

## **Safety data sheet (MSDS) according to Regulation (EC) No 1907/2006, Annex II**

### **1. Identification of the substance/mixture and of the company/undertaking**

#### **1.1 Product identifier**

- a.) Art.-Nr. CO-232-1: CO<sub>2</sub> - Indicator fluid  
b.) Art.-Nr. CO-232-2: CO<sub>2</sub> - Rinsing fluid

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

##### **Relevant identified uses of the substance or mixture:**

No information available at present.

##### **Uses advised against:**

No information available at present.

#### **1.3 Details of the supplier**

Esgen GmbH, Walesstr. 3, 58675 Hemer  
Phone +49 (0) 23 72 / 55 00 37  
Fax +49 (0) 23 72 / 55 00 97  
info@esgen.de

#### **1.4 Emergency telephone**

##### **Advisory office in case of poisoning:**

+49 30 19240 (D-13437 Berlin, 24 hour)

##### **Telephone number of the company in case of emergencies:**

Tel.: 8.00h-17.00h ++49 (0) 931 98494

### **2. Hazards identification**

#### **2.1 Classification of the substance or mixture**

##### **2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)**

not determined

##### **2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).**

The mixture is not classified as dangerous in the terms of the directive 1999/45/EC.

#### **2.2 Label elements**

##### **2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)**

not determined

##### **2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).**

Symbols:	n.a.
Indications of danger:	--
R-phrases:	--
S-phrases:	--
Additions:	n.a.

## 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

## 3: Composition/information on ingredients

### 3.1 Substance

n.a.

### 3.2 Mixture

Registration number (REACH)	--
Index	--
EINECS, ELINCS, NLP	--
CAS	--
content %	--
Classification according to Directive 67/548/EEC	--
Classification according to Regulation (EC) 1272/2008 (CLP)	--

## 4: First aid measures

### 4.1 Description of first aid measures

#### Inhalation:

- Remove person from danger area.
- Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact:

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact:

- Remove contact lenses.
- Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Medical attention recommended.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Irritation of the eyes

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

n.c.

## **5: Firefighting measures**

### **5.1 Extinguishing media Suitable extinguishing media**

Adapt to the nature and extent of fire.

### **Unsuitable extinguishing media**

n.c.

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

In case of fire the following can develop: Oxides of carbon

### **5.3 Advice for firefighters**

- In case of fire and/or explosion do not breathe fumes.
- Protective respirator with independent air supply.
- Dispose of contaminated extinction water according to official regulations.

## **6: Accidental release measures**

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

Avoid contact with eyes.

### **6.2 Environmental precautions**

- If leakage occurs, dam up
- Do not pour down the drain undiluted.

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

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

### **6.4 Reference to other sections**

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### **7.1 Precautions for safe handling**

#### **7.1.1 General recommendations**

Observe directions on label and instructions for use.

#### **7.1.2 Notes on general hygiene measures at the workplace**

- General hygiene measures for the handling of chemicals are applicable.
- Wash hands before breaks and at end of work.
- Keep away from food, drink and animal feedingstuffs.
- Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

- Not to be stored in gangways or stair wells.
- Store product closed and only in original packing. Only store at temperatures from 0°C to 45°C.

### **7.3 Specific end use(s)**

No information available at present.

## **8: : Exposure controls / personal protection**

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **8.2.1 Appropriate engineering controls**

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

#### **8.2.2 Individual protection measures, such as personal protective equipment**

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

#### **Eye/face protection:**

Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

#### **Skin protection - Hand protection:**

Normally not necessary.

#### **With long-term contact:**

Rubber gloves (EN 374).

Permeation time (penetration time) in minutes: > 480

#### **Skin protection - Other:**

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection: Normally not necessary.

#### **Thermal hazards:**

If applicable, these are included in the individual protective measures (eye/face protection, skin protection and respiratory protection).

Additional information on hand protection - No tests has been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed

### **8.2.3 Environmental exposure controls**

No information available at present.

## **9: Physical and chemical properties**

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

Physical state:	Liquid
Colour:	Blue
Odour:	Odourless
Odour threshold:	Not determined
pH-value:	6,6-6,8
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,92 g/ml (20°C)
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Mixable
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	No
Oxidising properties:	No

### **9.2 Other information**

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

## **10: Stability and reactivity**

### **10.1 Reactivity**

See also Subsection 10.4 to 10.6. The product has not been tested.

