

SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Tradename: MIXOL® ME 2 Silber (Silver)

1.2. Relevant identified uses of the substances or mixture and uses advised against

Relevante identified uses of the substance or mixture

Industry sector: Industrial Performance Chemicals
Paints, lacquers and varnishes industry
Polymers industry
Printing Inks Industry

Type of use: Colourant preparation

1.3. Details of the supplier of the safety data sheet

Identification of the company:

MIXOL-PRODUKTE

Diebold GmbH

Carl-Zeiss-Str. 17-19

73230 Kirchheim/Teck

Phone: 0049 / 7021 / 950090

Fax: 0049 / 7021 / 56030

Information to substance / mixture:

Division: Technics

Phone: +49(0)7021 / 950090

E-mail: Technik@mixol.de

1.4. Emergency telephone number

GBK Gefahrgut Büro GmbH, Ingelheim, Germany

From outside US: (001) 352-323-3500

(First call in English, response in your language is possible)

US & Canada (toll free): 1-800-5355-053

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance / mixture

Classification (EC) No.1272/2008):

Not a hazardous substance or mixture.

2.2. Label elements

Labeling(Regulation (EC) No.1272/2008):

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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SECTION 3: COMPOSITION / INFORMATION TO INGREDIENTS

3.1. Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. INDEX No. Registration No.	Classification Regulation (EC) No. 1272/2008	Concentration (% w/w)
Aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1 01-2119529243-45	Flam. Sol. 1; H228	≥ 25 - ≤ 50

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Discription of first aid measures

General information:

No hazards which requires special first aid measures.

Move the victim to fresh air.

Do not leave the victim unattended.

After inhalation:

If unconscious place in recovery position and seek medical advice.

If symptoms persist, call a physician.

After contact with skin:

Wash off immediately with soap and plenty of water.

After contact with eyes:

Remove contact lenses.

If eye irritation persists, consult a specialist.

Immediately flush eye(s) with plenty of water.

After swallowing:

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

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

Symptoms:

No information available.

Hazards:

No information available.

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

Treatment:

No information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinction agents:

Dry sand

ABC powder

Foam

Extinction agents, not suitable out of safety reasons:

Water

5.2. Special hazards arising from the substance or mixture

This information is not available.

5.3. Advice for firefightersSpecial protective equipment for firefighting:

Wear self contained breathing apparatus for the fire fighting if necessary.

Further information:

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate personnel to safe areas.

6.2. Environment precautions

This information is not available.

6.3. Methods and material for containment and cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Do not flush with water.

Keep in suitable, closed containers for disposal.

Use mechanical handling equipment.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4. Cross Reference to other sectionsAdditional information:

See section 8 for information on personal protection equipment.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**Advice on safe handling:

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

Hygiene measures:

General industrial hygiene practice.

7.2. Conditions for safe storage, including any incompatibilitiesRequirements for storage areas and containers:

Electrical installations / working materials must comply with the technological safety standards.

Earthing of containers and apparatuses is essential.

Reaction with water liberates extremely flammable gas (hydrogen).

Take measures to prevent the build up of electrostatic charge.

Use explosion-proof equipment. Store in original container.

Keep containers tightly closed in a cool, well-ventilated place.

Keep away from sources of ignition - No smoking.

Keep container closed when not in use.

Further information on storage conditions:

Protect from humidity and water.

Storage stability:

Shelf-life: at least 18 month.

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Advice on common storage:

Do not store near acids.

Do not store together with oxidizing and self-igniting products.

Keep away from oxidising agents and strongly acid or alkaline materials.

Never allow product to get in contact with water during storage.

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Other data:

No decomposition if stored and applied as directed.

7.3. Specific end use(s)

This information is not available.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Aluminium powder (stabilized)	7429-90-5	TWA (Inhalable)	10 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m ³ 8-hour TWA of inhalable dust or 4 mg/m ³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.			
aluminium	7429-90-5	TWA (Respirable)	4 mg/m ³	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m ³ 8-hour TWA of inhalable dust or 4 mg/m ³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.			
aluminium	7429-90-5	TWA	10 mg/m ³	2005-04-06	GB EH40
Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m ³ 8-hour TWA of inhalable dust or 4 mg/m ³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes.			

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		<p>The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			
		TWA (Respirable)	4 mg/m ³	2005-04-06	GB EH40
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Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
aluminium powder (stabilised)	Workers	Inhalation	long term – local effects	3.72 mg/m ³
	Consumers	Oral	long term – systemic effects	3.95 mg/kg

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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

8.2. Personal protective equipment

Eye protection:

Safety glasses

Hand protection:

Solvent resistant gloves

Preventive skin protection by use of skin-protection agents is recommended.

