Safety data sheet in accordance with regulation (EC) No 1907/2006 Trade name: Marabu Alcohol Ink 222, 20ml MNA Version: 2/GB Date revised: 17.07.2019 Print date: 07.08.19 Substance number: 12169007222 Replaces Version: 1 / GB SECTION 1: Identification of the substance/mixture and of the company/undertaking **1.1. Product identifier** Marabu Alcohol Ink 222, 20ml MNA 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/preparation Paint **Identified Uses** SU21 Consumer uses: Private households (= general public = consumers) PC9a Coatings and paints, thinners, paint removers 1.3. Details of the supplier of the safety data sheet Address Marabu GmbH & Co. KG Asperger Strasse 4 71732 Tamm Germany Telephone no. +49-7141/691-0 Fax no. +49-7141/691-147 Information provided Department product safety by / telephone E-mail address of PRSI@marabu.de person responsible for this SDS 1.4. Emergency telephone number (+49) (0)621-60-43333 SECTION 2: Hazards identification *** 2.1. Classification of the substance or mixture Classification (Regulation (EC) No. 1272/2008) Classification (Regulation (EC) No. 1272/2008) Flam. Liq. 2 H225 Eve Irrit. 2 H319 STOT SE 3 H336 2.2. Label elements Labelling according to regulation (EC) No 1272/2008 Hazard pictograms Signal word Danger

Hazard statements

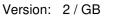
H225

H319

Highly flammable liquid and vapour. Causes serious eye irritation.

Trade name: Marabu Alcohol	Ink 222, 20ml MNA				\mathbf{N}
	Versior	n: 2/GB			Date revised: 17.07.2019
Substance number: 1216900	7222 Replac	es Version	n: 1/GE	3	Print date: 07.08.19
H336	May cause drowsiness	or dizzine	ess.		
Precautionary staten	nents ***				
P101	If medical advice is ne	eded, have	e product	container	or label at hand.
P102 P210	Keep out of reach of cl Keep away from heat, sources. No smoking.		es, spark	s, open fla	mes and other ignition
P264.1	Wash hands thorough	v after har	ndlina		
P271	Use only outdoors or in			rea.	
P280	Wear protective gloves				ction/face protection.
P305+P351+P338	IF IN EYES: Rinse cau lenses, if present and o	tiously wit	h water fo	or several	minutes. Remove contact
P405	Store locked up.			- 4'	
P501.9	Dispose of contents/co		•		
Hazardous compone	ent(s) to be indicated	on label (Regulat	tion (EC)	No. 1272/2008)
contains	Acetone;Propan-2-ol			-	
Supplemental inform	•				
EUH066	Repeated exposure m	ay cause s	kin drvne	ess or crac	king.
2.3. Other hazards		.,			
No special hazards h	ave to be mentioned.				
SECTION 3: Compos	sition/information	on inc	rodio	nte	
<u>OLOHION O.</u> Compos					
_				110	
3.2. Mixtures			liculei		
-					
3.2. Mixtures Hazardous ingredier Propan-2-ol				<u></u>	
3.2. Mixtures Hazardous ingredier					
3.2. Mixtures Hazardous ingredier Propan-2-ol CAS No. EINECS no.	n ts 67-63-0 200-661-7			10	
3.2. Mixtures Hazardous ingredier Propan-2-ol CAS No. EINECS no. Registration no.	n ts 67-63-0				
3.2. Mixtures Hazardous ingredier Propan-2-ol CAS No. EINECS no.	n ts 67-63-0 200-661-7	<	100	%	
3.2. Mixtures Hazardous ingredier Propan-2-ol CAS No. EINECS no. Registration no. Concentration	nts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008	<)			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration	nts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2	<) H225			
3.2. Mixtures Hazardous ingredier Propan-2-ol CAS No. EINECS no. Registration no. Concentration	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration	nts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2	<) H225			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No.	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no.	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No.	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1	<) H225 H319			
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20	<) H225 H319 H336	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008	<) H225 H319 H336 <	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2	< H225 H319 H336 <	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008	<) H225 H319 H336 <	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	<) H225 H319 H336 <) H225 H319	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	<) H225 H319 H336 <) H225 H319	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol CAS No.	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 2807-30-9	<) H225 H319 H336 <) H225 H319	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol CAS No. EINECS no.	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	<) H225 H319 H336 <) H225 H319	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol CAS No.	67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 2807-30-9	<) H225 H319 H336 <) H225 H319	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol CAS No. EINECS no. Concentration	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 2807-30-9 220-548-6 >= 1	<) H225 H319 H336 <) H225 H319 H336 < <	100	%	
3.2. Mixtures Hazardous ingredien Propan-2-ol CAS No. EINECS no. Registration no. Concentration Classification (Regula Acetone CAS No. EINECS no. Registration no. Concentration Classification (Regula 2-(Propyloxy)ethanol CAS No. EINECS no. Concentration	hts 67-63-0 200-661-7 01-2119457558-25 >= 50 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 67-64-1 200-662-2 01-2119471330-49 >= 20 ation (EC) No. 1272/2008 Flam. Liq. 2 Eye Irrit. 2 STOT SE 3 2807-30-9 220-548-6	<) H225 H319 H336 <) H225 H319 H336 < <	100	%	

