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

1.1 Product identifier

Trade name

einzA Heizkörper Spraylack, hochglänzend

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture
coating material

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
einzA Farben GmbH & Co KG
Junkersstraße 13
30179 Hannover

Telephone no. +49 (0)511 67490-0
Fax no. +49 (0)511 67490-20
e-mail info@einzA.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aerosol 1; H222 - H229
Aquatic Chronic 3; H412
Asp. Tox. 1; H304
STOT SE 3; H336

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms


GHS02


GHS07

Signal word
Danger

Hazardous component(s) to be indicated on label:
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Hazard statement(s)

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.

Hazard statements (EU)

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains phthalic-anhydride. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statement(s)

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.
P271	Use only outdoors or in a well-ventilated area.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P405	Store locked up.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
The components of this product are not considered to be a PBT.

vPvB assessment
The components of this product are not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**dimethyl ether**			
	115-10-6 204-065-8 603-019-00-8 01-2119472128-37	Flam. Gas 1A; H220 Press. Gas; H280	>= 25.00 - < 50.00	wt%
2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**			
	64742-48-9 919-857-5 649-327-00-6 01-2119463258-33	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 EUH066	>= 25.00 - < 50.00	wt%
3	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			
	13463-67-7 236-675-5 022-006-00-2 01-2119489379-17	Carc. 2; H351i	>= 10.00 - < 25.00	wt%
4	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			
	64742-49-0 921-024-6 649-328-00-1 01-2119475514-35	Aquatic Chronic 2; H411 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304	>= 5.00 - < 10.00	wt%
5	**cyclohexane**			
	110-82-7 203-806-2 601-017-00-1 01-2119463273-41	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Asp. Tox. 1; H304 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336	< 2.50	wt%
6	**n-hexane**			
	110-54-3 203-777-6 601-037-00-0 01-2119480412-44	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Flam. Liq. 2; H225 Repr. 2; H361f Skin Irrit. 2; H315 STOT RE 2; H373 STOT SE 3; H336	< 2.50	wt%
7	**phthalic-anhydride**			
	85-44-9 201-607-5 607-009-00-4 01-2119457017-41	Acute Tox. 4; H302 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335	< 0.50	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	U	-	-	-
2	P	-	-	-
3	V, W, 10	-	-	-
4	P	-	-	-
6	-	STOT RE 2; H373: C >= 5%	-	-

Full text for the notes: pls. see section 16 “Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)”.

No	Route, target organ, concrete effect
3	H351i inhalational; -; -

Acute toxicity estimate (ATE) values			
No	**oral**	**dermal**	**inhalative**
6	24 mg/kg bodyweight		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact
Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media
water jet.

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); Toxic pyrolysis products; Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters
Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses. Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Exclude sources of ignition and ventilate the area. Do not inhale vapours/aerosols. Refer to protective measures listed in sections 7 and 8.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Is not allowed to be released into the sewerage or water courses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4 Reference to other sections
No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Do not breathe steams or mist of the product. For personal protection see section 8. Avoid eye, skin and clothing contact.

General protective and hygiene measures
Avoid skin and eye contact. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Advice on protection against fire and explosion
Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Electrical equipment should be protected to the appropriate standard.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Comply with legal health and safety regulations; Prevent unauthorised access. Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep away from sources of ignition. No smoking.

Requirements for storage rooms and vessels
Keep the product in the original packing. Keep container tightly closed. Observe label precautions. Official regulations ruling storage of aerosols must be observed.

Incompatible products
Store away from oxidising agents, from strongly alkaline and strongly acid materials.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**dimethyl ether**	**115-10-6**		**204-065-8**	
	2000/39/EC				
	Dimethylether				
	WEL long-term (8-hr TWA reference period)	1920	mg/m³	1000	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Dimethyl ether				
	WEL short-term (15 min reference period)	958	mg/m³	500	ppm
	WEL long-term (8-hr TWA reference period)	766	mg/m³	400	ppm
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**	
	List of approved workplace exposure limits (WELs) / EH40				
	Titanium dioxide				
	total inhalable dust				
	WEL long-term (8-hr TWA reference period)	10	mg/m³		
	List of approved workplace exposure limits (WELs) / EH40				
	Titanium dioxide				
	respirable dust				
	WEL long-term (8-hr TWA reference period)	4	mg/m³		
3	**cyclohexane**	**110-82-7**		**203-806-2**	
	2006/15/EC				
	Cyclohexane				
	WEL long-term (8-hr TWA reference period)	700	mg/m³	200	ppm
	List of approved workplace exposure limits (WELs) / EH40				

