

SOLO GOYA Zapon Lacquer

Page 1 of 20

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance/preparation

Trade nameSOLO GOYA Zapon LacquerArticle No.377Package size50 mlSubstance name-INDEX No.-EG No.-CAS No.-REACH Registration No.-

1.2 Use of the substance/preparation

Colorless protective lacquer for metals; prevents tarnishing. For artists and hobby user.

1.3 Manufacturer/Supplier

C. KREUL GmbH & Co. KG Carl-Kreul-Strasse 2 D-91352 Hallerndorf Phone no. +49 (0) 9545 925-0 Fax no. +49 (0) 9545 925-511 Mail info@c-kreul.de

Information provided by

Mrs. Treiber, <u>b.treiber@c-kreul.de</u>

1.4 Emergency information

Phone no. +49 (0) 9545 925-0 Fax no. +49 (0) 9545 925-511

(Monday - Thursday 8.00 - 17.00; Friday 8.00 - 15.00)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance/preparation

Classification according to Regulation (EC) 1272/2008 Flam. Liq. 2 H225; Eye Irrit. 2 H319 ; STOT SE 3 H336 ; Aquatic Chron. 3 H412; EUH066

2.2 Labelling according to Regulation (EC) 1272/2008 Hazard pictogram and signal word of the product

Danger Hazard-determining components of labelling n-Butyl acetate, CAS 123-86-4, Isopropyl acetate, CAS 108-21-4



Page 2 of 20

Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

SOLO GOYA Zapon Lacquer

Hazard statements

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H412 Harmful to aquatic life with long lasting effects.

European hazard statements

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P370+P378	In case of fire: Use sand, CO ₂ , dry powder for extinction.
P501	Dispose of contents/container to hazardous or special waste collection point.
1 001	

2.3 Other Hazards

Highly flammable liquid and vapour. Vapours may form explosive mixtures with air. This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical / electrical equipment). Take precautionary measures against static discharges.

Results of PBT and vPvB assessment: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Peparation based on synthetic resin, cellulose nitrate and organic solvent.

Substance related information Main component

The product is a preparation.

-INDEX No. -EG No. -CAS No. -REACH Registration No.: -Classification according to Regulation (EC) 1272/2008: -

Hazard impurities -INDEX No. -EG No. -CAS No. -REACH Registration No.: -Classification according to Regulation (EC) 1272/2008: -



SOLO GOYA Zapon Lacquer

Page 3 of 20

3.1 Preparation/mixture related information 25 - 50 % n-Butyl acetate INDEX No. 607-025-00-1 EG No. 204-658-1 CAS No. 123-86-4 REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: : I Flam. Liq. 3 H226; I STOT SE 3 H336; EUH066

10 - 25 % Isopropyl acetate

INDEX No.
607-024-00-6

EG No.
203-561-1

CAS No.
108-21-4

REACH Registration No.:

Classification according to Regulation (EC) 1272/2008: ⁽¹⁾ Flam. Liq. 2 H225; ⁽¹⁾ Eye Irrit. 2 H319; ⁽¹⁾ STOT SE 3 H336; EUH066

2,5 - 10 % Propan-2-ol

INDEX No.
603-117-00-0

EG No.
200-661-7

CAS No.
67-63-0

REACH Registration No.:

Classification according to Regulation (EC) 1272/2008: ^(*) Flam. Liq. 2 H225; ^(*) Eye Irrit. 2 H319; ^(*) STOT SE 3 H336

2,5 - 10 % 1-Methoxy-2-propanol

INDEX No.
603-064-00-3

EG No.
203-539-1

CAS No.
107-98-2

REACH Registration No.:

Classification according to Regulation (EC) 1272/2008: ^(*) Flam. Liq. 3 H226; ^(*) STOT SE 3 H336

2,5 - 10 % Naphtha (petroleum), hydrotreated light INDEX No. 649-328-00-1

EG No. 265-151-9 CAS No. 64742-49-0 REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: ^(*) Flam. Liq. 2 H225; ^(*) Asp. Tox. 1 H304; ^(†) Skin Irrit. 2 H315; ^(†) STOT SE 3 H336; ^(*) Aquatic Chron. 2 H411