Trade name: Marabu Alcohol Ink 222, 20ml MNA



Date revised: 17.07.2019 Print date: 07.08.19

Substance number: 12169007222

Replaces Version: 1 / GB

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 Until now no symptoms known so far.

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

Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO2, 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 monoxide (CO); Carbon dioxide (CO2); 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

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. 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

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Version: 2 / GB

Date revised: 17.07.2019 Print date: 07.08.19

Substance number: 12169007222

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

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

Replaces Version: 1 / GB

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Avoid skin and eye contact. Avoid the inhalation of particulates and spray mist arising from the application of this mixture. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Advice on protection against fire and explosion

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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

Classification of fires	B (Combustible liquid substances)
Temperature class	T2

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Electrical installations/working materials must comply with the local applied technological safety standards. Storage rooms in which filling operations take place must have a conducting floor. Store in accordance with national regulation

Hints on storage assembly

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

Further information on storage conditions

Observe label precautions. Store between 15 and 30 °C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Paint

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Acetone

List	EH40
Туре	WEL
Value	1210

mg/m³

ppm(V)

500

ade name: Marabu Alcohol Ink 222,					Ma
ubstance number: 12169007222		ersion: 2 / GB eplaces Version:	1 / GB		ed: 17.07.20 nt date: 07.08.
Short torm ovpoqura limit	3620	mg/m ³	1500	$\operatorname{ppm}(M)$	
Short term exposure limit Status: 2011	5020	mg/m-	1500	ppm(V)	
Propan-2-ol					
List	EH40				
Туре	WEL				
Value	999	mg/m³	400	ppm(V)	
Short term exposure limit Status: 2011	1250	mg/m³	500	ppm(V)	
Derived No/Minimal Effect L	evels (DN.	EL/DMEL)			
Acetone					
Type of value		No Effect Level (I	DNEL)		
Reference group	Worker				
Duration of exposure	Long ter	rm			
Route of exposure	dermal				
Concentration		186		mg/kg/d	
Type of value		No Effect Level (I	ONEL)		
Reference group	Worker				
Duration of exposure	Short te				
Route of exposure	inhalativ				
Concentration		2420		mg/m³	
Type of value	Derived	No Effect Level (ONEL)		
Reference group	Worker				
Duration of exposure	Long ter	rm			
Route of exposure	inhalativ				
Concentration		1210		mg/m³	
Type of value	Derived	No Effect Level (I	ONEL)		
Reference group	Consum	ner	·		
Duration of exposure	Long ter	rm			
Route of exposure	oral				
Concentration		62		mg/kg/d	
Type of value	Derived	No Effect Level (I	ONEL)		
Reference group	Consum	ner			
Duration of exposure	Long ter				
Concentration		62		mg/kg/d	
Type of value	Derived	No Effect Level (I	ONEL)		
Reference group	Consum	,	,		
Duration of exposure	Long ter	-			
Route of exposure	inhalativ				
Concentration		200		mg/m³	
Propan-2-ol					
Type of value	Derived	No Effect Level (I	DNEL)		
Reference group	Worker		,		
Duration of exposure	Long ter	rm			
Route of exposure	inhalativ				
Mode of action		c effects			
Concentration		500		mg/m³	
Type of value	Derived	No Effect Level (I	ONEL)		
Reference group	Worker	, v	,		
	Long ter				