	Cyclohexane				
	WEL short-term (15 min reference period)	1050	mg/m³	300	ppm
	WEL long-term (8-hr TWA reference period)	350	mg/m³	100	ppm
4	**n-hexane**	**110-54-3**		**203-777-6**	
	2006/15/EC				
	n-Hexane				
	WEL long-term (8-hr TWA reference period)	72	mg/m³	20	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	n-Hexane				
	WEL long-term (8-hr TWA reference period)	72	mg/m³	20	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**dimethyl ether**			**115-10-6 204-065-8**	
	inhalative	Long term (chronic)	systemic	1894	mg/m³
2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**64742-48-9 919-857-5**	
	dermal	Long term (chronic)	systemic	77	mg/kg/day
	inhalative	Long term (chronic)	systemic	871	mg/m³
3	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			**13463-67-7 236-675-5**	
	inhalative	Long term (chronic)	local	1.25	mg/m³
4	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			**64742-49-0 921-024-6**	
	dermal	Long term (chronic)	systemic	773	mg/kg/day
	inhalative	Long term (chronic)	systemic	2035	mg/m³
5	**cyclohexane**			**110-82-7 203-806-2**	
	dermal	Long term (chronic)	systemic	2016	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	700	mg/m³
	inhalative	Short term (acut)	systemic	1400	mg/m³
	inhalative	Long term (chronic)	local	700	mg/m³
	inhalative	Short term (acut)	local	1400	mg/m³
6	**n-hexane**			**110-54-3 203-777-6**	
	dermal	Long term (chronic)	systemic	11	mg/kg
	inhalative	Long term (chronic)	systemic	75	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**dimethyl ether**			**115-10-6 204-065-8**	
	inhalative	Long term (chronic)	systemic	471	mg/m³
2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**			**64742-48-9 919-857-5**	
	oral	Long term (chronic)	systemic	46	mg/kg/day
	dermal	Long term (chronic)	systemic	46	mg/kg/day
	inhalative	Long term (chronic)	systemic	185	mg/m³
3	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**			**13463-67-7 236-675-5**	
	inhalative	Long term (chronic)	local	210	µg/m³
4	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**			**64742-49-0 921-024-6**	
	oral	Long term (chronic)	systemic	699	mg/kg/day
	dermal	Long term (chronic)	systemic	699	mg/kg/day
	inhalative	Long term (chronic)	systemic	608	mg/m³
5	**cyclohexane**			**110-82-7 203-806-2**	
	oral	Long term (chronic)	systemic	59.4	mg/kg bw/day
	dermal	Long term (chronic)	systemic	1186	mg/kg
	inhalative	Long term (chronic)	systemic	206	mg/m³
	inhalative	Short term (acut)	systemic	412	mg/m³
	inhalative	Long term (chronic)	local	206	mg/m³
	inhalative	Short term (acut)	local	412	mg/m³

6	**n-hexane**			**110-54-3** **203-777-6**	
	oral	Long term (chronic)	systemic	4	mg/kg
	dermal	Long term (chronic)	systemic	5.3	mg/kg
	inhalative	Long term (chronic)	systemic	16	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**dimethyl ether**		**115-10-6** **204-065-8**	
	water	fresh water	0.155	mg/L
	water	Aqua intermittent	1.549	mg/L
	water	marine water	0.016	mg/L
	water	fresh water sediment	0.681	mg/kg dry weight
	water	marine water sediment	0.069	mg/kg dry weight
	soil	-	0.045	mg/kg dry weight
	sewage treatment plant	-	160	mg/L
2	**cyclohexane**		**110-82-7** **203-806-2**	
	water	fresh water	44.7	µg/L
	water	marine water	4.47	µg/L
	water	fresh water sediment	3.6	mg/kg dry weight
	water	marine water sediment	0.36	mg/kg dry weight
	soil	-	0.694	mg/kg dry weight
	sewage treatment plant	-	3.24	mg/L

