SAFETY DATA SHEET
Albedo100/Invisible Bright, Albedo100/Sparkling Grey, Albedo100/Horsen and Pets

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

1.1. Product identifier

Product name Albedo100/Invisible Bright, Albedo100/Sparkling Grey, Albedo100/Horsen and Pets

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

Applications Light Reflecting spray. For use on textiles and fur. Disappears when washing.

1.3. Details of the supplier of the safety data sheet

Supplier
TrackInvent
Anckargripsgatan 3 c/o Minc
Malmö
Sweeden
Tel: +46 40 231310
www.ALBEDO100.COM

Contact person Anders Wellving (E-mail: anders@trackinvent.se)

1.4. Emergency telephone number

Emergency telephone number 112 # The UK National Poisons Emergency number: +44 870 600 6266 WEB: http://www.toxbase.org

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to directives 67/548/EEC, 99/45/EC & 2001/58/EC (DSD/DPD)
F+, R-12
N, R-51/53
R-67

Classification according to directive 1272/2008 (CLP)
GHS02, GHS09, GHS07, Danger
Flam. Aerosol 1: H222, H229
Skin Irrit. 2: H315
STOT SE 3: H336
Aquatic Chronic 2: H411
EUH208

2.2. Label elements

CLP

Hazard pictograms

Signal word	Danger
Hazard statements	Flam. Aerosol 1: H222 Extremely flammable aerosol. Flam. Aerosol 1: H229 Pressurised container: May burst if heated. Skin Irrit. 2: H315 Causes skin irritation. STOT SE 3: H336 May cause drowsiness or dizziness. Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. EUH208 Contains 2-Butanone, O, O`,O`` (methylsilylidyn)trioxim. May produce an allergic reaction.
Precautionary statements	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/sparks/open flames/hot surfaces. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: Do not pierce or burn, even after use. P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C/ 122°F.
Contains	butane heptane [and isomers]

2.3. Other hazards

Meets the criteria for vPvB	No.
Meets the criteria for PBT	No.
Other hazards which do not contribute to classification	No known risks.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ingredients

Name	EC No.	CAS No.	Content	Symbol	Classification
butane	203-448-7	106-97-8	50-60 %	F+	R-12
heptane [and isomers]	205-563-8	142-82-5	15-20 %	Xn ,F ,N	R-11, R-38, R-50/53, R-65, R-67
dimethyl ether	204-065-8	115-10-6	10-15 %	F+	R-12
propane	200-827-9	74-98-6	1-5 %	F+	R-12
xylen (o-, m-, p-isomer)	215-535-7	1130-20-7	1-2 %	Xn	R-10, R-20/21, R-38

CLP

Name	REACH No.	Content	Symbol	Classification	CAS No.
butane	01-2119474691-32	50-60 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	106-97-8
heptane [and isomers]	01-2119475515-33-0005/01-2119475515-33	15-20 %	GHS02, GHS09, GHS08, GHS07, , Danger	Flam. Liq. 2: H225, Asp. Tox. 1: H304, Skin Irrit. 2: H315, STOT SE 3: H336, Aquatic Acute 1: H400, Aquatic Chronic 1: H410	142-82-5
dimethyl ether	01-2119472128-37	10-15 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	115-10-6
propane	01-2119486944-21	1-5 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	74-98-6
xylen (o-, m-, p-isomer)	01-2119488216-32	1-2 %	GHS07, GHS02, , Warning	Flam. Liq. 3: H226, Acute Tox. 4: H332, Acute Tox. 4: H312, Skin Irrit. 2: H315	1130-20-7

Section 16 contains detailed classification phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

General If symptoms persist or in doubt, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Specific first aid treatment No specific first aid measures noted.

4.3. Indication of any immediate medical attention and special treatment needed

Inhalation Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion Ingestion is not likely under the use as intended and described, product is an aerosol. In case of ingestion: Do not induce vomiting. Contact physician.

Skin Remove contaminated clothing. Wash skin with soap and water. Frostbite must be treated by a physician. Wash clothing before reuse.

Eyes Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media Powder, foam or CO2. Do not use water jet as an extinguisher, as this will spread the fire.

Special fire fighting procedures Containers close to fire should be removed immediately or cooled with water.

5.2. Special hazards arising from the substance or mixture

Specific hazards Extremely flammable. Aerosol cans may explode in fires. Vapours are heavier than air and may spread near ground to sources of ignition. May form explosive mixture with air.

Hazardous combustion products Hazardous gases / vapors / fumes.

5.3. Advice for firefighters

Protective measures in fire Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection Wear appropriate personal protective equipment - see Section 8. Ensure adequate ventilation. Avoid heat. Avoid sources of ignation.

