

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

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

#### 1.1 Product identifier

**Kebulen-heat-shrinkable-sleeve C 50**  
**Kebulen-heat-shrinkable-tubing C 50**

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

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

This is an article

**Uses advised against:**

No information available at present.

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

Kebulin-Gesellschaft Kettler GmbH & Co. KG, Ostring 9, D-45701 Herten-Westerholt

Telephone ++49(0)209/9615-0, Fax ++49(0)209/9615-190

#### 1.4 Emergency telephone

**Advisory office in case of poisoning:**

Tel.:

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

Tel.: ++49(0)209/9615-0

### SECTION 3: Composition/information on ingredients

#### 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).

Not applicable

#### 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).

This is an article.

Symbols: Not applicable

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.

**SECTION 3: Composition/information on ingredients****3.1 Substance**

n.a.

**3.2 Mixture**

<b>Zinc oxide</b>	
<b>Registration number (ECHA)</b>	-
<b>Index</b>	030-013-00-7
<b>EINECS, ELINCS</b>	215-222-5
<b>CAS</b>	CAS 1314-13-2
<b>content %</b>	0.1-<1
<b>Classification according to Directive 67/548/EEC</b>	Dangerous for the environment, N, R50 Dangerous for the environment, R53
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

<b>2,4,6-triallyloxy-1,3,5-triazine</b>	
<b>Registration number (ECHA)</b>	-
<b>Index</b>	-
<b>EINECS, ELINCS</b>	202-936-7
<b>CAS</b>	CAS 101-37-1
<b>content %</b>	0.01-<1
<b>Classification according to Directive 67/548/EEC</b>	Harmful, Xn, R22 Dangerous for the environment, N, R51-53
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	-

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

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

Typically no exposure pathway.

**Skin contact**

Wash thoroughly with water and soap.

**Eye contact**

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

**Ingestion**

Typically no exposure pathway

**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.

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

n.c.

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

Adapt to the nature and extent of fire.

**Unsuitable extinguishing media**

None known.

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

In case of fire the following can develop:

Oxides of carbon

Toxic gases.

### 5.3 Advice for firefighters

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

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

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

No special measures required.

### 6.2 Environmental precautions

Normally not necessary.

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

Pick up mechanically 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.

## SECTION 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

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

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.

Store at room temperature.

Store in a dry place.

### 7.3 Specific end use(s)

No information available at present.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Chemical Name	Carbon black	Content %:
WEL-TWA: 3,5 mg/m <sup>3</sup>	WEL-STEL: 7 mg/m <sup>3</sup>	---
BMGV: ---	Other information: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage. \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

<b>Zink oxide</b>						
<b>Area of application</b>	<b>Exposure route / Environmental compartment</b>	<b>Effect on health</b>	<b>Descriptor</b>	<b>Value</b>	<b>Unit</b>	<b>Note</b>
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5	mg/m <sup>3</sup>	
	Environment - freshwater		PNEC	20,6	µg/l	
	Environment - marine		PNEC	6,1	µg/l	
	Environment - sewage treatment plant		PNEC	52	µg/l	
	Environment - sediment, freshwater		PNEC	118	mg/kg	
	Environment - sediment, marine		PNEC	56,5	mg/kg	
	Environment - soil		PNEC	35,6	mg/kg	

## 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:

Normally not necessary.

Skin protection - Hand protection:

Normally not necessary.

Protective hand cream recommended.

Skin protection - Other:

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

Respiratory protection:

Normally not necessary.

If OES or MEL is exceeded.

Thermal hazards:

Not applicable.

Additional information on hand protection - No tests have 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

Not information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Solid
Colour:	According to specification
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	n.a.
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:	Not determined
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive
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

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Not to be expected

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

See also section 7.

None known.

### 10.5 Incompatible materials

See also section 7.

None known.

### 10.6 Hazardous decomposition products

See also section 5.2.

No decomposition when used as directed.





