

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

### **1.1. Product identifier**

ClearJet A-2000 Semi-Gloss

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

#### **Use of the substance/preparation**

Liquid laminate

### **1.3. Details of the supplier of the safety data sheet**

#### **Address**

Marabu North America  
2460A Remount Road  
29406 North Charleston

Information provided by / telephone Department product safety

E-mail address of person responsible for this SDS PRSI@marabu.de

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

#### **Classification (Regulation (EC) No. 1272/2008)**

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319
STOT SE 3	H336
Aerosol 1	H222
	H229

#### **Classification in accordance with EC directives 1999/45/EC and 67/548/EEC**

Classification	R66
	R67
	Xi, R36
	R52/53
	F+, R12

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

#### **Hazard pictograms**



#### **Signal word**

Danger

#### **Hazard statements**

H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H222	Extremely flammable aerosol.

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H229 Pressurised container: May burst if heated.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

**Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)**

contains Acetone;1-Methoxy-2-propanol;Butanone

EUH208 Contains Mixture of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-, Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, Orange, sweet, ext., May produce an allergic reaction.

**Supplemental information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**SECTION 3: Composition/information on ingredients****Hazardous ingredients****Acetone**

CAS No. 67-64-1

EINECS no. 200-662-2

Concentration >= 25 < 50 %

Classification Xi, R36  
F, R11  
R66  
R67

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225

Eye Irrit. 2 H319

STOT SE 3 H336

**1-Methoxy-2-propanol**

CAS No. 107-98-2

EINECS no. 203-539-1

Registration no. 01-2119457435-35

Concentration >= 20 < 25 %

Classification R10  
R67

Classification (Regulation (EC) No. 1272/2008)

STOT SE 3 H336

Flam. Liq. 3 H226

**Butanone**

CAS No. 78-93-3

EINECS no. 201-159-0

Registration no. 01-2119457290-43

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Concentration	>=	1	<	10	%
Classification					

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2	H319
STOT SE 3	H336
Flam. Liq. 2	H225

**Orange, sweet, ext.**

CAS No. 8028-48-6  
EINECS no. 232-433-8  
Registration no. 01-2119493353-35-0008

Concentration	>=	0,1	<	1	%
Classification					

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 3	H226
Asp. Tox. 1	H304
Skin Irrit. 2	H315
Skin Sens. 1	H317
Aquatic chronic 2	H411

**Mixture of alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxyethylene) and alpha-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-3-(3-(2h-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)**

EINECS no. 400-830-7  
Concentration >= 0,1 < 1 %  
Classification Xi, R43  
N, R51/53

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317
Aquatic chronic 2	H411

**Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate**

Registration no. 01-2119491304-40  
Concentration >= 0,1 < 0,25 %  
Classification R43  
N, R50/53

Classification (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

## **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. 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. Summon a doctor immediately.

#### **After skin contact**

After contact with skin, wash immediately with plenty of water. Don't use solvents.

#### **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**

Summon a doctor immediately. Keep at rest. Do NOT induce vomiting.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray/mist, Not be used for safety reasons: water jet

### **5.2. Special hazards arising from the substance or mixture**

In the event of fire the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); dense black smoke

### **5.3. Advice for firefighters**

#### **Special protective equipment for fire-fighting**

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Keep away sources of ignition. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Refer to protective measures listed in Sections 7 and 8.

### **6.2. Environmental precautions**

Do not empty into drains. 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.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

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### Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Provide good ventilation of working area (local exhaust ventilation if necessary). Handle and open container with care. Isolate from sources of heat, sparks and open flame. Avoid skin and eye contact. Smoking, eating and drinking shall be prohibited in application area. Comply with the health and safety at work laws.

### Advice on protection against fire and explosion

No special measures required.

### Classification of fires / temperature class / Ignition group / Dust explosion class

Temperature class T3

## 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Store in accordance with national regulation

### Further information on storage conditions

Keep away from sources of ignition. Keep container tightly closed, cool and dry. Observe label precautions.

## 7.3. Specific end use(s)

Spray varnish

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limit values

##### Acetone

List	EH40			
Type	WEL			
Value	1210	mg/m <sup>3</sup>	500	ppm(V)
Short term exposure limit	3620	mg/m <sup>3</sup>	1500	ppm(V)
Status:	2011			

##### 1-Methoxy-2-propanol

List	EH40			
Type	WEL			
Value	375	mg/m <sup>3</sup>	100	ppm(V)
Short term exposure limit	560	mg/m <sup>3</sup>	150	ppm(V)
Skin resorption / sensibilisation:	Sk; Status: 2011			

##### Butanone

List	EH40			
Type	WEL			
Value	600	mg/m <sup>3</sup>	200	ppm(V)
Short term exposure limit	899	mg/m <sup>3</sup>	300	ppm(V)
Skin resorption / sensibilisation:	Sk; Status: 2011; Remarks: BMGV			

##### Propane

List	EH40			
Type	Asphyx			
Status:	2002			

### Derived No/Minimal Effect Levels (DNEL/DMEL)

##### Acetone

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Long term

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Route of exposure dermal  
 Concentration 186 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Short term  
 Route of exposure inhalative  
 Concentration 2420 mg/cm<sup>2</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Concentration 1210 mg/cm<sup>2</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Duration of exposure Long term  
 Route of exposure oral  
 Concentration 62 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Duration of exposure Long term  
 Concentration 62 mg/kg/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Consumer  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Concentration 200 mg/m<sup>3</sup>