Prior to contact with the watersoluble substance/product/preparation apply waterinsoluble skin-protecting agent (fat-containing film former or W/O emulsions)

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

No personal respiratory protective equipment normally required.

Use suitable breathing protection if workplace concentration requires.

Body and skin protection:

Protective suit

8.3. Environment exposure controls

Water:

The product should not be allowed to enter drains, water courses or soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Appearance

Physical state:	liquid
Colour:	silver-grey
Odour:	characteristic
pH:	7
Freezing point:	no data available
Boiling point/boiling range:	no data available
Flash point:	> 100 °C
Bulk density:	no data available
Flammibility(solid, gas)	no data available
Upper explosion limit:	no data available
Lower explosion limit:	no data available
Vapour pressure at 20 °C:	no data available
Density at 20 °C:	no data available
Solubility in water:	no data available
Solubility in other solvents:	no data available
Partition coefficient n-octanol/water:	no data available
Auto ignition temperature:	no data available
Thermal decomposition:	no data available
Viscosity, dynamic:	no data available

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Viscosity, kinematic: no data available
Flow time: no data available

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical Stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Hazardous reactions:

Stable under recommended storage conditions.

10.4. Conditions to avoid

No data available.

Do not allow evaporation to dryness.

10.5. Incompatible Materials

Materials to avoid:

No data available.

10.6. Hazardous decomposition products

Other information:

No data available.

SECTION 11: TOXICOLOGIC INFORMATION

11.1. Acute Toxicity

Informations related to the product:

Not classified based on available information.

Informations related to the component aluminium powder stabilized:

Acute inhalation toxicit: LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Skin corrosion/irritation

Informations related to the product:

Result: No skin irritation

Remarks: Based on available data, the classification criteria are not met.

Serious eye damage/ eye irritation

Informations related to the product:

Result: No skin irritation

Remarks: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Informations related to the product:

Not classified based on available information.

Germ cell mutagenicity

Informations related to the product:

Not classified based on available information.

Carcinogenicity

Informations related to the product:

Not classified based on available information.

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Reproductive toxicity

Informations related to the product:

Not classified based on available information.

STOT – single exposure

Informations related to the product:

Not classified based on available information.

STOT – repeated exposure

Informations related to the product:

Not classified based on available information.

Aspiration toxicity

Informations related to the product:

Not classified based on available information.

Further Information

Informations related to the product:

No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Informations related to the component copper:

Ecotoxicology Assessment:

Acute aquatic toxicity:

This product has no known ecotoxicological effects

Chronic aquatic toxicity:

This product has no known ecotoxicological effects.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other adverse effects

Informations related to the product:

Additional ecotoxicological remarks: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

European Waste Catalogue: 08 01 11 - waste paint and varnish containing organic solvents or other dangerous substances.

13.1. Waste treatment methods

Product:

In accordance with local and national regulations.

Contaminated packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal.

In accordance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION**14.1. to 14.5.**

ADR: Not dangerous goods
IATA: Not permitted for transport
IMDG: Not dangerous goods

14.6. Transport / Additional Information

No dangerous goods according to transport regulations.
Due to the risk of hydrogen development we recommend to refrain from airfreighting this/these product(s).
Not classified as dangerous in the meaning of transport regulations.

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

Not applicable for product as supplied.

SECTION 15: LEGISLATIVE PROVISIONS**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Candidate List of Substances of
Very High Concern for Authorisation (Article 59): Not applicable

15.2. Chemical safety assessment

This information is not available.

SECTION 16: OTHER INFORMATION

Observe national and local legal requirements

List of the text of the hazard statements mentioned section 3 (H-phrases) :

H228 Flammable solid

Full text of other abbreviations

Flam. Sol.: Flammable solids
GB EH40: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA: Long-term exposure limit (8-hour TWA reference period)

Change compared to the previous version:

Change in the composition

Legend

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
DMEL	Derived Minimal Effect Level (genotoxic substances)
DNEL	Derived No Effect Level
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)

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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 Development
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
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

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example, "1,35 g/cm³" means "one point three five g/cm³").

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. MIXOL-PRODUKTE Diebold GmbH makes no warranties, express or implied, as to the information accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of MIXOL products for its particular application. Nothing included in this information waives any of MIXOL's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing.

Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing MIXOL products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products.

For additional information, please contact MIXOL-PRODUKTE Diebold GmbH.