

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

Name of product Anti Friction Coating MoS2
Code-Nr. 115390

**1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended intended purpose(s)**

Technical Aerosols

1.3. Details of the supplier of the safety data sheet**Distributor**

WEICON GmbH & Co. KG
Königsberger Str. 255,, DE-48157 Münster
Phone ++49(0)251 / 9322 - 0, Fax ++49(0)251 / 9322 - 244
E-Mail : msds@weicon.de
Internet : www.weicon.de

Advice

Produktsicherheit / Product-Safety-Department
Phone ++49(0)251 / 9322 - 0
E-mail (competent person):
msds@weicon.de

1.4. Emergency telephone number

EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel:
++44 1865 407333 (English)
TRANSPORT EMERGENCY CONTACT - UK, UAE, South
Africa (24h): Tel: ++44 1865 407333 (English)

Manufacturer

WEICON GmbH & Co. KG
Königsberger Str. 255, DE-48157 Münster

1.4. Emergency telephone number

GIFTNOTRUF/TRANSPORTNOTRUF - Deutschland (24h):
Tel: ++49 69 222 25285 (Deutsch, Englisch)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aerosol 1	H222, H229	
STOT SE 3	H336	
Aquatic Chronic 3	H412	

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS02



GHS07

Signal word

Danger

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container to hazardous or special waste collection point.

Hazardous ingredients for labeling

pentane

Supplemental Hazard information (EU)

Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Product has an anesthetic effect.

Information pertaining to special dangers for human and environment

In extensive use, formation of flammable / explosive vapour-air mixture is possible.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Description

Mixture of active ingredients with propellant

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
75-28-5	200-857-2	isobutane	10 - 20	Flam. Gas 1, H220 / Press. Gas
106-97-8	203-448-7	butane	30 - 50	Flam. Gas 1, H220 / Press. Gas
109-66-0	203-692-4	pentane	10 - 20	Flam. Liq. 2, H225 / Asp. Tox. 1, H304 / STOT SE 3, H336 / Aquatic Chronic 2, H411
123-86-4	204-658-1	n-butyl acetate	10 - 20	Flam. Liq. 3, H226 / STOT SE 3, H336
64742-82-1	265-185-4	Naphtha (petroleum), hydrotreated heavy (NOTA P)	0,5 - 0,99	Asp. Tox 1, H304 / STOT SE 3, H336 / Flam. Liq. 3, H226 / Aquatic Chronic 2, H411 / , EUH066
74-98-6	200-827-9	propane	10 - 20	Flam. Gas 1, H220 / Press. Gas

REACH

CAS No	Name	REACH registration number
74-98-6	propane	01-2119486944-21

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with soap and water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Seek 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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry powder

Carbon dioxide

sand



Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Danger of bursting

In case of fire formation of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.

Do not discharge into the drains or bodies of water..

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

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

After taking up the material dispose according to regulation.

Additional Information

Sort out leaky cans and dispose according to regulations.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

At work do not eat, drink and smoke.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Do not spray on a naked flame or any incandescent material.

Pressurized container.



Do not pierce or burn even after use.
Vapours can form an explosive mixture with air.
Take precautionary measures against static discharges.
Avoid effect of heat.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Adhere to administrative regulations relating to storage of compressed gas cylinders / containers.

Further information on storage conditions

Protect from heat and direct solar radiation.

Storage temperature may not exceed 50°C (=122°F).

Store container at cool and aired place.

7.3. Specific end use(s)

Recommendation(s) for intended use

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
106-97-8	Butane	8 hours	1450	600	EH40/2005
		Short-term	1810	750	

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
109-66-0	pentane	8 hours	3000	1000	

DNEL-/PNEC-values

DNEL worker

CAS No	Substance name	Value	Code	Remark
123-86-4	n-butyl acetate	960 mg/m3	DNEL acute inhalative (local)	
		960 mg/m3	DNEL acute inhalative (systemic)	
		480 mg/m3	DNEL long-term inhalative (local)	
		480 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
123-86-4	n-butyl acetate	0,018 mg/l	PNEC aquatic, marine water	
		0,18 mg/l	PNEC aquatic, freshwater	
		0,981 mg/kg	PNEC sediment, freshwater	

Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls

Respiratory protection

If ventilation insufficient, wear respiratory protection.

Short-term: filter apparatus, filter AX/P2, otherwise environment-independent breathing apparatus.

**Anti Friction Coating MoS2****Hand protection**

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile rubber; 0,4mm; 480min;60min.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

aerosol

Colour

grey

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not applicable				
Melting point / Freezing point	not determined				
Flash point	not applicable				Aerosol
Vapourisation rate	not determined				
Flammable (solid)	not applicable				
Flammability (gas)	not determined				
Ignition temperature	285 °C				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	1,2 Vol-%				
Upper explosion limit	10,9 Vol-%				
Vapour pressure	3300 hPa	20 °C			
Relative density	0,85 g/cm3	20 °C			
Vapour density	not determined				



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	Value	Temperature	at	Method	Remark
Solubility in water					No or low immiscibility
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not determined				
Viscosity kinematic	not determined				

Oxidising properties

No information available.

Explosive properties

The product is considered non-explosive ; nevertheless explosive vapour/air mixtures can be generated .

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat.

Formation of explosive gas/air mixtures.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
Skin irritation	non-irritant			
Eye irritation	non-irritant			



	Value/Validation	Species	Method	Remark
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Skin sensitization non-sensitizing

Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

SECTION 12: Ecological information**12.1. Toxicity**

No information available.

12.2. Persistence and 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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects**General regulation**

Toxic to aquatic life, fishes and plankton.

Even in the event of low quantities penetration into the underground drinking water is contaminated.

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste code No.**

15 01 04

15 01 10*

Name of waste

metallic packaging

packaging containing residues of or contaminated by hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

Recommendations for the product

Remove in accordance with local official regulations.

Recommendations for packaging

Dispose of according to the local waste regulations.

General information

For proper waste disposal a complete emptying of the tin is necessary.

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)	2.1	2.1	2.1
14.4. Packing group	-	-	-
14.5. Environmental hazards	No	No	No

14.6. Special precautions for user

Caution: Gases

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable**Land and inland navigation transport ADR/RID**

Hazard label(s) 2.1

tunnel restriction code D

Classification code 5F

transport in "limited quantities" according to 3.4 ADR is possible

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****VOC standard****VOC content** 87,28 %**VOC value** ca.597 g/L**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

For industrial use only.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 8.4

EUH066 Repeated exposure may cause skin dryness or cracking.

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.



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Anti Friction Coating MoS₂

- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.