6.2. Environmental precautions

Environmental protection Dyke to prevent entering any sewer or waterway.

6.3. Methods and material for containment and cleaning up

Spill cleanup methods Spills wiped up with a rag or paper. Absorb in vermiculite, dry sand or earth and place into containers. Collect and reclaim or dispose in sealed containers in licensed waste.

6.4. Reference to other sections

See section 13 for waste handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear appropriate personal protective equipment - see Section 8. Do not spray on hot surfaces or open flame. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Avoid spilling, skin and eye contact. Avoid inhalation of vapours/aerosoles. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep in cool, dry, ventilated storage and closed containers. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

7.3. Specific end use(s)

Specific use(s) Contact supplier for more information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
butane	106-97-8	WEL.	600/1450 ppm/mg/m³	750/1810 ppm/mg/m3	
heptane [and isomers]	142-82-5	WEL.	500 ppm		
dimethyl ether	115-10-6	WEL.	400/766 ppm/mg/m³	500/958 ppm/mg/m3	
xylen (o-, m-, p-isomer)	1130-20-7	WEL.	50/220 ppm/mg/m³	100/441 ppm/mg/m3	

Ingredient comments WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic

Process conditions Provide eyewash station.

Ventilation Well ventilated area.

8.2. Exposure controls

Respirators In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter type A (Brown)/P2. Standard EN 149.

Protective gloves Risk of contact: Use protective gloves made of: Nitrile. Neoprene. Time of breakthrough is not known, change gloves regulary. Suitable glove must be chosen in consultation with the gloves supplier, giving information of the breakthrough time for

	the glove material. Standard EN 374.
Eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable. Standard EN 166.
Other Protection	Protective clothing as needed.
Hygienic work practices	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Promptly remove any clothing that becomes contaminated.
Other exposure limits	Personal protective equipment should be selected according to the CEN standards and in cooperation with the supplier of personal protective equipment.
DNEL	No data.
PNEC	No data.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol	
Colour	Colourless. / Grey.	
Odour	Organic solvents.	
Solubility description	Insoluble in water.	
Density (g/cm3)	0,7	**Temperature (°C)**
Flash point (°C)	< 40	**Method**

9.2. Other information

Safety information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Aerosol cans may explode in fires or at high temperatures.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous polymerisation	Will not polymerise.

10.4. Conditions to avoid

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. May form explosive mixture with air.

10.5. Incompatible materials

Materials to avoid	Oxidising material.

10.6. Hazardous decomposition products

Hazardous decomp. products	No hazardous decomposition products are emitted at recommended use and storage conditions. Dimethyl ether: Photochemical change to formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Sensitization	The product contains component(s) that may cause an allergic skin reaction.
Genotoxicity	No known heritable or mutagenic effects.
Carcinogenicity	No evidence of carcinogenic properties.
Reproduction toxicity	No known hazardous effects on reproduction, fertility or to the unborn child.
Health hazards, general	Repeated and prolonged contact may cause permanent damage to brain, liver and

	kidneys (chronic solvent intoxication).
Inhalation	Vapours may cause drowsiness and dizziness. Solvent vapours are hazardous and may cause nausea, sickness and headaches.
Ingestion	Ingestion is not likely. The product is an areosol. Ingestion of great quantities may cause distaste as gastrointestinal irritation, nausea, vomiting and diarrhoea.
Skin	Causes skin irritation. Risk of frostbite in contact with Liquids.
Eyes	May cause irritation to eyes.
COMPONENT:	**butane**
Toxicology data	Acute toxicity. LC50. 2 hours. Inhalation. Mouse. 680 mg/l
Toxic conc. - LC50:	658 mg/l/4h (inhalation rat)
COMPONENT:	**heptane [and isomers]**
Toxic dose - LD50:	>17000 mg/kg (oral rat)
Toxic dose - LD50 (skin):	3000 mg/kg (skin rabbit)
Toxic conc. - LC50:	60 mg/l/4h (inhalation rat)
COMPONENT:	**dimethyl ether**
Toxic conc. - LC50:	308 mg/l/4h (inhalation rat)
COMPONENT:	**propane**
Toxic dose - LD50:	>5000 mg/kg (oral rat)
Toxic conc. - LC50:	513 mg/l/h (inh rat)
COMPONENT:	**xylen (o-, m-, p-isomer)**
Toxic dose - LD50:	3600 mg/kg (oral rat)
Toxic dose - LD50 (skin):	>2000 mg/kg (skin rabbit)
Toxic conc. - LC50:	<19 mg/l/4h (inhalation rat)

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Unknown.

12.3. Bioaccumulative potential

Unknown.

