SAFETY DATA SHEET www.zettex.com

according to 1907/2006/EC, Article 31

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SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier Trade name: Zettex Underbody Coating Aerosol

- · Article number:
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- \cdot Application of the substance / the mixture <code>Surface</code> protection
- 1.3 Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Zettex Europe BV Plaza 20, 4782 SK Moerdijk
- The Netherlands +31(0)888-938839 info@zettex.nl www.zettex.nl
- 1.4 Emergency telephone number: Zettex Europe BV 031 (0) 888 938 839 (Mon-Fri 09:00-17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 GHS02 flame Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated. GHS09 environment Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects. GHS07 Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335-H336 May cause respiratory irritation. 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 CLP regulation.

· Hazard pictograms



· Signal word Danger

 Hazard-determining components of labelling: Hydrocarbons,C9,aromatics
 Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics butanone
 Hydrocarbons, C6-C7, n-alkanes, isoalkanes,cyclics, <5% n-hexane

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• Hazard statemen	
	mely flammable aerosol. Pressurised container: May burst if heated.
	es serious eye irritation.
	cause respiratory irritation. May cause drowsiness or dizziness.
	c to aquatic life with long lasting effects.
· Precautionary st	
P101	If medical advice is needed, have product container or label at hand.
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.
P260	Do not breathe spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	3 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P403	Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
 Additional information 	mation:
EUH066 Repeate	d exposure may cause skin dryness or cracking.
Buildup of explos	ive mixtures possible without sufficient ventilation.
· 2.3 Other hazard	
• Results of PBT a	nd vPvB assessment
• PBT: Not applica	ble.

• **vPvB**: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

*

· Description: Active substance with propellant

• Dangerous components:		
EC number: 918-668-5 Fl	Hydrocarbons,C9,aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	10-<25%
CAS: 8052-42-4 A	Asphalt ubstance with a Community workplace exposure limit	10-<25%
	oropane Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-<25%
EC number: 919-857-5 ar	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336	10-<25%
	outanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	2.5-<10%
EC number: 921-024-6 Fl	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	2.5-<10%
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CAS: 106-97-8	butane (containing $< 0.1\%$ butadiene (203-450-8))	2.5-<10%
EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	Flam. Gas 1, H220; Press. Gas (Comp.), H280	
CAS: 75-28-5	isobutane (containing < 0,1 % butadiene (203-450-8))	1-<2.5%
EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	Flam. Gas 1, H220; Press. Gas (Comp.), H280	
CAS: 64-17-5	ethanol	0.1-<1%
EINECS: 200-578-6 Reg.nr.: 01-2119457610-43	Flam. Liq. 2, H225; Eye Irrit. 2, H319	

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- \cdot 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:
- Water haze

Fire-extinguishing powder

Carbon dioxide

Alcohol resistant foam

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- Protective equipment: Mount respiratory protective device.

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 product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents
- 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 Ensure good ventilation/exhaustion at the workplace.

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	on about fire - and explosion ay onto a naked flame or any	
Keep ignit	ion sources away - Do not sr inst electrostatic charges.	
Pressurised		light and do not expose to temperatures exceeding 50°C, i.e. electric r use.
· 7.2 Condit · Storage:	ions for safe storage, inclu	iding any incompatibilities
	ents to be met by storeroor	ns and receptacles:
	cool location.	packagings with pressurised containers.
· Information	on about storage in one co	mmon storage facility:
	ficial regulations on storing formation about storage c	packagings with pressurised containers.
	ol, dry conditions in well set	
Protect fro	m heat and direct sunlight.	
· 7.3 Specifi	c end use(s) No further rele	vant information available.
SECTIC	N 8: Exposure contro	ls/personal protection
· Additiona	l information about design	of technical facilities: No further data; see item 7.
	ol parameters	
0		quire monitoring at the workplace:
8052-42-4	-	
	rt-term value: 10 mg/m ³ g-term value: 5 mg/m ³	
74-98-6 pr	· ·	
	g-term value: 1800 mg/m ³	
78-93-3 bi	• •	
WEL Sho	rt-term value: 899 mg/m ³ , 30	00 ppm
	g-term value: 600 mg/m ³ , 20 BMGV	10 ppm
106-97-8 k	outane (containing < 0.1%	butadiene (203-450-8))
	rt-term value: 1810 mg/m ³ , 7	
	g-term value: 1450 mg/m ³ , 6 c (if more than 0.1% of buta	
	butane (containing < 0.1	
	rt-term value: 2400 mg/m^3	
	g-term value: 1900 mg/m ³	
64-17-5 et	hanol	
WEL Lon	g-term value: 1920 mg/m ³ , 1	.000 ppm
· DNELs		
	-0 Hydrocarbons,C9,arom	atics
Oral	DNEL Long term-systemic	11 mg/kg bw/day (Consumer)
Dermal		11 mg/kg bw/day (Consumer)
		25 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	
		100 mg/m3 (Worker)
	Undreasembons CO C11	n-alkanes, isoalkanes, cyclics, <2% aromatics
64742-48-	⁹ Hyurocarbolis, C9-C11,	n-analies, isoanalies, cyclics, <2 /0 al officies
64742-48 - Oral	•	125 mg/kg bw/day (Consumer)