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Substance number: 12169007222

Version: 2 / GB Replaces Version: 1 / GB Date revised: 17.07.2019 Print date: 07.08.19

		I I	
	Route of exposure	dermal	
	Mode of action		
		Systemic effects	
	Concentration	888	mg/kg/d
	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	89	mg/m³
	Type of value	Derived No Effect Level (DNEL)	
	Reference group	General Population	
	Duration of exposure	Long term	
	Route of exposure	dermal	
	Mode of action	Systemic effects	
	Concentration	319	mg/kg/d
	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	26	mg/kg/d
F	Predicted No Effect Concent	ration (PNEC)	
	Acetone		
		PNEC	
	Type of value		
	Туре	Freshwater	
	Concentration	10,6	mg/l
	Type of value	PNEC	
		Saltwater	
	Concentration	1,06	mg/l
	Concentration	1,00	iiig/i
	Type of value	PNEC	
	Туре	Water (intermittent release)	
	Concentration	`21	mg/l
	Type of value	PNEC	
	Туре	Freshwater sediment	
	Concentration	30,4	mg/kg
	Schoontration	00,1	
	Type of value	PNEC	
	Туре	Marine sediment	
	Concentration	3,04	mg/kg
		0,01	
	Type of value	PNEC	
	Туре	Soil	
	Concentration	29,5	mg/kg
	Type of value	PNEC	
	Туре	Sewage treatment plant (STP)	
	Concentration	100	mg/l
	Bropon 2 ol		
	Propan-2-ol	DNEC	
	Type of value	PNEC	
	×1		

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Substance number:	12169007222
Substance number.	12109007222

tance number: 12169007222	Replaces Version: 1 / GB	Print date: 07.08.19
Type Concentration	Freshwater 140,9	mg/l
Type of value Type Concentration	PNEC Saltwater 140,9	mg/l
Type of value Type Concentration	PNEC Sewage treatment plant (STP) 2251	mg/l
Type of value Type Concentration	PNEC Freshwater sediment 552	mg/kg
Type of value Type Concentration	PNEC Marine sediment 552	mg/kg
Type of value Type Concentration	PNEC Soil 28	mg/kg

Version: 2/GB

Date revised: 17.07.2019

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. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

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 mn	۱

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.

Eve protection

Use safety eyewear designed to protect against splash of liquids.

Body protection

Cotton or cotton/synthetic overalls or coveralls are normally suitable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