2,5 - 10 % Iso-ButanolINDEX No.603-108-00-1EG No.201-148-0CAS No.78-83-1



SOLO GOYA Zapon Lacquer

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: ^(*) Flam. Liq. 3 H226; ^(*) Eye Dam. 2 H318; ^(*) Skin Irrit. 2 H315; ^(*) STOT SE 3 H335; ^(*) STOT SE 3 H336

2,5 - 10 % Butan-1-ol INDEX No. 603-004-00-6 EG No. 200-751-6 CAS No. 71-36-3 REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: H302; Eye Dam. 2 H318; Skin Irrit. 2 H315; STOT SE 3 H335; STOT SE 3 H335; STOT SE 3 H336

2,5 - 10 % Ethyl acetateINDEX No.607-022-00-5EG No.205-500-4CAS No.141-78-6REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: The Flam. Liq. 2 H225; Eye Irrit. 2 H319: STOT SE 3 H336: EUH066

< 2,5 % Ethanol INDEX No. 603-002-00-5 EG No. 200-578-6 CAS No. 64-17-5 REACH Registration No.: -Classification according to Regulation (EC) 1272/2008: Flam. Lig. 2 H225

*minimum classification

Full text of H- and EUH-phrases: see section 16.

4. FIRST AID MEASURES

4.1 General information

Remove contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Immediately remove person concerned out of danger area. Symptoms see part 11.

After inhalation

Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. If breathing is irregular or stopped, administer artificial respiration. Unconsciousness: lateral poison - contact a doctor immediately.

Page 4 of 20



Page 5 of 20

Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

SOLO GOYA Zapon Lacquer

After skin contact

Remove contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do NOT use solvents or thinners. In case of skin reactions, consult a physician.

After eye contact

Remove contact lens. Irrigate copiously with clean, fresh water for at least 10 - 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

If swallowed immediately drink: water, to which activated charcoal may be added. Do NOT induce vomiting. During spontaneous vomiting hold the head of the casualty low with the body in a prone position in order to avoid aspiration. Call a physician to the site of the accident in every case.

4.2 The most important acute and delayed appearing symptoms and effects Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in

extreme cases, loss of consciousness. See part 11.

4.3 References to medical emergency relief or special treatment

With unconsciousness: inform an emergency doctor. Further instructions see section 4.1.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Extinguishing powder, foam, water spray and carbon dioxide. Extinguishing media which must not be used for safety reasons: Full water jet

5.2 Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

Use water spray jet to protect personnel and to cool endangered containers. Cool endangered containers with water in case of fire. It is possible to pressure formation and to burst of containers. Fire will produce dense black smoke. When product exposed to high temperatures it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazards components.

5.3 Special protective equipment

In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Beware of reignition. Do not allow the quenching water into the sewage system. Dispose fire debris and contaminated fire fighting water in accordance with official regulations.

5.4 Additional information

Compare section 3, 7, 8 and 10.



SOLO GOYA Zapon Lacquer

Page 6 of 20

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Wear protective gloves/protective clothing/eye protection/face protection. Remove ignition sources. Provide for sufficient ventilation. Do NOT inhale the vapour. Remove persons to safety.

6.2 Environmental precautions

Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not empty into drains or watercourses. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Further instructions see section 6.3.

6.3 Methods for cleaning up/collecting

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. Further instructions see part 10.

6.4 Additional information

Further instructions see section 7, 8 and 10.

7. HANDLING AND STORAGE

7.1 Information for 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 adequate ventilation. Never use pressure to empty: container is not a pressure vessel. Do not leave vessels/containers open. Always keep in containers of same material as the original one. Additionally, 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. Preparation may charge electro statically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Use only antistatic equipped (spark-free) tools. Comply with the health and safety at work laws (TRGS 500). Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in application area. See protective measures under point 8.

Precautions against fire and explosion

Highly flammable liquid and vapour. Keep away from sources of ignition - No smoking. Danger of inflammation in cause of weldings-works at empty containers. Vapours may form explosive mixtures with air. Take precautionary measures against static discharges. Usual measures for fire prevention.

7.2 Conditions for safe storage, including incompatibilities Information about storage conditions

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep container tightly closed.



SOLO GOYA Zapon Lacquer

Page 7 of 20

Hints on joint storage

Only substances of the same storage class should be stored together. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. The substance should not be stored with substances with which hazardous chemical reactions are possible.