12.4. Mobility in soil

Mobility	The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

PTB/vPvB	Component(s) is not identified as a PBT or vPvB-substance.

12.6. Other adverse effects

No known information.

COMPONENT:	**butane**
Bioaccumulative potential	BCF:33,88
Partition coefficient (log Pow)	2,89
COMPONENT:	**heptane [and isomers]**
LC 50, 96 Hrs, Fish mg/l:	>100 (Silver salmon)
EC 50, 48 Hrs, Daphnia, mg/l:	>50 (Daphnia magna)
IC 50, 72 Hrs, Algae, mg/l:	>200 (Scenedesmus)
Bioaccumulative potential	BCF:776 Accumulates in soil and sediment.
Partition coefficient (log Pow)	4,66
COMPONENT:	**dimethyl ether**
LC 50, 96 Hrs, Fish mg/l:	1474
EC 50, 48 Hrs, Daphnia, mg/l:	2390
IC 50, 72 Hrs, Algae, mg/l:	1986
Partition coefficient (log Pow)	0,10
Persistence and degradability	BOD: 0 - 1% (MITI)
COMPONENT:	**propane**
LC 50, 96 Hrs, Fish mg/l:	16,9
EC 50, 48 Hrs, Daphnia, mg/l:	16,3
IC 50, 72 Hrs, Algae, mg/l:	11,3
Bioaccumulative potential	BCF: 13,18 Component will not bio-accumulate.
Partition coefficient (log Pow)	2,36
COMPONENT:	**xylen (o-, m-, p-isomer)**
LC 50, 96 Hrs, Fish mg/l:	7,6 (Oncorhynchus mykiss)
EC 50, 48 Hrs, Daphnia, mg/l:	3,1 (Daphnia magna)
IC 50, 72 Hrs, Algae, mg/l:	3,2 (Selenastrum capicosmutum)
Bioaccumulative potential	BCF: 6 - 21
Partition coefficient (log Pow)	3,16
Persistence and degradability	BOD5/COD: 0,55

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General/cleaning	Waste is classified as hazardous waste.
Disposal methods	Dispose of in accordance with Local Authority requirements.
Waste class	14 06 03* other solvents and solvent mixtures The given EWC-code is a guiding, and the code depends on how the waste is formed. User must evaluate the choice of correct code.
Contaminated packaging	The product packaging must be disposed of in compliance with the country specific regulations.

SECTION 14: Transport information

Label for conveyance

ROAD TRANSPORT (ADR):

14.1. UN number

UN no. road	1950
UN no. sea	1950
UN no., air	1950

14.2. UN proper shipping name

Proper shipping name (national)	AEROSOLS
Proper shipping name (international)	AEROSOLS

14.3. Transport hazard class(es)

ADR class no.	2
ADR Hazard labels	2.1
Classification code	5F
Hazard no. (ADR)	23
Road transport notes	Tunnel restriction code: (D)

RAIL TRANSPORT (RID):

RID class no.	2
RID Hazard labels	2.1

SEA TRANSPORT (IMDG):

IMDG class	2
EmS no.	F-D, S-U
Marine pollutant	Yes.

TRANSPORT BY INLAND WATERWAYS (ADN):

AIR TRANSPORT (IATA-DGR / ICAO-TI):

IATA/ICAO class	2.1
IATA/ICAO Hazard label	Flamm.gas

14.4. Packing group

14.5. Environmental hazards

Transport by inland waterways notes	Not applicable.

14.6. Special precautions for user

No particular precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No IBC-code for bulk transport offshore (MARPOL).

SECTION 15: Regulatory information

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

EU directives	EC-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.
Other information	Safety Data Sheet has been prepared using information provided by the manufacturer.

15.2. Chemical safety assessment

Chemical Safety Assessment	Chemical Safety Report (CSR) has not been carried out for this product.

SECTION 16: Other information

Explanations to R-phrases in section 3	R-10 Flammable. R-11 Highly flammable. R-12 Extremely flammable.

R-20/21 Harmful by inhalation and in contact with skin.
R-38 Irritating to skin.
R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R-65 Harmful: may cause lung damage if swallowed.
R-67 Vapours may cause drowsiness and dizziness.

Explanations to classification in section 3

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

DSD/DPD

Labeling

F+, N,

Risk phrases

R-12 Extremely flammable.
R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R-67 Vapours may cause drowsiness and dizziness.

*** Information revised since the previous version of the SDS**

Issued by

Essenticon AS, Leif Weldingsvei 18, N-3208 Sandefjord, Norway. E-mail: post@essenticon.no. Phone.: +47 33 42 34 50 - Fax: +47 33 42 34 59 www.essenticon.com

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Disclaimer

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.