8.2 Exposure controls

Appropriate engineering controls
Provide good ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Short term: filter apparatus, Filter A

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	nitrile rubber		
Material thickness	>	0.4	mm
Breakthrough time	>	480	min

Other
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
gas

Form
Aerosol

Colour
white

Odour
characteristic

pH value	
reason for missing pH	substance/mixture is non-soluble (in water)

Boiling point / boiling range			
Value	-25	°C	
Reference substance	dimethylether		

Melting point/freezing point			
Value	-142	°C	
Reference substance	dimethylether		

Decomposition temperature
No data available

Flash point			
Value	< 42	°C	
Comments	without propellant		

Ignition temperature			
Value	207	°C	
Reference substance	Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane		

Flammability
Extremely flammable aerosol

Lower explosion limit			
Value	0.6	% vol	
Reference substance	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		
Source	Literature value		

Upper explosion limit			
Value	24.4	% vol	
Reference substance	dimethylether		
Source	Literature value		

Vapour pressure			
Value	60	mbar	
Reference temperature	20	°C	
Reference substance	Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane		

Relative vapour density
No data available

Relative density
No data available

Density
No data available

Solubility in water	
Comments	insoluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**
Not applicable				
Source	ECHA			
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
log Pow	2.96	-	3.78	
Reference temperature			20	°C
with reference to	pH 7			
Method	QSAR			
Source	ECHA			
3	**cyclohexane**	**110-82-7**		**203-806-2**
log Pow			3.44	
Reference temperature			25	°C
with reference to	pH 7			
Source	ECHA			
4	**n-hexane**	**110-54-3**		**203-777-6**
log Pow			4	
Reference temperature			20	°C
Source	ECHA			

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable under recommended storage and handling conditions (See section 7).

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

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

10.4 Conditions to avoid
Heat, naked flames and other ignition sources.

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

10.6 Hazardous decomposition products
None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**		**919-857-5**
LD50	>	5000	mg/kg bodyweight	
Species	rat			
Method	OECD 401			
Source	ECHA			
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**
LD50	>	2000	mg/kg bodyweight	
Species	rat			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
3	**cyclohexane**	**110-82-7**		**203-806-2**
LD50	>	5000	mg/kg bodyweight	
Species	rat			
Method	OECD 401			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
4	**n-hexane**	**110-54-3**		**203-777-6**
LD50		24	mg/kg bodyweight	
Species	rat			
Method	OECD 401			
Source	ECHA			

Acute dermal toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**		**919-857-5**
LD50	>	2000	mg/kg bodyweight	
Species	rabbit			
Method	OECD 402			
Source	ECHA			
2	**cyclohexane**	**110-82-7**		**203-806-2**
LD50	>	2000	mg/kg bodyweight	
Species	rabbit			
Method	OECD 402			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**dimethyl ether**	**115-10-6**	**204-065-8**	
LC50		164000	ppmV	
Duration of exposure		4	h	
State of aggregation	Gas			
Species	rat			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**	
LC50		5.09	mg/l	
Duration of exposure		4	h	
State of aggregation	Dust			
Species	rat			
Method	OECD 403			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**	
LC50	>	25.2	mg/l	
Duration of exposure		4	h	
State of aggregation	Vapour			
Species	rat			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			
4	**cyclohexane**	**110-82-7**	**203-806-2**	
LC50	>	19.07	mg/l	
Duration of exposure		4	h	
State of aggregation	Dust/mist			
Species	rat			
Method	OECD 403			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**	**919-857-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**	**919-857-5**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	non-irritant		
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Species	rabbit		
Method	OECD 405		
Source	ECHA		