Requirement for storage rooms and vessels

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. No smoking. Keep container tightly closed. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage. Although the storage and use of this product is not subject to specific statutory requirements, observation of the principles of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations as appropriate will be seen as good industrial practice in meeting the general duties of the Health and Safety at Work Act. Observe label precautions.

Additional information

Storage class (VCI): 3A Flammable liquid substances

7.3 Specific uses

See 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Components with critical values that require monitoring at the workplace (exposure limits)

n-Butyl acetate; CAS No. 123-86-4

Specification:	AGW
Value:	62 ml/m ³ (ppm), 300 mg/m ³
Peak limitation:	2(I)
Toxic to reproduction:	Y - a risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Remark:	AGS

Isopropyl acetate; CAS No. 108-21-4

Specification:MAKValue:100 ml/m³ (ppm), 420 mg/m³Peak limitation:2(I)Toxic to reproduction:-Remark:-

Propan-2-ol; CAS No. 67-63-0

Specification:	AGW
Value:	200 ml/m ³ (ppm), 500 mg/m ³
Peak limitation:	2(II)
Toxic to reproduction:	Y - a risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Remark:	DFG



SO	SOLO GOYA Zapon Lacquer		Page 8 of 20
	1-Methoxy-2-propano	I: CAS No. 107-98-2	
	Specification:	AGW	
	Value:	100 ml/m^3 (ppm), 370 mg/m ³	
	Peak limitation:	2(1)	
	Toxic to reproduction:	Y - a risk of reproductive effects needs not to be fear exposure limit value (AGW) and the biological limit v	red if the occupational alue (BGW) is kept
	Remark:	DFG, EU	
	Naphtha (petroleum),	hydrotreated light; CAS No. 64742-49-0	
	Specification:	ÂGW	
	Value:	100 ml/m ³ (ppm)	
	Peak limitation:	-	
	Toxic to reproduction:	-	
	Remark:	Hydrocarbon mixture	
	Iso-Butanol; CAS No.	78-83-1	
	Specification:	AGW	
	Value:	100 ml/m³ (ppm), 310 mg/m³	
	Peak limitation:	1(I)	
	Toxic to reproduction:	Y - a risk of reproductive effects needs not to be fear exposure limit value (AGW) and the biological limit v	red if the occupational alue (BGW) is kept
	Remark:	DFG	. , .
	n-Butanol: CAS No. 7	1-36-3	
	Specification:	AGW	
	Value:	100 ml/m^3 (ppm), 310 mg/m ³	
	Peak limitation:	1(1)	
	Toxic to reproduction:	Y - a risk of reproductive effects needs not to be fear exposure limit value (AGW) and the biological limit v	red if the occupational alue (BGW) is kept
	Remark:	DFG	
	Ethvl acetate: CAS No	o. 141-78-6	
	Specification:	AGW	
	Value:	400 ml/m ³ (ppm), 1500 mg/m ³	
	Peak limitation:	2 (I)	
	Toxic to reproduction:	Y - a risk of reproductive effects needs not to be fear	red if the occupational alue (BGW) is kept
	Remark:	DFG	
	Ethanol: CAS No. 64-	17-5	
	Specification	AGW	
	Value:	500 ml/m^3 (ppm), 960 mg/m ³	
	Peak limitation:	2(II)	
	Toxic to reproduction:	Y - a risk of reproductive effects needs not to be fear exposure limit value (AGW) and the biological limit v	red if the occupational alue (BGW) is kept
	Remark:	DFG	



