respiratory Protection:

In case of exposure to high levels of airborne dust, wear a respirator EN 149, P2 half masks.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice  
Handle in accordance with good industrial hygiene and safety practice

### Environmental Exposure:

This product does not present any particular risk for the environment.  
Check the appropriate national and local regulations. Prevent entry into sewers and waterways.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance:

Physical State

Solid Powder

Color

White

Odor

Odorless

Odor Threshold

No information available

pH:

Not available

Melting point / Freezing point

2000° C (3632° F) (1013 hPa)

Initial boiling point and boiling range

2980° C (5396 °F) (1013 hPa)

Flash Point:

Not applicable. Product/Substance is inorganic. Solid.

Evaporation Rate

Not applicable. Melting Point : > 300°C

Flammability (solid, gas)

No information available

Upper flammability limit:

Lower flammability limit:

Vapor Pressure

1 hPa (2158 °C)

Vapor Density

Not applicable Melting Point : > 300°C

Relative Density

4 (20 °C)

Water Solubility

Insoluble

Solubility in other solvents

No information available

Partition coefficient

Not applicable Product/Substance is inorganic

Autoignition Temperature

No information available

Decomposition Temperature

No information available

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**Kinematic viscosity** Not applicable Solid  
**Dynamic viscosity** Not applicable Solid  
**Explosive Properties** None  
**Oxidizing Properties** None

**9.2. Other information** No data available

### SECTION 10: Stability and reactivity

**10.1. Reactivity** No data available  
**10.2. Chemical stability** Stable under normal conditions  
**10.3. Possibility of hazardous reactions** None under normal processing  
**10.4. Conditions to avoid** Incompatible materials  
Decomposition Temperature  
< / =0.3%  
:  
Al2O3  
Water  
**10.5. Incompatible materials** Strong acids  
**10.6. Hazardous decomposition products** None known

### SECTION 11: Toxicological information

**General Information** Users are advised to consider national Occupational Exposure Limits or other equivalent values.

#### Information on Likely Routes of Exposure

**Inhalation** Do not breathe dust  
**Skin** Avoid prolonged or repeated contact with skin  
Contact with dust can cause mechanical irritation or drying of the skin  
**Eyes** Avoid contact with eyes  
Dust contact with the eyes can lead to mechanical irritation  
**Ingestion** Ingestion is not a likely route of exposure  
**Aspiration hazard** Not an expected route of exposure.

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### 11.1. Information on toxicological effects

#### Aluminum oxide

<b>Oral LD50</b>	> 2000 mg/kg Rat
<b>Inhalation LC50</b>	> 2.3 mg/l 4-hr Aerosol : Rat
<b>Serious eye damage/eye irritation</b>	Non-irritant : Rabbit
<b>Skin Corrosion/Irritation</b>	Non-irritant : Rabbit
<b>Mutagenicity</b>	in vitro in vivo Based on available data, the classification criteria are not met
<b>Reproductive Effects</b>	No indication of effects on fertility. No indication of effects on developmental toxicity.
<b>Target Organ Effects</b>	Lungs
<b>Specific target organ toxicity - Single exposure</b>	No information available
<b>Specific target organ toxicity - Repeated exposure</b>	Repeated dose toxicity Inhalation 28-d Rat NOAEL (No observed adverse effect level) 70 mg(Al)/m <sup>3</sup> Repeated dose toxicity 1- Year Rat NOAEL (No observed adverse effect level) >=30 mg Al/kg bw

<b>Acute Toxicity</b>	Based on available data, the classification criteria are not met
<b>Chronic Toxicity</b>	Based on available data, the classification criteria are not met.
<b>Chronic Effects</b>	Based on available data, the classification criteria are not met.
<b>Respiratory Sensitization</b>	Based on available data, the classification criteria are not met
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met
<b>Skin Corrosion/Irritation</b>	Based on available data, the classification criteria are not met
<b>Skin Sensitization</b>	Based on available data, the classification criteria are not met
<b>Mutagenicity</b>	Based on available data, the classification criteria are not met
<b>Reproductive Effects</b>	This product does not contain any known or suspected reproductive hazards.
<b>Reproductive Toxicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Specific target organ toxicity - Single exposure</b>	Not classified.
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.

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**12.1. Ecotoxicity** Very low solubility. Not considered to be harmful to aquatic life.

### Aluminum oxide

WGK Classification (VwVwS) 1346. WGK: nwg

**12.2. Persistence and degradability** The methods for determining biodegradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential** Not likely to bioaccumulate.

**Bioconcentration factor (BCF)** No data available.

**12.4. Mobility in soil** None.

**12.5. Results of PBT and vPvB assessment** This substance does not meet the criteria for classification as PBT or vPvB.

**12.6. Other adverse effects** None known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse container.

**Waste codes** Waste codes should be assigned by the user based on the application for which the product was used

### Aluminum oxide

WGK Classification (VwVwS) 1346. WGK: nwg

## SECTION 14: Transport information

### Mode of Transportation (Road, Water, Air, Rail)

**TDG -Canada** Not regulated  
**DOT** Not regulated  
**ADR** Not regulated





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Signal Word None

Hazard Statements None

### Hazards identification

Physical Hazard Not classified

Health Hazards Not classified

Environmental Hazard Not classified

### Abbreviations and acronyms

International Agency for Research on Cancer (IARC)  
International Air Transport Association (IATA)  
International Maritime Dangerous Goods (IMDG)  
International Uniform Chemical Information Database (IUCLID)  
Workplace Hazardous Materials Information System (WHMIS) status and classification  
EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification  
DOT (Department of Transportation)  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
TWA - Time-Weighted Average  
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)  
The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)  
PPE - Personal Protection Equipment  
NIOSH - National Institute for Occupational Safety and Health  
TDG (Transport of Dangerous Goods) Canada  
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)  
Reportable Quantity (RQ) (RQ/% in mixture)  
STEL - Short Term Exposure Limit  
TLV® - Threshold Limit Value  
Derived No Effect Level (DNEL)  
SVHC: Substances of Very High Concern for Authorization:  
Land transport (ADR/RID)  
Biochemical oxygen demand (BOD)  
Chemical oxygen demand (COD)  
ICAO (air)  
(IMDG) International Maritime Dangerous Goods  
Positive Pressure Self-Contained Breathing Apparatus (SCBA)  
Predicted No Effect Concentration (PNEC)  
Globally Harmonized System (GHS)

**Disclaimer** 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.

**End of Safety Data Sheet**