Evaluation	non-irritant
Evaluation/classification	Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**	**919-857-5**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	**cyclohexane**	**110-82-7**	**203-806-2**
Route of exposure	Skin		
Species	guinea pig		
Method	Buehler		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		
4	**n-hexane**	**110-54-3**	**203-777-6**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	non-sensitizing		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**dimethyl ether**	**115-10-6**	**204-065-8**
Type of examination	in vitro gene mutation study in bacteria		
Species	Salmonella typhimurium / Escherichia coli		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro Mammalian Chromosomal Aberration Test		
Species	Human Lymphocyte		
Method	OECD 473		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	in vitro gene mutation study in mammalian cells		
Species	Chinese hamster Ovary (CHO)		
Method	OECD 476		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Type of examination	In vitro mammalian cytogenicity		
Method	OECD 487		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	oral		
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus		
Species	rat		
Method	OECD 474		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	**cyclohexane**	**110-82-7**	**203-806-2**
Type of examination	in vitro gene mutation study in bacteria		
Species	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

4	n-hexane	110-54-3	203-777-6
Species		Salmonella typhimurium TA98, TA100, TA1535, TA1537	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**dimethyl ether**	**115-10-6**	**204-065-8**
Route of exposure		inhalational	
Type of examination		Repeated Dose Inhalation Toxicity	
Species		rat	
Method		OECD 452	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
NOAEL		40000	ppm
Type of examination		Prenatal Developmental Toxicity Study	
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Route of exposure		oral	
NOAEL		>= 1000	mg/kg bw/d
Type of examination		Reproductive studies - one generation	
Species		rat	
Method		OECD 443	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		oral	
NOAEL		1000	mg/kg bw/d
Type of examination		Prenatal Developmental Toxicity Study	
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	**n-hexane**	**110-54-3**	**203-777-6**
Species		rat	
Method		OECD 416	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**dimethyl ether**	**115-10-6**	**204-065-8**
Route of exposure		inhalational	
NOAEC		47106	mg/m³
Type of examination		Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test	
Species		rat	
Method		OECD 453	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**
Route of exposure		oral	
NOEL		7500	mg/kg bw/d
Species		mouse	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**dimethyl ether**	**115-10-6**	**204-065-8**
Route of exposure		inhalational	
Species		rat	
Method		OECD 452	

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**

Route of exposure	oral		
NOAEL	>	962	mg/kg bw/d
Species	rat		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	inhalational		
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**

Route of exposure	inhalational		
NOAEC		14000	mg/m³
Species	rat		
Source	ECHA		

Aspiration hazard
No data available

Endocrine disrupting properties
No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Inhalation may cause irritations of the respiratory tract, allergic reactions, cough, breathing difficulties, headache, nausea and vomiting.

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)

No	**Substance name**	**CAS no.**	**EC no.**
1	**dimethyl ether**	**115-10-6**	**204-065-8**

LC50	>	4100	mg/l
Duration of exposure		96	h
Species	Poecilia reticulata		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**	**919-857-5**

LL50	>	1000	mg/l
Duration of exposure		96	h
Species	Rainbow trout		
Method	OECD 203		
Source	ECHA		

3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**

LC50		11.4	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

4	**cyclohexane**	**110-82-7**	**203-806-2**

LC50		4.53	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No	**Substance name**	**CAS no.**	**EC no.**

1	dimethyl ether	115-10-6		204-065-8	
EC50		>	4400		mg/l
Duration of exposure			48		h
Species		Daphnia magna			
Source		ECHA			
Evaluation/classification		Based on available data, the classification criteria are not met.			
2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**		**919-857-5**	
EL50		>	1000		mg/l
Duration of exposure			48		h
Species		Daphnia magna			
with reference to		WAF (water accommodated fractions)			
Method		OECD 202			
Source		ECHA			
3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**	
EL50			3		mg/l
Duration of exposure			48		h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			
Evaluation/classification		Based on available data, the classification criteria are met.			
4	**cyclohexane**	**110-82-7**		**203-806-2**	
EC50			0.9		mg/l
Duration of exposure			48		h
Species		Daphnia magna			
Method		OECD 202			
Source		ECHA			

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)

No	Substance name	CAS no.		EC no.	
1	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**		**919-857-5**	
EL50		>	1000		mg/l
Duration of exposure			72		h
Species		Pseudokirchneriella subcapitata			
with reference to		WAF (water accommodated fractions)			
Method		OECD 201			
Source		ECHA			
2	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**	
EC50		>	100		mg/l
Duration of exposure			72		h
Species		Raphidocelis subcapitata			
Method		OECD 201			
Source		ECHA			
Evaluation/classification		Based on the available data, the classification criteria are not met.			
3	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**	
EL50			30		mg/l
Duration of exposure			72		h
Species		Pseudokirchneriella subcapitata			
Method		OECD 201			
Source		ECHA			
4	**cyclohexane**	**110-82-7**		**203-806-2**	
ErC50		>	4.425		mg/l
Duration of exposure			72		h
Species		Raphidocelis subcapitata			
Method		OECD 201			
Source		ECHA			
Evaluation/classification		Based on available data, the classification criteria are not met.			