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Dermal	DNEL Long term-systemic	125 mg/kg bw/day (Consumer)
		208 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	185 mg/m3 (Consumer)
		871 mg/m3 (Worker)
78-93-3 bi	utanone	
Oral	DNEL Long term-systemic	31 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	412 mg/kg bw/day (Consumer)
		1161 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	106 mg/m3 (Consumer)
		600 mg/m3 (Worker)
92128-66-	0 Hydrocarbons, C6-C7, n	-alkanes, isoalkanes, cyclics, <5% n-hexane
Oral	-	699 mg/kg bw/day (Consumer)
Dermal		699 mg/kg bw/day (Consumer)
		773 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	
innanati ve	DI (EE Eong term systemic	2035 mg/m3 (Worker)
0	ts with biological limit valu	les:
78-93-3 bi		
BMGV 70		
	fedium: urine ampling time: post shift	
	arameter: butan-2-one	
		id during the making were used as basis.
	ure controls protective equipment:	
	protective and hygienic mea	isures:
	y from foodstuffs, beverages	
Immediate	ly remove all soiled and con	taminated clothing
	ds before breaks and at the en	nd of work.
	ale gases / fumes / aerosols.	
Filter A/P2	ry protection:	
		ice in case of insufficient ventilation.
Filter A2P		
	n of hands:	
dlb		
1112	Protective gloves	
	I lottetive gloves	
	sistant gloves	
		ideration of the penetration times, rates of diffusion and the degradation
Material of The selection		es not only depend on the material, but also on further marks of quality
		facturer. As the product is a preparation of several substances, the
		t be calculated in advance and has therefore to be checked prior to the
application	-	1

application.

Nitrile rubber, NBR

Recommended thickness of the material: $\ge 0.5 \text{ mm}$

· Penetration time of glove material

For continuous contact we recommend gloves with breakthrough time of at least 240 minutes, with the preference given to a breakthrough time greater than 480 minutes. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available. In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and

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timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made.

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

· Eye protection:

Safety glasses



Tightly sealed goggles

• Body protection: Use protective suit. (EN-13034/6)

9.1 Information on basic physical and c	hemical properties
General Information	
Appearance:	A 1
Form:	Aerosol
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range	:-44.5 °C
Flash point:	-97 °C
Flammability (solid, gas):	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/
	vapour mixtures are possible.
	Not determined.
Explosion limits:	
Lower:	0.6 Vol %
Upper:	11.5 Vol %
Vapour pressure at 20 °C:	4900 hPa
Density at 20 °C:	0.748 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	74.8 %
Solids content:	23.4 %

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• 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- · 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: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

• Acute toxicity Based on available data, the classification criteria are not met.

· Acute tox	icity Based	on available data, the classification criteria are not met.
· LD/LC50	values rele	vant for classification:
128601-23	3-0 Hydroca	arbons,C9,aromatics
Oral	LD50	3492 mg/kg (rat)
Dermal	LD50	>3160 mg/kg (rabbit)
Inhalative	LC50/4 h	>6193 mg/l (rat) (Acute Inhalation Toxicity)
64742-48-	9 Hydroca	rbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50 (4h)	4951 mg/m3 (rat)
78-93-3 bi	utanone	-
Oral	LD50	>2193 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
		5000 mg/kg (rbt)
92128-66-	0 Hydroca	rbons, C6-C7, n-alkanes, isoalkanes,cyclics, <5% n-hexane
Oral	LD50	>5840 mg/kg (rat)
Dermal	LD50	>2920 mg/kg (rabbit)
Inhalative	LC50/4h	>25 mg/l (rat)
	osion/irrita	tion Based on available data, the classification criteria are not met.
• Serious ey		
	ious eye irri	sensitisation. Bensitisation Based on available data, the classification criteria are not met.
		ogenity, mutagenicity and toxicity for reproduction):
		ity Based on available data, the classification criteria are not met.
		ed on available data, the classification criteria are not met.
		y Based on available data, the classification criteria are not met.
· STOT-sin		

May cause respiratory irritation. May cause drowsiness or dizziness.