LO GOYA Zapo	on Lacqu	Jer			Page 9 of 20	
DNEL/DMEL	-Values	No. 123-86-4				
Inhalativ	DNEL S	short-term exposure – system	nic effects	859,7 mg/m ³ 960 mg/m ³	(general populatio (worker)	n)
Inhalativ	DNEL I	ong-term exposure – system	ic effects	102,34 mg/m³ 480 mg/m³	(general populatio (worker)	n)
Propan-2-ol;	CAS No	o. 67-63-0				
Oral	DNEL I	ong-term exposure – system	ic effects	26 mg/kg	(general populatio	n)
Dermal	DNEL I	ong-term exposure – system	ic effects	319mg/kg bw/d 888 mg/kg bw/c	(general populatio I(worker)	n)
Inhalativ	DNEL I	ong-term exposure – system	ic effects	89 mg/m ³ 500 mg/m ³	(general populatio (worker)	n)
Methoxy-2-p	ropanol;	CAS No. 107-98-2				
Oral	DNEL I	ong-term exposure – system	ic effects	3,3 mg/kg	(general populatio	n)
Dermal	DNEL I	ong-term exposure – system	ic effects	18,1mg/kg bw/c 50,6 mg/kg bw/c	l(general populatio d (worker)	n)
Inhalativ	DNEL I	ong-term exposure – system	ic effects	43,9 mg/m³ 369 mg/m³	(general populatio (worker)	n)
Inhalativ	DNEL I	ong-term exposure – system	ic effects	553,5 mg/m³	(worker)	
Naphtha (pe	troleum)	, hydrotreated light; CAS N	o. 64742-4	49-0		
Oral	DNEL I	ong-term exposure – system	ic effects	699 mg/kg	(general populatio	n)
Dermal	DNEL I	ong-term exposure – system	ic effects	699mg/kg bw/d	(general populatio	n)
Inhalativ		ong-torm oxposure system	ic offacts	773 mg/kg bw/c	I(WORKER)	n)
IIIIaaliv	DNEL	ong-term exposure – system		2035 mg/m ³	(worker)	1)
Iso-Butanol;	CAS No	. 78-83-1				
Oral		ong-term exposure – system	ic effects	25 mg/kg	(general populatio	n)
Innalativ	DNEL	ong-term exposure – system	ic effects	55 mg/m [°] 310 mg/m ³	(general populatio (worker)	n)
n-Butanol; C	CAS No.	71-36-3				
Oral	DNEL I	ong-term exposure – system	ic effects	3125 mg/kg	(general populatio	n)
Inhalativ	DNEL I	ong-term exposure – system	ic effects	55 mg/m³ 310 mg/m³	(general populatio (worker)	∩)
PNEC-Value	s					
n-Butyl aceta	ate; CAS	No. 123-86-4				
STP		35,6 mg/l	(environi	mental)		
treshwater		0,18 mg/l	(environi	mental)		
marine water	buctor	U,U18 Mg/I	(environi	mental)		
sediment ma	ring	0,981 mg/kg dry weight	(environi	mental)		
soil		0.0903 mg/kg dry weight	(environ	mental)		
550		e, ee ee megneg ary morgine	,			



SOLO GOYA Zapon Lacquer

Page 10 of 20

Propan-2-ol; CAS No	. 67-63-0	
freshwater	140,9 mg/l	(environmental)
marine water	140,9 mg/l	(environmental)
sediment freshwater	552 mg/kg dry weight	(environmental)
sediment marine	552 mg/kg dry weight	(environmental)
soil	28 mg/kg dry weight	(environmental)
Methoxy-2-propanol;	CAS No. 107-98-2	
STP	100 mg/l	(environmental)
freshwater	10 mg/l	(environmental)
marine water	1 mg/l	(environmental)
sediment freshwater	41,6 mg/kg dry weight	(environmental)
sediment marine	4,17 mg/kg dry weight	(environmental)
soil	2,47 mg/kg dry weight	(environmental)
Iso-Butanol; CAS No	. 78-83-1	
freshwater	0,4 mg/l	(environmental)
marine water	0,04 mg/l	(environmental)
sediment freshwater	1,52 mg/kg dry weight	(environmental)
sediment marine	0,152 mg/kg dry weight	(environmental)

n-Butanol; CAS No. 71-36-3

2476 mg/l	(environmental)
0,082 mg/l	(environmental)
0,0082 mg/l	(environmental)
0,178 mg/kg dry weight	(environmental)
0,0178 mg/kg dry weight	(environmental)
	2476 mg/l 0,082 mg/l 0,0082 mg/l 0,178 mg/kg dry weight 0,0178 mg/kg dry weight

8.2 Occupational exposure controls

Technical measures and the application of suitable working methods have precedence before the application of personal protective equipment. 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.

Suitable judgement methods of the examination of the effectiveness of the grieved preventive measures enclose measuring-technical and non-technical inquiry methods like they in the technical rules for danger materials (TRGS) 402.

Personal protective equipment

Do not eat or drink during work – No smoking. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately.

Respiratory protection

Take breathing protection measures (see also instruct to avoid accidents). Breathing protection equipment required in inadequately ventilated places and during spraying.