rade name: Marabu Alcohol Ink 222, 2	0ml MNA	\				\mathbb{N}
		/ersion: 2	/ GB			Date revised: 17.07.2019
Substance number: 12169007222	F	Replaces Ve	ersion:	1 / GB		Print date: 07.08.19
Form	liquid					
Colour	coloure	ed				
Odour	solven	t-like				
Odour threshold						
Remarks	No dat	a available				
pH value						
Remarks	Not ap	plicable				
Melting point						
Remarks	not det	ermined				
Freezing point						
Remarks	not det	ermined				
Initial boiling point and boilin						
Value	appr.	82			°C	
Flash point	appn	02			U	
Value		20			°C	
Evaporation rate (ether = 1) :		20			0	
Remarks	not dot	ermined				
	not det	ennineu				
Flammability (solid, gas)						
Not applicable	voleciv	a limita				
Upper/lower flammability or e	-				0(()))	
Lower explosion limit Upper explosion limit	appr. appr.	2 13			%(V) %(V)	
Source		ure value			70(v)	
Vapour pressure						
Value	appr.	45			hPa	
Vapour density	- 1- 1-	-				
Remarks	not det	ermined				
Density						
Remarks	not det	ermined				
Solubility in water	not det	errinica				
Remarks	nartiall	y miscible				
Partition coefficient: n-octand	•					
Remarks		plicable				
	Νοι αρ	plicable				
Ignition temperature		405			•••	
Value Source	appr. Literati	425 ure value			°C	
Viscosity	Literati					
Value		150	to	250	mPa.s	
		150	to	200	IIIF d.S	
Efflux time Value	_	10				
Value Temperature	<	12 20	°C		S	
Method	DIN 53	211 4 mm	5			
Explosive properties						
evaluation	no					
Oxidising properties						
evaluation	None k	nown				

Safety data sheet in accordance with regulation (EC) No 1907	7/2006
--	--------

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Version: 2/GB

Substance number: 12169007222

Replaces Version: 1 / GB

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

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.

10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

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

	gical			
Acute oral toxicity				
Remarks	Based on available data, the classification criteria are not met.			
Acute oral toxicity (Compo	nents)			
Acetone				
Species LD50	rat	5800	mg/kg	
Acute dermal toxicity (Con	nponen	ts)		
Acetone				
Species LD50	rabbit	20000	ma///a	
		20000	mg/kg	
Acute inhalational toxicity	- ·			
Remarks	Based	on available dat	a, the classification criteria are not met.	
Skin corrosion/irritation				
Remarks	Based	on available dat	a, the classification criteria are not met.	
Serious eye damage/irritat	on			
evaluation	irritant			
Remarks	The cl	assification criter	ria are met.	
Sensitization				
Remarks	Based	on available dat	a, the classification criteria are not met.	
Mutagenicity				
Remarks	Based	on available data	a, the classification criteria are not met.	
Reproductive toxicity				
Remarks	Based	on available dat	a, the classification criteria are not met.	
Carcinogenicity				
Remarks	Based	on available dat	a, the classification criteria are not met.	

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Version: 2 / GB

Substance number: 12169007222

Replaces Version: 1 / GB

Date revised: 17.07.2019 Print date: 07.08.19

Specific Target Organ Toxicity (STOT)

Single exposure	
Remarks	The classification criteria are met.
evaluation	May cause drowsiness or dizziness.
Repeated exposure	
Remarks	Based on available data, the classification criteria are not met.

Aspiration hazard

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

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 GHS/CLP Regulation (EC) No 1272/2008.

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.

12.2. Persistence and degradability

General information

No data available

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient: n-octanol/water

Not applicable

12.4. Mobility in soil

Remarks

General information

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

General information

There are no data available on the mixture itself.

12.6. Other adverse effects

General information

Trade name: Marabu Alcohol Ink 222, 20ml MNA

Version: 2 / GB

Substance number: 12169007222

Replaces Version: 1 / GB

Date revised: 17.07.2019 Print date: 07.08.19

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses.

Wastes and emptied containers should be classified in accordance with relevant national regulation. The European Waste Catalogue classification of this product, when disposed of as waste is EWC waste code 08 03 12* waste ink containing dangerous substances If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned.