• STOT-repeated exposure Based on available data, the classification criteria are not met.

· Aspiration hazard Based on available data, the classification criteria are not met.

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12.1 Toxicity	
Aquatic toxicity	y:
128601-23-0 Ну	vdrocarbons,C9,aromatics
NOELR (72h)	1 mg/l (Pseudokirchneriella subcapitata)
EL50(48h)	3.2 mg/l (Daphnia magna)
LL50 (96h)	9.2 mg/l (Oncorhynchus mykiss (96h))
64742-48-9 Нус	rocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
EL0 (48h)	1000 mg/l (Daphnia magna)
NOELR (72h)	100 mg/l (Pseudokirchneriella subcapitata)
EL50 (72h)	>1000 mg/l (Pseudokirchneriella subcapitata)
LL50 (96h)	>1000 mg/l (Oncorhynchus mykiss (96h))
78-93-3 butano	ne
LC50/96h	2993 mg/l (Pimephales promelas)
EC50/48h	308 mg/l (Daphnia magna)
92128-66-0 Hyd	lrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
NOELR (72h)	3 mg/l (Pseudokirchneriella subcapitata)
EL50(48h)	3 mg/l (Daphnia magna)
EL50 (72h)	30-100 mg/l (Pseudokirchneriella subcapitata)
LL50 (96h)	11.4 mg/l (Oncorhynchus mykiss (96h))
NOEC (21 days)	0.17 mg/l (Daphnia magna)
LOEC (21 days)	0.32 mg/l (Daphnia magna)
12.3 Bioaccumu 12.4 Mobility in Ecotoxical effect Remark: Toxic	
Water hazard cla	ass 2 (German Regulation) (Self-assessment): hazardous for water
	oduct to reach ground water, water course or sewage system.
	ing water if even small quantities leak into the ground. for fish and plankton in water bodies.
Toxic for aquati	
12.5 Results of	PBT and vPvB assessment
PBT: Not applic	
vPvB: Not appli 12.6 Other advo	icable. erse effects No further relevant information available.
SECTION 13	3: Disposal considerations

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

· European waste catalogue

16 05 04* gases in pressure containers (including halons) containing hazardous substances

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· Uncleaned packaging:

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• **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information	11
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR, ADN · IMDG	UN1950 AEROSOLS AEROSOLS (TURPENTINE SUBSTITUTE), MARIN POLLUTANT
· IATA	AEROSOLS, flammable
· 14.3 Transport hazard class(es)	
· ADR	
· Class	2 5F Gases.
· Label	2.1
· ADN · ADN/R Class:	2 5F
· IMDG	2.51
	2.1
· Class · Label	2.1 2.1
· IATA	2.1
· Label	2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
 14.5 Environmental hazards: Marine pollutant: Special marking (ADR): 	Product contains environmentally hazardous substances Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U SW1 Protected from converse of heat
· 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 abov 1 litre: Category B. For WASTE AEROSOLS: Category
· Segregation Code	C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from"

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	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 Transport in bulk according to A	Annex II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
Transport category	2
Tunnel restriction code	D
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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
- E2 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- \cdot Qualifying quantity (tonnes) for the application of upper-tier requirements $500\ t$
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations:

Class	Share in %
NK	50-<75

- · VOC-CH 74.76 %
- · VOC-EU 559.2 g/l
- · Danish MAL Code 5-3
- · 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.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

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H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	
H411 Toxic to aquatic life with long lasting effects.	
Contact:	
Abbreviations and acronyms:	
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agre	ement 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)	
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning in	nhalation hazards, Denmark)
DNEL: Derived No-Effect Level (REACH)	
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
Flam. Gas 1: Flammable gases – Category 1	
Aerosol 1: Aerosols – Category 1	
Press. Gas (Comp.): Gases under pressure – Compressed gas	
Flam. Liq. 2: Flammable liquids – Category 2	
Flam. Liq. 3: Flammable liquids - Category 3	
Skin Irrit. 2: Skin corrosion/irritation – Category 2	
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2	
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3	
Asp. Tox. 1: Aspiration hazard – Category 1	
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category	2