Respiratory filter (gas): A1 (brown) until 1000 ml/m³ (ppm) A2 (brown) until 5000 ml/m³ (ppm)



SOLO GOYA Zapon Lacquer

Page 11 of 20

A3 (brown) until 10000 ml/m³ (ppm)

Details are to be inferred "from the rules for the use of respiratory protective devices" (BGR 190 (German regulation)).

Skin protection

Avoid contact with skin. Use protective gloves (EN 374). Solvent-resistant protective gloves must be worn. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location. Textile or leather gloves are completely unsuitable. Pay attention to skin care.

The following materials are suitable for protective gloves Inherent protection Nitrile rubber/Nitrile latex – NBR (0,4 mm): Permeation time 2 hours

Splash guard Polychloropren - CR (0,5 mm): Permeation time 2 hours

The times listed are suggested by measurements taken at 22 °C and constant contact. Temperatures raised by warmed substances, body heat, etc. and a weakening of the effective layer thickness caused by expansion can lead to a significantly shorter breakthrough time. In case of doubt contact the gloves' manufacturer. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation.

Eye protection

Avoid contact with eyes. Use safety glasses according to EN 166:2001.

Body protection

Personnel should wear antistatic clothing's made of natural fibre or of high temperature resistant synthetic fibre. All parts of the body should be washed after contact. Light protective clothing.

Limitation and supervision of the environmental exposition

See section 6 and 7.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Form:	liquid
Colour:	clear, colorless
Odour:	characteristic

9.2 Relevant safety data

Flashpoint:	13 °C	DIN EN 22719
Viscosity:	>20,5 cSt	
Density: (20 °C)	approx. 0,88 g/cm ³	DIN 53217



Page 12 of 20

Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

SOLO GOYA Zapon Lacquer

Explosive limits:Lower / Upper:1,8 Vol.-% / 10 Vol.-%Ignition temperature:180 °CVapour pressure:not determined (20 °C)pH-value:not applicableSolubility in water:insoluble

9.3 Additional information

No other physical-chemical date available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. See section 7.

10.2 Chemical stability

If handled properly then product has chemical stability.

10.3 Possible dangerous reactions

None, if handled according to order. Further instructions see section 10.1 and 10.2.

10.4 Conditions to avoid

Only use the material in places where open light, fire and other flammable sources can be kept away.

10.5 Incompatible materials

See section 10.1.

10.6 Hazardous decomposition products

When product exposed to high temperatures, it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazardous components.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicityn-Butyl acetate; CAS No. 123-86-4LD50, oral, rat = 10800 mg/kg(Reference: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 1, Pg. 196, 1992.)LD50, dermal, rabbit = 17600 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 7, 1974.)LC50, inh., rat,4h = 1,85 mg/m³(Reference: Inhalation Toxicology. Vol. 9, Pg. 623, 1997.)Substance/product listed in Regulation (EC) 1272/2008.