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

SECTION 14: Transport information

Land transport ADR/RID

14.1. UN number	
UN 1263	
14.2. UN proper shipping name	
PAINT	
14.3. Transport hazard class(es)	
Class	3
Label	3 3
14.4. Packing group	U
Packing group	П
Special provision	640D
	5 I
Limited Quantity	
Transport category	3
14.5. Environmental hazards	
-	
Tunnel restriction code	D/E
Marine transport IMDG/GGVSec 14.1. UN number UN 1263 14.2. UN proper shipping name PAINT 14.3. Transport hazard class(es) Class 14.4. Packing group Packing group 14.5. Environmental hazards no	3 11
Air transport ICAO/IATA 14.1. UN number UN 1263 14.2. UN proper shipping name PAINT 14.3. Transport hazard class(es) Class	3

	proance with re	gulation (EC) No 1907/2	006	
rade name: Marabu Alco	ohol Ink 222, 201	ml MNA		
		Version: 2 / GB		Date revised: 17.07.201
Substance number: 1216	9007222	Replaces Version:	1 / GB	Print date: 07.08.1
14.4. Packing group Packing group 14.5. Environmenta	-	II		
	utions for user the user's premi in closed contai	•		f an accident or spillage.
Other information 14.7. Transport in b no	oulk according	to Annex II of Marpol an	d the IBC Code	
ECTION 15: Reg	ulatory info	ormation		
-			egislation spe	cific for the substance
or mixture			-9:	
Major-accident ca	ategories acc.	96/82/EC		
Category	-	hly flammable liquids	5.000.000	kg 50.000.000 kg
Other information	า			
		ostances of very high con	cern (SVHC).	
			()	
15.2. Chemical safet		nı afety assessment has not	boon carried out	
		alety assessment has not	been canled out.	
ECTION 16: Othe	<u>er informat</u>	<u>ion</u>		
ECTION 16: Othe Hazard statement				
	ts listed in Ch		vapour.	
Hazard statement H225 H312	ts listed in Ch Hig Ha	apter 3 hly flammable liquid and rmful in contact with skin.		
Hazard statement H225 H312 H319	ts listed in Ch Hig Ha Ca	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation		
Hazard statement H225 H312 H319 H336	ts listed in Ch Hig Ha Ca Ma	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or diz		
Hazard statement H225 H312 H319 H336 CLP categories lis	ts listed in Ch Hig Ha Ca Ma sted in Chapt	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or diz er 3		
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4	ts listed in Ch Hig Ha Ca Ma sted in Chapt Act	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or diz er 3 ute toxicity, Category 4		
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2	ts listed in Ch Hig Ha Ca Ma sted in Chapt Aci Eye	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or diz er 3 ute toxicity, Category 4 e irritation, Category 2	zziness.	
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2	ts listed in Ch Hig Ha Ca Ma sted in Chapt Acc Eye Fla	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 3	zziness. 2	Catogory 3
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3	ts listed in Ch Hig Ha Ca Ma sted in Chapt Aci Eya Fla Sp	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or diz er 3 ute toxicity, Category 4 e irritation, Category 2	zziness. 2	e, Category 3
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infe	ts listed in Ch Hig Ha Ca Ma sted in Chapt Acc Eye Fla Sp ormation	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 3 ecific target organ toxicity	zziness. 2 - single exposure	
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infor Relevant changes This information i	ts listed in Ch Hig Ha Ca Ma sted in Chapt Acr Eyr Fla Sp ormation s compared with is based on our	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 2 ecific target organ toxicity the previous version of t present state of knowledg	zziness. 2 - single exposure he safety data she le. However, it sho	eet are marked with: *** ould not constitute a
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infor Relevant changes This information i guarantee for any	ts listed in Ch Hig Ha Ca Ma sted in Chapt Act Eye Fla Sp ormation s compared with is based on our y specific produce	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 3 ecific target organ toxicity n the previous version of t	zziness. 2 - single exposure he safety data she je. However, it sho establish a legall	eet are marked with: *** ould not constitute a y valid relationship.
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infe Relevant changes This information i guarantee for any The information i legislation. It provides guidar	ts listed in Ch Hig Ha Ca Sted in Chapt Aci Eya Fla Sp ormation s compared with is based on our y specific produc n this Safety Da	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 3 ecific target organ toxicity the previous version of t present state of knowledge the properties and shall not ta Sheet is based on the p afety and environmental a	zziness. 2 - single exposure he safety data she establish a legally present state of kr	eet are marked with: *** ould not constitute a y valid relationship. howledge and current duct and should not be