**Carbon black**

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>1000	mg/l	(Branchydanio rerio)	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	24h	>5600	mg/l	(Daphnia magna)	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	NOEC/NOEL	72h	10000	mg/l	(Scenedesmus subspicatus)	OECD 201 (Alga, Growth Inhibition Test)	
Water solubility			0				

**SECTION 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 02 13 waste plastic

20 01 39 plastics

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

**For contaminated packing material**

Pay attention to local and national official regulations

Recommendation:

Recycling

**SECTION 14: Transport information****General statements**

UN number:

n.a

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

UN proper shipping name:

UN 1263 PAINT (SPECIAL PROVISION 640D)

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:

Paint

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.

## SECTION 15: Regulatory information

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

For classification and labeling see Section 2.

Observe restrictions: n.a.

VOC (1999/13/EC) n.a.

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: n.a.

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).

22 Harmful if swallowed.

50 Very toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Aquatic Acute-Hazardous to the aquatic environment - acute

Aquatic Chronic-Hazardous to the aquatic environment - chronic

## Legend:

AC	Article Categories
acc., acc. to	according, according to
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Accord europeen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOEL	Acceptable Operator Exposure Level
AOX	Adsorbable organic halogen compounds
approx.	approximately
Art., Art. no.	Article number
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA	Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF	Bioconcentration factor
BGV	Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHT	Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
BMGV	Biological monitoring guidance value (EH40, UK)
BOD	Biochemical oxygen demand
BSEF	Bromine Science and Environmental Forum
bw	body weight
CAS	Chemical Abstracts Service
CESIO	Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPAC	Collaborative International Pesticides Analytical Council
CLP	Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR	carcinogenic, mutagenic, reproductive toxic
COD	Chemical oxygen demand
CTFA	Cosmetic, Toiletry, and Fragrance Association

DMEL	Derived Minimum Effect Level
DNEL	Derived No Effect Level
DOC	Dissolved organic carbon
DT50	Dwell Time - 50% reduction of start concentration
DVS	Deutscher Verband für Schweißen und verwandte Verfahren e.v. (= German Association for Welding and Allied Processes)
dw	dry weight
e.g.	for example (abbreviation of Latin 'exempli gratia'), for instance
EC	European Community
ECHA	European Chemicals Agency
EEA	European Economic Area
EEC	European Economic Community
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European list of Notified Chemical Substances
EN	European Norms
EPA	United States Environmental Protection Agency (United States of America)
ERC	Environmental Release Categories
ES	Exposure scenario
etc.	et cetera
EU	European Union
EWC	European Waste Catalogue
Fax.	Fax number
gen.	general
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GWP	Global warming potential
HET-CAM	Hen's Egg Test - Chorionallantoic Membrane
HGWP	Halocarbon Global Warming Potential
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IBC	(Code) International Bulk Chemical (Code)
IC	Inhibitory concentration
IMDG-code	International Maritime Code for Dangerous Goods
in cl.	including, inclusive
IUCLID	International Uniform Chemical Information Database
LC	lethal concentration
LC50	lethal concentration 50 percent kill
LCLo	lowest published lethal concentration
LD	Lethal Dose of a chemical
LOSO	Lethal Dose, 50% kill
LDLo	Lethal Dose Low
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
LQ	Limited Quantities
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
n.a.	not applicable
n.av.	not available
n.c.	not checked
n.d.a.	no data available
NIOSH	National Institute of Occupational Safety and Health (United States of America)
NOAEC	No Observed Adverse Effective Concentration
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
ODP	Ozone Depletion Potential
OECD	Organisation for Economic Co-operation and Development
org.	organic
PAH	polycyclic aromatic hydrocarbon
PBT	persistent, bioaccumulative and toxic
PC	Chemical product category
PE	Polyethylene
PNEC	Predicted No Effect Concentration
POCP	Photochemical ozone creation potential
ppm	parts per million

PROC	Process category
PTFE	Polytetrafluorethylene
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No.	9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID	Reglement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure Activity Relationship
SU	Sector of use
SVHC	Substances of Very High Concern
Tel.	Telephone
ThOD	Theoretical oxygen demand
TOC	Total organic carbon
TRGS	Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
VbF	Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC	Volatile organic compounds
vPvB	very persistent and very bioaccumulative
WE.L-TWA, WEL-STEL	WEL-TWA = Workplace Exposure limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
WHO	World Health Organization
wwt	wet weight

These statements were made by:

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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.