SOLO GOYA Zapon Lacquer	Page 13 of 20				
Isopropyl acetate; CAS No.	Isopropyl acetate; CAS No. 108-21-4				
$LD_{50, \text{ oral, rat}} = 6750 \text{ mg/kg}$ $LD_{50, \text{ dermal, rabbit}} = 17400 \text{ mg/kg}$	(Reference: Union Carbide Data Sheet. Vol. 3/24/1970.) g(Reference: AMA Archives of Industrial Hygiene and Occupational Medicine, Vol. 10, Pg. 61, 1954.)				
Remark:	Substance/product listed in Regulation (EC) 1272/2008.				
Propan-2-ol; CAS No. 67-63	3-0				
$LD_{50, \text{ oral, rat}} = 5050 \text{ mg/kg}$	(Reference: Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 43(1), Pg. 8, 1978.)				
$LD_{50, dermal, rabbit} = 12800 \text{ mg/kg}$	g(Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974, Vol. 1, Pg. 100, 1974.)				
Remark:	Substance/product listed in Regulation (EC) 1272/2008.				
Iso-Butanol; CAS No. 78-83	3-1				
LD _{50, oral, rat} = 2460 mg/kg	(Reference: AMA Archives of Industrial Hygiene and Occupational Medicine. Vol. 10, Pg. 61, 1954.)				
LD _{50, dermal, rabbit} = 3400 mg/kg	(Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974, Vol. 1, Pg. 11, 1974.)				
Remark:	Substance/product listed in Regulation (EC) 1272/2008.				
n-Butanol; CAS No. 71-36-3	3				
LD _{50, oral, rat} = 790 mg/kg LD _{50, dermal, rabbit} = 3400 mg/kg	(Reference: South African Medical Journal. Vol. 43, Pg. 795, 1969.) (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 10, 1974.)				
$LC_{50, inh., rat, 4h} = 24,3 mg/m^3$	(Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974, Vol. 1. Pg. 10, 1974)				
Remark:	Substance/product listed in Regulation (EC) 1272/2008.				
Naphtha (petroleum), hydro LD _{50, oral, rat} > 5000 mg/kg LD _{50, dermal, rat} > 2920 mg/kg LD _{50, dermal, rabbit} > 2000 mg/kg	otreated light; CAS No. 64742-49-0 (Supplier Information.) (Supplier Information.) (Supplier Information.)				
LC _{50, inh., rat,4h} > 20 mg/l Remark:	(Supplier Information.) Substance/product listed in Regulation (EC) 1272/2008.				
Ethyl acetate; CAS No. 141	-78-6				
$LD_{50, \text{ oral, rat}} = 5620 \text{ mg/kg}$ $LD_{50, \text{ dermal, rabbit}} = 18000 \text{ mg/kg}$ Remark:	(Reference: Yakkyoku. Pharmacy. Vol. 32, Pg. 1241, 1981.) g(Reference: Union Carbide Data Sheet. Vol. 10/4/1968.) Substance/product listed in Regulation (EC) 1272/2008.				
Ethanol; CAS No. 64-17-5 LD _{50, oral, rat} = 7060 mg/kg	(Reference: Toxicology and Applied Pharmacology. Vol. 16, Pg. 718,				
Remark:	Substance/product listed in Regulation (EC) 1272/2008.				



SOLO GOYA Zapon Lacquer

Page 14 of 20

Primary irritant effect	
after inhalation	Exposure to component solvents vapour concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
on the skin	Repeated exposure may cause skin dryness or cracking. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin and absorption through the skin.
on the eyes	Irritating to eyes.
after ingestion	Harmful: may cause lung damage if swallowed. Do not induce vomiting. For symptoms see primary irritant effect after inhalation.
Sensitization	There are no data available on the preparation itself.
Chronic	There are no data available on the preparation itself.

11.2 Additional toxicological information

The product is classified according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Harmful to aquatic life with long lasting effects.

n-Butyl acetate; CAS No. 123-86-4

LC_{50, fish, 96h} = 81 mg/l (Reference: Wellens, H. 1982. Comparison of the Sensitivity of Brachydanio rerio and Leuciscus idus by Testing the Fish Toxicity of Chemicals and Wastewaters. Z.Wasser-Abwasser-Forsch. 51(2):49-52 (GER) (ENG ABS); Dawson, G.W., A.L. Jennings, D. Drozdowski, and E. Rider 1977. The Acute Toxicity of 47 Industrial Chemicals to Fresh and Saltwater Fishes. J.Hazard.Mater. 1(4):303-318 (OECDG Data File))

Remark:

Propan-2-ol; CAS No. 67-63-0

LC _{50, fish, 96h} = 9640 mg/l	(Reference: Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott
	1984. Acute Toxicities of Organic Chemicals to Fathead Minnows
	(Pimephales promelas), Vol. 1. Center for Lake Superior
	Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414)
EC _{50, crustaceans, 48h} = 1400 mg/l	(Reference: Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents.
	Mar.Pollut.Bull. 5:116-118)
Remark:	-

Iso-Butanol; CAS No. 78-83-1

```
LC<sub>50, fish, 96h</sub> = 1510 mg/l (Reference: Bottger, A. 1988. Belastung der Anwohner von
```