### **10.2 Chemical stability**

See also Subsection 10.4 to 10.6. Stable with proper storage and handling.

### **10.3 Possibility of hazardous reactions**

See also Subsection 10.4 to 10.6.

No decomposition if used as intended.

### **10.4 Conditions to avoid**

### **10.5 Incompatible materials**

No dangerous reactions are known.

### **10.6 Hazardous decomposition products**

See also Subsection 10.4 to 10.6.

See also section 5.2

No decomposition when used as directed.

## 11: Toxicological information

Art.-Nr. CO-232-1: CO<sub>2</sub> - Indicator fluid

Art.-Nr. CO-232-2: CO<sub>2</sub> - Rinsing fluid

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other toxicity data:						Classification according to calculation

## 12: Ecological information

Art.-Nr. CO-232-1: CO<sub>2</sub> - Indicator fluid

Art.-Nr. CO-232-2: CO<sub>2</sub> - Rinsing fluid

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.
Other ecotoxicological data:							According to the recipe, contains no AOX.
Other ecotoxicological data:							DOC-elimination degree(complexing organic substance)>= 80%/28d; n.a.

## **13: Disposal considerations**

### **13.1 Waste treatment methods**

For the substance / mixture / residual amounts EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

07 07 01 aqueous washing liquids and mother liquors

07 03 01 aqueous washing liquids and mother liquors

#### **Recommendation:**

Pay attention to local and national official regulations E.g. dispose at suitable refuse site.

#### **For contaminated packing material**

Pay attention to local and national official regulations

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

#### **Empty container completely.**

Uncontaminated packaging can be recycled.

**Dispose of packaging that cannot be cleaned in the same manner as the substance.**

## **14: Transport information**

### **General statements**

UN number: n.a.

#### **Transport by road/by rail (ADR/RID)**

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Classification code: n.a.

LQ (ADR 2011): n.a.

LQ (ADR 2009): n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

#### **Transport by sea (IMDG-code)**

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Marine Pollutant: n.a.

Environmental hazards: Not applicable

#### **Transport by air (IATA)**

UN proper shipping name:

Transport hazard class(es): n.a.

Packing group: n.a.

Environmental hazards: Not applicable

### **Special precautions for user**

Unless specified otherwise, general measures for safe transport must be followed.

### **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Non-dangerous material according to Transport Regulations.

## 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

n.a.

### **15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

## 16: Other information

These details refer to the product as it is delivered.

Revised sections:

1-16

## In this document used abbreviations and acronyms:

<b>ADR</b>	Accord europeen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
<b>AOX</b>	adsorbable organic halogen compounds
<b>Art.-Nr.</b>	Artikel-Number / Item-Number
<b>CAS</b>	Chemical Abstracts Service
<b>CLP</b>	Classification, Labelling and Packaging of Substances and Mixtures
<b>DOC</b>	Dissolved organic carbon
<b>EC</b>	European Community
<b>EEC</b>	European Economic Community
<b>e.g.</b>	for example, for instance (abbreviation of Latin 'exempli gratis')
<b>EINECS</b>	European Inventory of Existing Commercial Chemical Substances
<b>ELINCS</b>	European List of Notified Chemical Substances
<b>EN</b>	European Norm
<b>IATA</b>	International Air Transport Association
<b>IBC</b>	Intermediate Bulk Container
<b>ISO</b>	International Organization of Standardization
<b>IMDG-Code</b>	International Maritime Code for Dangerous Goods
<b>LQ</b>	Limited Quantities (= begrenzte Mengen)
<b>MSDS</b>	Material Safety Data Sheet
<b>n.a.</b>	not applicable
<b>n.c.</b>	not checked
<b>n.d.a.</b>	no data available
<b>NLP</b>	No-longer-polymers list
<b>PBT</b>	persistent, bioaccumulative and toxic
<b>REACH</b>	Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No. 1907/2006
<b>RID</b>	Reglement concernant le transport International ferroviaire de marchandises Dangereuses
<b>vPvB</b>	very persistent and very bioaccumulative)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.  
No responsibility.

This MSDS is made by: Esgen GmbH, Walesstr. 3, 58675 Hemer