Toxicity to algae (chronic)

No	Substance name	CAS no.		EC no.	
1	**cyclohexane**	**110-82-7**		**203-806-2**	
NOEC			0.9		mg/l
Duration of exposure			72		h
Species		Pseudokirchneriella subcapitata			

Method	OECD 201
Source	ECHA

Bacteria toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**dimethyl ether**	**115-10-6**		**204-065-8**
EC10	>	1600		mg/l
Species	Pseudomonas putida			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**		**EC no.**
1	**dimethyl ether**	**115-10-6**		**204-065-8**
Type	aerobic biodegradation			
Value		5		%
Duration		28		d
Method	OECD 301 D			
Source	ECHA			
Evaluation	not readily biodegradable			
2	**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics**	**64742-48-9**		**919-857-5**
Method	OECD 301 F			
Source	ECHA			
Evaluation	readily biodegradable			
3	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**
Source	ECHA			
Evaluation	Not applicable for inorganic substances.			
4	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
Value		98		%
Duration		28		day(s)
Method	OECD 301 F			
Source	ECHA			
Evaluation	readily biodegradable			
5	**cyclohexane**	**110-82-7**		**203-806-2**
Type	aerobic biodegradation			
Value		77		%
Duration		28		d
Method	OECD 301 F			
Source	ECHA			
Evaluation	readily biodegradable			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**		**236-675-5**
Not applicable				
Source	ECHA			
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**		**921-024-6**
log Pow	2.96	-	3.78	
Reference temperature			20	°C
with reference to	pH 7			
Method	QSAR			
Source	ECHA			
3	**cyclohexane**	**110-82-7**		**203-806-2**
log Pow			3.44	
Reference temperature			25	°C
with reference to	pH 7			
Source	ECHA			
4	**n-hexane**	**110-54-3**		**203-777-6**
log Pow			4	
Reference temperature			20	°C
Source	ECHA			

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
einzA Heizkörper Spraylack, hochglänzend	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not allow to enter drains or water courses.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste code	08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Hand over only completely emptied aerosol cans for valuable substance recovery!

Packaging

Waste code	15 01 04; 15 01 11*	metallic packaging; metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer. Empty containers must be scrapped or reconditioned.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN1950
IMDG	UN1950
ICAO-TI / IATA	UN1950

14.2 UN proper shipping name

ADR/RID/ADN	AEROSOLS
IMDG	AEROSOLS
ICAO-TI / IATA	Aerosols, flammable

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	2
Label	2.1
Classification code	5F
Tunnel restriction code	D
IMDG - Class	2
Label	2.1
ICAO-TI / IATA - Class	2.1
Label	2.1

14.4 Packing group

ADR/RID/ADN	-
IMDG	-
ICAO-TI / IATA	-

14.5 Environmental hazards

EmS	F-D, S-U

14.6 Special precautions for user
Transport within the user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	**cyclohexane**	**110-82-7**	**203-806-2**	**57, 75**
2	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**	**64742-49-0**	**921-024-6**	**75**
3	**n-hexane**	**110-54-3**	**203-777-6**	**75**
4	**phthalic-anhydride**	**85-44-9**	**201-607-5**	**75**
5	**titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]**	**13463-67-7**	**236-675-5**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P3a

National regulations

Other national regulations
Adhere to national regulations for proper handling and use of hazardous materials. Use appropriate personal protective equipment.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H220	Extremely flammable gas.
H222 - H229	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351i	Suspected of causing cancer by inhalation.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

P	The harmonised classification as a carcinogen applies unless the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen, in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.
U	When put on the market gases have to be classified as ‘Gases under pressure’, in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.
V	If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.
W	It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.
1	The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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