

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

DumaCO2®, CO2 adsorber tube, filled with adsorbent and sealed gas tight
Article number: 14-0021

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

See product information.

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company C. Gerhardt GmbH & Co. KG
 Cäsariusstraße 97
 53639 Königswinter / GERMANY
 Phone +49 (0)2223 2999 - 0
 Fax +49 (0)2223 2999 - 99
 Homepage www.gerhardt.de
 E-mail info@gerhardt.de

Address enquiries to

Technical information info@gerhardt.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +49 (0) 2223 2999-0 Mo-Fr 8:00 - 16:00

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

No classification.

2.2 Label elements

The product does not require a hazard warning label in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms none

Signal word none

Hazard statements none

Precautionary statements none

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients
3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Comment on component parts

No dangerous components.
 Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

SECTION 4: First aid measures**4.1 Description of first aid measures**

General information	Change powdered clothing.
Inhalation	Ensure supply of fresh air.
Skin contact	In case of contact with skin wash off with warm water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media	Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.
Extinguishing media that must not be used	Full water jet.

5.2 Special hazards arising from the substance or mixture

none

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment (protective gloves).

Ensure adequate ventilation.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically. Avoid production of dust.

Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Do not store together with food and animal food/diet.

Store in a dry place.

Keep container tightly closed.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational
exposure limits to be monitored (GB)

not applicable

8.2 Exposure controls

Additional advice on system design

Ensure adequate ventilation on workstation.
Pay attention to dust limit value (ACGIH-2011: 10 mg/m³ particle inhalable; 3 mg/m³ particle respirable).

Eye protection

Safety glasses. (EN 166:2001)

Hand protection

In full contact:
0,7 mm; Nitrile rubber, >480 min (EN 374-1/-2/-3).
The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection

Light protective clothing.

Other

Avoid contact with eyes and skin.
Do not inhale dust.

Respiratory protection

Respiratory protection in the case of dust formation.
Use Safety mask. (DIN EN 149)

Thermal hazards

No information available.

Delimitation and monitoring of the
environmental exposition

Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pearls
Color	white
Odor	odourless
Odour threshold	not applicable
pH-value	not determined
pH-value [1%]	not determined
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/ml]	not determined
Bulk density [kg/m³]	not determined
Solubility in water	not determined
Solubility other solvents	not applicable
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not determined
Auto-ignition temperature	not self-igniting
Decomposition temperature [°C]	not determined
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Reacts with water: generation of heat.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Acute dermal toxicity

Acute inhalational toxicity

Serious eye damage/irritation

Based on the available information, the classification criteria are not fulfilled.

Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Respiratory or skin sensitisation

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity —
single exposure

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity —
repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.
Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Carcinogenicity

Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard

General remarks

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

Behaviour in environment
compartments

No information available.

Behaviour in sewage plant

No information available.

Biological degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Do not discharge product unmonitored into the environment or into the drainage.
Ecological data of complete product are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Coordinate disposal with the authorities if necessary.

Waste no. (recommended)

101299

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended)

150102

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID

not applicable

Inland navigation (ADN)

not applicable

Marine transport in accordance with IMDG

not applicable

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID

NO DANGEROUS GOODS

Inland navigation (ADN)

NO DANGEROUS GOODS

Marine transport in accordance with IMDG

NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID

not applicable

Inland navigation (ADN)

not applicable

Marine transport in accordance with IMDG

not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EEC-REGULATIONS 2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people none

- VOC (2010/75/CE) 0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information**16.1 Abbreviations and acronyms:**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.2 Other information**Classification procedure**

Modified position

SECTION 2 deleted: STOT SE 3

SECTION 2 deleted: H335 May cause respiratory irritation.

SECTION 2 deleted: Skin Irrit. 2

SECTION 2 deleted: H315 Causes skin irritation.

SECTION 2 deleted: Eye Irrit. 2

SECTION 2 deleted: H319 Causes serious eye irritation.

SECTION 3 been added: No dangerous components.

SECTION 4 been added: Change powdered clothing.

SECTION 6 been added: Use personal protective equipment (protective gloves).

SECTION 7 been added: Avoid contact with eyes and skin.

SECTION 7 been added: Store in a dry place.

SECTION 7 been added: Do not store together with food and animal food/diet.

SECTION 8 been added: In full contact:

SECTION 8 been added: Use Safety mask. (DIN EN 149)

SECTION 10 been added: Reacts with water: generation of heat.

SECTION 11 deleted: May cause respiratory irritation.

SECTION 11 deleted: Irritant

SECTION 12 been added: Ecological data of complete product are not available.

SECTION 15 been added: not hazardous for water, acc. AwSV of 18.04.2017

Copyright: Chemiebüro®