**1-Methoxy-2-propanol**

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Acute  
 Route of exposure inhalative  
 Mode of action Local effects  
 Concentration 553,5 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure dermal  
 Mode of action Systemic effects  
 Concentration 50,6 mg/person/d

Type of value Derived No Effect Level (DNEL)  
 Reference group Worker  
 Duration of exposure Long term  
 Route of exposure inhalative  
 Mode of action Systemic effects  
 Concentration 369 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)

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Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	18,1	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	43,9	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	General Population	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	3,3	mg/kg/d

**Predicted No Effect Concentration (PNEC)**

**Acetone**

Type of value	PNEC	
Type	Freshwater	
Concentration	10,6	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	1,06	mg/l

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	21	mg/l

Type of value	PNEC	
Type	Freshwater sediment	
Concentration	30,4	mg/kg

Type of value	PNEC	
Type	Marine sediment	
Concentration	3,04	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	29,5	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	19,5	mg/l

**1-Methoxy-2-propanol**

Type of value	PNEC	
Type	Freshwater	
Concentration	10	mg/l

Type of value	PNEC	
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Type	Water	
Concentration	41,6	mg/kg
Type of value	PNEC	
Type	Sediment	
Concentration	41,6	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	4,17	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	2,47	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

## 8.2. Exposure controls

### Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Respiratory protection

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Full mask, filter A

### Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness > 0,5 mm

Breakthrough time < 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

### Eye protection

Safety glasses

### Body protection

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

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Form	Aerosol
Colour	colourless
Odour	solvent-like

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**Initial boiling point and boiling range**

Value	appr. 56	°C
Pressure	1.013	hPa
Source	Literature value	

**Flash point**

Remarks	Not applicable
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**Upper/lower flammability or explosive limits**

Lower explosion limit	appr. 1,5	%(V)
Upper explosion limit	appr. 13,7	%(V)
Source	Literature value	

**Density**

Value	appr. 0,92	g/cm <sup>3</sup>
Source	calculated value	

**Partition coefficient: n-octanol/water**

Remarks	Not applicable
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**Ignition temperature**

Value	appr. 287	°C
Source	Literature value	

**SECTION 10: Stability and reactivity****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**

When exposed to high temperatures may produce hazardous decomposition products.

**10.6. Hazardous decomposition products**

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute oral toxicity (Components)****Acetone**

Species	rat	
LD50	5800	mg/kg

**1-Methoxy-2-propanol**

Species	rat	
LD50	5200	mg/kg

**Acute dermal toxicity (Components)****Acetone**

Species	rabbit	
LD50	20000	mg/kg

**1-Methoxy-2-propanol**

Species	rabbit	
LD50	14000	mg/kg



**Experience in practice**

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

**Other information**

There are no data available on the mixture itself.  
The mixture has been assessed following the additivity method of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**General information**

There are no data available on the mixture itself. Do not allow to enter drains or water courses. The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

**Fish toxicity (Components)**

**1-Methoxy-2-propanol**

Species	golden orfe ( <i>Leuciscus idus</i> )		
LC0	>	4600	mg/l
Duration of exposure		96 h	

**Daphnia toxicity (Components)**

**1-Methoxy-2-propanol**

Species	Daphnia magna		
EC50		23300	mg/l
Duration of exposure		48 h	

**Algae toxicity (Components)**

**1-Methoxy-2-propanol**

Species	Desmodesmus		
EC50	>	1000	mg/l
Duration of exposure		168 h	

**Bacteria toxicity (Components)**

**1-Methoxy-2-propanol**

Species	activated sludge		
EC50	>	1000	mg/l

**12.2. Persistence and degradability**

**General information**

No data available

**Biodegradability (Components)**

**1-Methoxy-2-propanol**

Value	90		%
Duration of test		28 d	

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evaluation Method Readily biodegradable (according to OECD criteria)  
OECD 301 F

**12.3. Bioaccumulative potential**

**Partition coefficient: n-octanol/water**

Remarks Not applicable

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations for the product**

Do not allow to enter drains or water courses.

**Disposal recommendations for packaging**

Non-contaminated packages may be recycled.

Not emptied containers are hazardous waste (waste code number 150110).

**SECTION 14: Transport information**

**Land transport ADR/RID**

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

AEROSOLS

**14.3. Transport hazard class(es)**

Class 2  
Label 2.1  
Limited Quantity 1 I  
Transport category 2

**14.5. Environmental hazards**

-  
Tunnel restriction code D

**Marine transport IMDG/GGVSee**

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

AEROSOLS

**14.3. Transport hazard class(es)**

Class 2.1

**14.5. Environmental hazards**

no

**Air transport ICAO/IATA**

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

AEROSOLS

**14.3. Transport hazard class(es)**

Class 2.1

**14.5. Environmental hazards**

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**SECTION 15: Regulatory information**

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

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### or mixture

#### Major-accident categories acc. 96/82/EC

Category	8	Extremely flammable	10.000	kg	50.000	kg
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#### VOC

VOC (EU)	25,66	%	236,1	g/l
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#### Other information

The product does not contain substances of very high concern (SVHC).

## SECTION 16: Other information

### R-phrases listed in Chapter 3

10	Flammable.
11	Highly flammable.
36	Irritating to eyes.
38	Irritating to skin.
43	May cause sensitization by skin contact.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

### Hazard statements listed in Chapter 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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.

### CLP categories listed in Chapter 3

Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

### Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

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The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.  
As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.  
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.