

Safety data sheet AM Tunnel2K

in accordance with Regulation (EU) no. 453/2010

SECTION 1: Name of the substance and/or the mixture and the company

1.1 Product identifier

AM Tunnel2K

1.2 Relevant identified use of the substance or mixture and uses which are not recommended

Two component paint system.

1.3 Details concerning the suppliers which have prepared the safety data sheet

Manufacturer/Supplier	AM Surface GmbH
Street/PO Box	Spissenstrasse 72
Country ID/Postcode/Town	CH-6045 Meggen
E-mail	info@am-surface.ch
Telephone	+41 41 377 28 67
Fax	+41 41 377 28 45

1.4 Emergency number

+41 41 377 28 67 – After close of business +41 79 222 31 03

SECTION 2: Possible hazards

2.1 Classification of the material or mixture in accordance with Regulation (EC) no. 1272/2008

Sensitisation – Skin, hazard category 1

2.2 Labelling elements in accordance with Regulation (EC) no. 1272/2008



Signal word **Warning**

Hazard notes

H317	May cause an allergic skin reactions.
EUH205	Contains epoxy constituents. Can cause allergic reactions.

Safety notes

P261	Avoid breathing dust/fumes/gas/mist/vapours/spray.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.

Hazard-determining component(s) for labelling

4,4'-Isopropylidencyclohexanol, oligomer reaction product with 1-chlorine-2,3-epoxypropane.

2.3 Other hazards

Not known.

SECTION 3: Composition/Information concerning component parts

3.1 Substances

This product is a mixture.

3.2 Mixtures

Epoxy resins with additives.

Hazardous contents

4,4'-Isopropylidencyclohexanol, oligomer reaction product with 1-chlorine-2,3-epoxypropane
 EC no. 500-070-7 CAS no. 30583-72-3 Registration no. 01-2119959495-22
 Percentage 5 - < 15%
 Classification in accordance with Directive 67/548/EEC R43 – R52-53
 Classification in accordance with Regulation (EC) no. 1272/2008 Skin sens. 1; H317 Aquatic chronic 3; H412

2-butoxyethanol
 EC no. 203-905-0 CAS no. 111-76-2
 Percentage 1 - < 2%
 Classification in accordance with Directive 67/548/EEC Xn; R20/21/22 – Xi; R36/38
 Classification in accordance with Regulation (EC) no. 1272/2008 Acute tox. 4; H302 – Acute tox. 4; H312
 Skin irrit. 2; H315 – Eye irrit. 2; H319
 Acute tox. 4; H332

There is a common workplace limit value (see section 8).

Methanol
 EC no. 200-659-6 CAS no. 67-56-1 Registration no. 01-2119433307-44
 Percentage < 0.3%
 Classification in accordance with Directive 67/548/EEC F; R11 – T; R23/24/25-R39/23/24/25
 Classification in accordance with Regulation (EC) no. 1272/2008 Flam. Liq. 2; H225 – Acute tox. 3; H301
 Acute tox. 3; H311 – Acute tox. 3; H331
 STOT SE 1; H370

There is a common workplace limit value (see section 8).

The wording of the hazard notes is found in section 16.

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

General notes	Consult a doctor. Show this safety data sheet to the doctor providing the treatment.
following inhalation	Bring the person out into the open air. If the affected person feels unwell, consult a doctor.
following contact with the skin	Take off soiled clothing, wash the affected skin with a lot of soap and water. If the affected person feels unwell, consult a doctor.
following contact with the eyes	With open eyelids, rinse thoroughly under running water, consult an eye specialist straight away.
after swallowing	Rinse out mouth and drink plenty of water, consult a doctor.

4.2 The most important acute and delayed symptoms and effects

No data available.

4.3 Information relevant to immediate assistance provided by a doctor and special treatment

No data available.

SECTION 5: Measures for fighting fires**5.1 Extinguishing media****Suitable extinguishing media**

Spray water, extinguishing powder, CO₂, alcohol-proof foam.

Unsuitable extinguishing media

Water released at full speed (full jet).

5.2 Special hazards emanating from the substance or mixture

Thermal decomposition into carbon monoxide and organic by-products.

5.3 Information for the fighting of fires

Leak proof suit which guards against fire with breathing apparatus that is independent of the circulating air.

SECTION 6: Measures in the event of unintentional release**6.1 Personal precautions, protective equipment and procedures which are to be applied in the event of emergencies**

See section 8 "Limitation and monitoring of the exposure/Personal protective equipment".

6.2 Environmental protective measures

Prevent further discharge or spillage, if this is possible without danger. Do not allow substance to reach bodies of water. Release into the environment should be avoided.

6.3 Methods and material for retention and cleaning

Absorb with inert absorption agents and dispose according to the local laws, unless usable in some other way.

6.4 Reference to other sections

For disposal, see section 13.

