Revision: 02.08.2023



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.08.2023 Version number 15 (replaces version 14)

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

- · 1.1 Product identifier
- · Trade name: Mipa 2K-PU-Industry-Prefilled-Spray
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Prefilled spray
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

MIPA SE

Am Oberen Moos 1 D-84051 Essenbach Tel.: +49 8703 92 20 Fax.: +49 8703 92 21 00

e-mail: sdb-registratur@mipa-paints.com

www.mipa-paints.com

· 1.4 Emergency telephone number: International emergency number: +49(0)700 24112112 (MIP)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

acetone

Hexamethylene diisocyanate, oligomers

n-Butyl acetate

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.

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· Precautionary statements

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking. EUH204 Contains isocyanates. May produce an allergic reaction.

Restricted to professional users.

Buildup of explosive mixtures possible without sufficient ventilation.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37	dimethyl ether → Flam. Gas 1A, H220; Press. Gas (Liq.), H280	50-100%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49	acetone ♦ Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	25-50%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-Butyl acetate The Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	5-<10%
CAS: 28182-81-2 NLP: 500-060-2 Reg.nr.: 01-2119485796-17	Hexamethylene diisocyanate, oligomers ♠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335, EUH204	5-<10%

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately rinse with water.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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• 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Hydrogen cyanide (HCN)

- 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Contain and collect spillages with non-combustible absorbent materials (e.g. sand, earth, diatomaceous earth) and place in a suitable container.

Decontaminate immediately with suitable mixture (flammable):

- as such usable (inflammatory!):

water 45 Vol.% ethanol or isopropanol 50 Vol.% ammonia solution (Density= 0.88) 5 Vol.%

- alternatively (non-flammable):

sodium carbonate 5 Vol.% water 95 Vol.%

Add the same decontaminant to any residues and allow to stand for several days in an non-sealed container until no further reaction occurs. Once this stage is reached, close the container and dispose of in accordance with the waste regulations (see Section 13).

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Persons with a history of asthma, allergies or chronic or recurrent respiratory diseases should only be employed in processes in which this product is used under appropriate medical supervision.

· Information about fire - and explosion protection:

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

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Keep ignition sources away - Do not smoke.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

Information about storage in one common storage facility:

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis. Store away from foodstuffs.

· Further information about storage conditions:

Keep container tightly sealed.

Store separately from oxidising agents, strongly alkaline and strongly acidic materials, amines, alcohol and water.

- · Storage class: 2 B
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

		at the workplace:

115-10-6 dimethyl ether

WEL	Short-term value: 958 mg/m³, 500 ppm
	Long-term value: 766 mg/m³. 400 ppm

67-64-1 acetone

WEL	Short-term value: 3620 mg/m³, 1500 ppm
	Long-term value: 1210 mg/m³, 500 ppm

123-86-4 n-Butyl acetate

WEL	Short-term value: 966 mg/m³, 200 ppm
	Long-term value: 724 mg/m³, 150 ppm

28182-81-2 Hexamethylene diisocyanate, oligomers

EBW Short-term value: 0.5 mg/m3

exposition evaluation valu TRGS 430 (EBW)

- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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.

Breakthrough time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Safety glasses



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state Aerosol

· Colour: According to product specification

· Odour: Characteristic · Odour threshold: Not determined. · Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and

boiling range -24.9 °C (115-10-6 dimethyl ether)

· Flammability Not applicable.

· Lower and upper explosion limit

· Lower: 2.6 Vol % · Upper: 18.6 Vol %

<0 °C (DIN EN ISO 1523:2002) · Flash point:

Auto-ignition temperature: 235 °C (DIN 51794) Decomposition temperature: Not determined. · pH Not determined.

· Viscosity:

Not determined. · Kinematic viscosity · Dynamic: Not determined.

· Solubility

· water: Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log

value) Not determined. · Vapour pressure at 20 °C: 5.200 hPa

· Density and/or relative density

Density at 20 °C: 0.723 g/cm3 (DIN EN ISO 2811-1)

· Relative density Not determined.

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Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Aerosol
Important information on protection of hea	alth
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	In use, may form flammable/explosive vapour-air
	mixture.
Solvent content:	
VOC (EC)	94.70 %
Solids content (weight-%):	5.3 %
Change in condition	
Evaporation rate	Not applicable.
classes Explosives Flammable gases	Void Void
Flammable gases Aerosols	
	container: May burst if heated.
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	
flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void

Void

Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability

· Corrosive to metals · Desensitised explosives

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:

Possible in traces.

Nitrogen oxides

Hydrogen chloride (HCI)

Hydrogen cyanide (prussic acid)

Carbon monoxide

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Nitrogen oxides (NOx)

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SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation

This product is a respiratory sensitiser when sprayed. COSHH requires that persons exposed are subject to appropriate health surveillance.

May cause an allergic skin reaction.

· STOT-single exposure May cause drowsiness or dizziness.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

·IATA

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

AEROSOLS, flammable

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name	
ADR	UN1950 AEROSOLS
· IMDG	AEROSOLS

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(Contd. of page 7) · 14.3 Transport hazard class(es) · ADR 2 5F Gases. · Class · Label 2.1 · IMDG, IATA 2.1 Gases. · Class ·Label 2.1 · 14.4 Packing group · ADR, IMDG, IATA Void · 14.5 Environmental hazards: · Marine pollutant: No · 14.6 Special precautions for user Warning: Gases. · Hazard identification number (Kemler code): -· EMS Number: F-D.S-U · Stowage Code SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. · Segregation Code SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2. · 14.7 Maritime transport in bulk according to IMO instruments Not applicable. · Transport/Additional information: · Limited quantities (LQ) 1L · Transport category 2 · Tunnel restriction code D 1L · Limited quantities (LQ) UN "Model Regulation": UN 1950 AEROSOLS, 2.1



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SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · National regulations:
- · Additional classification according to Decree on Hazardous Materials, Annex II:

Class	Share in %
NK	50-100

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH204 Contains isocyanates. May produce an allergic reaction.

· Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1A: Flammable gases - Category 1A

Aerosol 1: Aerosols - Category 1

Press. Gas (Liq.): Gases under pressure - Liquefied gas

Flam. Liq. 2: Flammable liquids - Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.