Hazard statement H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infe Relevant changes This information i guarantee for any The information in legislation. It provides guidar construed as any	ts listed in Ch Hig Ha Ca Sted in Chapt Act Sp sted in Chapt Fla Sp ormation s compared with is based on our y specific produc n this Safety Da nce on health, sa	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 3 ecific target organ toxicity to the previous version of t present state of knowledge of properties and shall not ta Sheet is based on the p afety and environmental a chnical performance or su	zziness. 2 - single exposure he safety data she le. However, it sho establish a legally present state of kr spects of the prod uitability for particu	eet are marked with: *** ould not constitute a y valid relationship. nowledge and current duct and should not be ular applications.
Hazard statement H225 H312 H319 H336 CLP categories list Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infor Relevant changes This information i guarantee for any The information in legislation. It provides guidar construed as any The product show	ts listed in Ch Hig Ha Ca Sted in Chapt Act Sp Sp ormation s compared with is based on our y specific produc n this Safety Da nce on health, sa guarantee of te uld not be used f	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 2 mmable liquid, Category 3 ecific target organ toxicity to the previous version of t present state of knowledge of properties and shall not ta Sheet is based on the p afety and environmental a chnical performance or su or purposes other than th	zziness. 2 - single exposure he safety data she le. However, it sho establish a legally present state of kr spects of the prod uitability for particu	eet are marked with: *** ould not constitute a y valid relationship. howledge and current duct and should not be
H225 H312 H319 H336 CLP categories lis Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental info Relevant changes This information i guarantee for any The information in legislation. It provides guidar construed as any The product shou to the supplier an	ts listed in Ch Hig Ha Ca Sted in Chapt Act Sp Sp ormation s compared with is based on our y specific product n this Safety Da nce on health, sa guarantee of te uld not be used f ad obtaining writt	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 2 mmable liquid, Category 3 ecific target organ toxicity the previous version of t present state of knowledge the previous version of t present state of knowledge the previous version of t present state of nowledge the previous version of t present state of shall not ta Sheet is based on the p afety and environmental a chnical performance or si or purposes other than th ten handling instructions.	zziness. 2 - single exposure he safety data she establish a legally present state of kr spects of the proc uitability for particu ose shown in Sec	eet are marked with: *** ould not constitute a y valid relationship. nowledge and current duct and should not be ular applications. tion 1 without first referring
Hazard statement H225 H312 H319 H336 CLP categories list Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 Supplemental infor Relevant changes This information is guarantee for any The information is legislation. It provides guidar construed as any The product show to the supplier an As the specific co	ts listed in Ch Hig Ha Ca Sted in Chapt Act Sp Sp ormation s compared with is based on our y specific product n this Safety Da nce on health, sa guarantee of te uld not be used f ad obtaining writt onditions of use	apter 3 hly flammable liquid and rmful in contact with skin. uses serious eye irritation y cause drowsiness or dia er 3 ute toxicity, Category 4 e irritation, Category 2 mmable liquid, Category 2 mmable liquid, Category 3 ecific target organ toxicity the previous version of t present state of knowledge the previous version of t present state of knowledge the previous version of t present state of nowledge the previous version of t present state of shall not ta Sheet is based on the p afety and environmental a chnical performance or si or purposes other than th ten handling instructions.	zziness. 2 - single exposure he safety data she establish a legally present state of kr spects of the prod uitability for particu ose shown in Sec the supplier's con	eet are marked with: *** ould not constitute a y valid relationship. nowledge and current duct and should not be ular applications.

٦

Г

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.