SECTION 7: Handling and storage**7.1 Safeguards for safe handling**

Store the container in a cool place, keep sealed tight and ensure adequate ventilation.

7.2 Conditions for safe storage taking incompatibilities into account

Keep the container away from concentrated mineral acids and strong oxidants. Cool vulnerable containers with sprayed water.

7.3 Specific end uses

No data available.

SECTION 8: Limitation and monitoring of the exposure/Personal protective equipment**8.1 Parameters to be monitored****Component parts with workplace related limit values which have to be monitored (2000/39/EC)**

2-butoxyethanol	
EC no. 203-905-0	CAS no. 111-76-2
Limit value (8 h)	98 mg/m ³ (20 ppm)
Limit value (15 min)	246 mg/m ³ (50 ppm)
Note	Risk of reabsorption into the skin.

Component parts with workplace related limit values which have to be monitored (2006/15/EC)

Methanol	
EC no. 200-659-6	CAS no. 67-56-1
Limit value (8 h)	260 mg/m ³ (200 ppm)
Limit value (15 min)	Not stated.
Note	Risk of reabsorption into the skin.

Component parts with workplace related limit values which have to be monitored (TRGS 900 Germany)

2-butoxyethanol	
EC no. 203-905-0	CAS no. 111-76-2
Workplace limit value	10 ml/m ³ (ppm) – 49 mg/m ³
Peak limit,	
Overrun factor	4(l)
Remarks	H, Y, AGS

Methanol	
EC no. 200-659-6	CAS no. 67-56-1
Workplace limit value	200 ml/m ³ (ppm) – 270 mg/m ³
Peak limit,	
Overrun factor	4(l)
Remarks	DFG, EU, H, Y

Component parts with workplace related limit values which have to be monitored (TRGS 903 Germany)

2-butoxyethanol	
EC no. 203-905-0	CAS no. 111-76-2
Biological limit value in the workplace	100 mg/l
Parameter	Butoxyacetic acid
Examined material	Urine
Time of the sample	In the case of long term exposure: After several earlier shifts.

Methanol	
EC no. 200-659-6	CAS no. 67-56-1
Biological limit value in the workplace	30 mg/l
Parameter	Methanol
Examined material	Urine
Time of the sample	End of exposure and/or end of shift. In the case of long term exposure: After several earlier shifts.

8.2 Limitation and monitoring of the exposure

Suitable technical control equipment

Avoid skin and eye contact. When working, do not eat, drink or smoke. Wear skin protection as a preventative measure.

Personal protective equipment

Respiratory protection	If the workplace limit value is exceeded in closed rooms, a breathing apparatus should be used which is independent of the circulating air.
Eye protection	Use leak proof protective goggles with side protection.
Skin protection	Use safety gloves in accordance with EN-374-2 made from butyl rubber, thickness 0.5 mm, breakthrough time \geq 480 min. or made from fluorine rubber, thickness 0.4 mm, breakthrough time \geq 480 min.
Personal protection	Use protective clothing made from rubber or plastic.

SECTION 9: Physical and chemical properties

9.1 Information concerning the basic physical and chemical properties

Visual appearance

Aggregate state	liquid
Colour	pure white
Odour	according to the glycol ether
Melting point/Melt range	Not available.
Initial boiling point/boiling range	Not available.
Flashpoint	> 60 °C
pH-value (at T = 20 °C)	Not applicable.
Flammability	Not easily flammable.
Ignition temperature	Not available.
Auto-ignitability	Not applicable.
Oxidising properties	Not applicable.
Risk of explosion	Not applicable.
Lower explosion limits	Not applicable.
Upper explosion limits	Not applicable.
Density (at T = 20 °C)	1.47 g/ml
Solubility in H ₂ O (at T = 20 °C)	Practically non-soluble.
Vapour pressure (at T = 20 °C)	Not available.
Vapour pressure (air = 1)	Not available.
Distribution coefficient (n-octanol/water)	Not available.
Viscosity (at T = 20 °C)	Not available.
Solvent separation test	Not applicable.
Solvent content (VOC EU)	18 g/l
Evaporation number	Not available.

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Strong oxidants and concentrated mineral acids.

10.4 Conditions to be avoided

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Only in the event of fire, see section 5.2.

SECTION 11: Toxicological information

11.1 Information relating to toxicological effects

Mixtures

Acute toxicity

No data available.

Irritation

No data available.

Corrosive effect

No data available.

Sensitisation

The product has a sensitising effect upon contact with the skin.

Toxicity in the event of repeated administration

No data available.

Carcinogenicity

No data available.

Mutagenicity

No data available.

Reproductive toxicity

No data available.

Other information

No data available.

SECTION 12: Environment related information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulation potential

No data available.

12.4 Mobility in the soil

No data available.