SOLO GOTA Zapon Lacquer	
	Chemisch-Reinigungsanlegen durch Tetrachlorethylen. Vortrag :30 (OECDG Data File))
$LC_{50, \text{ crustaceans, } 48h} = 1110 \text{ mg/l}$	(Reference: Thurston, R.V., T.A. Gilfoil, E.L. Meyn, R.K. Zajdel, T.L. Aoki, and G.D. Veith 1985. Comparative Toxicity of Ten Organic Chemicals to Ten Common Aquatic Species. Water Res. 19(9):1145-
$EC_{50, \text{ crustaceans, } 48h} = 1200 \text{ mg/l}$	(Reference: Elnabarawy, M.T., A.N. Welter, and R.R. Robideau 1986. Relative Sensitivity of Three Daphnid Species to Selected Organic and Inorganic Chemicals. Environ. Toxicol. Chem. 5(4):393-398)
Remark:	-
n-Butanol: CAS No. 71-36-3	
$LC_{50, \text{ fish, 96h}} = 1910 \text{ mg/l}$ ((Reference: Mattson, V.R., J.W. Arthur, and C.T. Walbridge 1976. Acute Toxicity of Selected Organic Compounds to Fathead Minnows. EPA-600/3-76-097 U.S. EPA Duluth MN :12 n.)
EC _{50, crustaceans, 48h} = 1980 mg/l ((Reference: Kuhn, R., M. Pattard, K.D. Pernak, and A. Winter 1989. Results of the Harmful Effects of Selected Water Pollutants (Anilines, Phenols, Aliphatic Compounds) to Daphnia magna. Water Res. 23(4):495-499)
Remark:	-
Ethyl acetate: CAS No. 141-	78-6
$LC_{50, \text{ fish, 96h}} = 328 \text{ mg/l}$	(Reference: Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414; Douglas, M.T., D.O. Chanter, I.B. Pell, and G.M. Burney 1986. A Proposal for the Reduction of Animal Numbers Required for the Acute Toxicity to Fish Test (LC50 Determination). Aquat.Toxicol. 8(4):243-249.)
LC _{50, crustaceans, 48h} = 679 mg/l ((Reference: Canton, J.H., and D.M.M. Adema 1978. Reproducibility of Short-Term and Reproduction Toxicity Experiments with Daphnia magna and Comparison of the Sensitivity of Daphnia magna with Daphnia pulex and Daphnia cucullata in Short-Term Experiments. Hydrobiologia 59(2):135-140 (Used Reference 2018).)
$EC_{50, algae, 96h} = 2500 \text{ mg/l}$	(Reference: Slooff, W. 1982. A Comparative Study on the Short-Term Effects of 15 Chemicals on Fresh Water Organisms of Different Tropic Levels. Natl.Tech.Inf.Serv., Springfield, VA :25 p. (DUT) (ENG ABS) (NTIS/PB83-200386))
Remark:	-
Ethanol; CAS No. 64-17-5	
$LC_{50, \text{ fish, 96h}} = 11000 \text{ mg/l}$ (Reference: Bengtsson, B.E., L. Renberg, and M. Tarkpea 1984. Molecular Structure and Aquatic Toxicity - an Example with C1-C13 Aliphatic Alcohols. Chemosphere 13(5/6):613-622.)

LC_{50, crustaceans, 48h} = 9280 mg/l (Reference: Takahashi, I.T., U.M. Cowgill, and P.G. Murphy 1987. Comparison of Ethanol Toxicity to Daphnia magna and Ceriodaphnia



SOLO GOYA Zapon Lacquer

Page 16 of 20

dubia Tested at Two Different Temperatures: Static Acute Toxicity Test Results. Bull.Environ.Contam.Toxicol. 39(2):229-236; Ziegenfuss, P.S., W.J. Renaudette, and W.J. Adams 1986. Methodology for Assessing the Acute Toxicity of Chemicals Sorbed to Sediments: Testing the Equilibrium Partitioning Theory. In: T.M.Poston and R.Purdy (Eds.), Aquatic Toxicology and Environmental Fate, 9th Volume, ASTM STP 921, Philadelphia, PA :479-493)

EC_{50, crustaceans, 48h} = 9950 mg/l (Reference: Barera, Y., and W.J. Adams 1983. Resolving Some Practical Questions About Daphnia Acute Toxicity Tests. In: W.E.Bishop (Ed.), Aquatic Toxicology and Hazard Assessment, 6th Symposium, ASTM STP 802, Philadelphia, PA :509-518; Rossini, G.D.B., and A.E. Ronco 1996. Acute Toxicity Bioassay Using Daphnia obtusa as a Test Organism. Environ.Toxicol. Water Qual. 11(3):255-258)

Remark:

12.2 Persistence/degradability

There are no data available.

12.3 Bioaccumulative potential

There are no data available.

12.4 Mobility

There are no data available.

12.5 Results of PBT and vPvP assessment There are no data available.

12.6 Other adverse effects

There are no data available.