12.5 Results of the PBT and vPvB evaluation

In accordance with the present information, the criteria for classification as a PBT and/or vPvB are not fulfilled.

12.6 Other harmful effects

Product that leaks damages bodies of water as a result of oxygen depletion and general pollution.

SECTION 13: Notes concerning disposal

13.1 Procedure for handling waste

Hazardous waste in accordance with the European waste catalogue (2000/532/EC). If salvaging is not possible, waste has to be disposed of in accordance with the local laws. Do not dispose of in the sewage system.

Waste code

20 01 27 Paints, print colours, glues and synthetic resins which contain hazardous substances.

15 01 10 Packaging which contains the residue of hazardous substances or is contaminated as a result of hazardous substances.

SECTION 14: Information concerning transportation

14.1 UN number

Not applicable.

14.2 Proper UN shipping term

ADR/RID / IMDG code / ICAO TI / IATA DGR

Not applicable.

14.3 Transportation hazard class(es)

Not applicable.

14.4 Packaging group

Not applicable.

14.5 Environmental hazards

Labelling of substances which are harmful to the environment

ADR/RID / IMDG code / ICAO TI / IATA DGR Not applicable.

Marine pollutant Not applicable.

14.6 Special cautionary notes for the user

Not available.

14.7 Conveyance of bulk cargo in accordance with appendix II of the MARPOL Convention 73/78 and the IBC code

Not applicable.

SECTION 15: Statutory provisions

15.1 Provisions concerning safety, health and environmental protection/specific laws for the substance or mixture

EU provisions

Entry in appendix I of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances
Not applicable.

Directive 1998/8/EC concerning the placing of biocidal products on the market
Not applicable.

Regulation (EC) no. 648/2004 (Detergent regulation)
Not applicable.

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC)
Not applicable.

German regulations

Limitation of use Yes.

Technical instructions on air quality Follow limit values for organic materials in accordance with 5.2.5 and for particles of paint in accordance with 5.4.5.1.

Water hazard class Water hazard class 2 (hazardous in bodies of water)

Storage class in accordance with -
Technical rules for hazardous substances 510 Storage class 10 (flammable fluids, unless LGK 3)

Other provisions, restrictions and regulations relating to prohibitions

Follow technical rules for hazardous substances 540.

15.2 Substance safety assessment

The mixture has not been subjected to any safety assessment.

SECTION 16: Other information

Wording of the hazard notes in accordance with section 3

Flam. Liq. 2; H225	Flammable liquids, hazard category 2; Easily flammable liquid and vapour.
Acute tox. 3; H301	Acute tox (oral), hazard category 3; toxic if swallowed.
Acute tox. 4; H302	Acute tox (oral), hazard category 4; Harmful if swallowed.
Acute tox. 3; H311	Acute tox (skin), hazard category 3; toxic in contact with skin.
Acute tox. 4; H312	Acute tox (skin), hazard category 4; Harmful in contact with skin.
Skin. irrit. 2; H315	Burning/Irritation of skin, hazard category 2; Causes skin irritation.
Skin sens. 1; H317	Sensitisation – skin, hazard category 1; May cause allergic skin reactions.
Eye irrit. 2; H319	Causes serious eye damage/irritation, hazard category 2; Causes serious eye irritation.
Acute tox. 3; H331	Acute tox. (inhalation), hazard category 3; Toxic if inhaled.
Acute tox. 4; H332	Acute tox. (inhalation), hazard category 4; Harmful if inhaled.
STOT SE 1; H370	Specific target organ toxicity (single exposure), hazard category 1; causes organ damage upon contact with the skin, inhalation and when swallowed.
Aquatic chronic 1; H412	Chronic hazard in bodies of water, hazard category 3; Harmful to aquatic life with long-lasting effects.
R11	Highly flammable.
R20/21/22	Harmful by inhalation, harmful if swallowed and harmful in contact with skin.
R20/24/25	Harmful by inhalation, toxic if swallowed and toxic in contact with skin.
R39/23/24/25	Toxic: Risk of very serious irreversible effects, toxic by inhalation, toxic in contact with skin, toxic if swallowed.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R52	Harmful to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.

Notes

This safety data sheet has been compiled on the basis of the applicable EU and German provisions. It reflects the current body of knowledge and is not a contractual assurance of product qualities. This information should not be changed or transferred to other products. Copying an unaltered document is permitted.

Abbreviations

AGS	Committee for hazardous substances.
AGW	Workplace limit value.
BGW	Biological limit value in the workplace.
DFG	Deutsche Forschungsgemeinschaft.
EU	European Union.
H	Risk of absorption by the skin.
LGK	Storage class.
PBT	Persistent, bioaccumulative and toxic
TRGS	Technical rules for hazardous substances.
vPvB	Very persistent and very bioaccumulative.
WGK	Water hazard class.
Y	There is no risk of foetal damage when AGW and BGW are adhered to.