12.7 Further ecological information

Do not discharge into the drains/surface waters/groundwater. Water hazard class: WGK 1 slightly hazardous to water

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Send to a hazardous waste incinerator facility under observation of official regulations. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Recommendation

Disposal must be made according to official regulations.



SOLO GOYA Zapon Lacquer

Page 17 of 20

13.2 European waste code number in accordance with AAV

EWC No.: 08 01 11 EWC No.: 20 01 27 WUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS, solvents

13.3 Packaging

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing, may be taken for reuse. Packaging that cannot be cleaned should be disposed in the same manner as the medium.

EWC No. 15 01 10 packaging containing residues of or contaminated by dangerous substances

Non-contaminated packages

EWC No.: 15 01 02	plastic packaging
EWC No.: 15 01 07	glass packaging

14. TRANSPORT INFORMATION

14.1 Land transport ADR/RID and GVS/GGVE



Class:	3 Flammable liquids
Kemler-Code:	33
UN No.:	1263
Packaging group:	III
Label:	3
Special marking:	-
Proper shipping name:	1263 - Paint (Contains Isopropyl acetate)
Classification-Code:	F1
Limit:	5 L
Tunnel restriction code:	3 (D/E)

14.2 Maritime transport IMDG/GGVSea



Class:3UN No.:1263Label:3Packaging group:IIIEmS-No.:F-E, S-EMarine pollutant:-Proper shipping name:Paint (Contains Isopropyl acetate)



SOLO GOYA Zapon Lacquer

Page 18 of 20

14.3 Air transport ICAO-TI and IATA-DGR



ICAO/IATA Class: 3 UN no.: 1263 Label: 3 Packaging group: III Proper shipping name: Paint (Contains Isopropyl acetate)

14.3 Remarks

Product contains environmentally hazardous substances: -

15. REGULATORY INFORMATION

15.1 European Regulation

Chemical Safety Assessment: For this substance a chemical safety assessment is not required.

15.2 National Regulations

Statutory order on hazardous incidents (StörfallV): Annex I, Nr. 6, 9b Regulation on inflammable liquids: VbF-Class: All Emission control act ("TA-Luft"): 3.1.7 Class III Water hazard class: WGK 1 slightly hazardous to water (according VwVwS)

15.3 Additional information

The product is classified according to the EEC directives and the Ordinance on Hazardous Materials (GefStoffV). If bottle \leq 125 ml then the following H- and P-phrases are not necessary: H225, H319, P243, P273, P370+378, P501. Please check local regulations. Volatile organic compounds (Swiss): 90%, 39,60 g/50ml, 0,792 kg/l. The advertised use (section 1) is not subject of the Directive 2004/42/EC.

16. OTHER INFORMATION

16.1 Changes compared with the last version

The last version was all changed and revised completely. Alterations to the previous edition are marked in the right-hand margin.

16.2 Literature reference and data source

Regulation (EC) 1999/45, last changed by Regulation (EC) 1907/2006 Regulation (EC) 67/548, last changed by Regulation (EC) 2009/2 REACH Regulation (EC) 1907/2006, last changed by Regulation (EC) 453/2010 Regulation (EC) 1272/2008, last changed by Regulation (EC) 790/2009



SOLO GOYA Zapon Lacquer

Page 19 of 20

Internet

http://www.baua.de http://www.arbeitssicherheit.de http://www.gischem.de

16.3 Full text of H- and R-phrases appearing in section 2 and 3: According to Regulation (EC) 1272/2008

Flam. Liq. 2 H225	Highly flammable liquid and vapour.
Flam. Liq. 3 H226	Flammable liquid and vapour.
Acute Tox. 4* H302	Harmful if swallowed.
Asp. Tox.1 H304	May be fatal if swallowed and enters airways.
Skin Irrit. 2 H315	Causes skin irritation.
Eye Dam. 1 H318	Causes serious eye damage.
Eye Irrit. 2 H319	Causes serious eye irritation.
STOT SE 3 H335	May cause respiratory irritation.
STOT SE 3 H336	May cause drowsiness or dizziness.
Aquatic Chronic 2 H411	Toxic to aquatic life with long lasting effects.

* minimum classification

EUH – statements

Repeated exposure may cause skin dryness or cracking. EUH066

Methods according to article 9 of the order (EC) No. 1272/2008 for the assessment of the information for the purpose of the classification were used:

Classification according to Regulation 1272/2008.

16.4 Abbreviations and acronyms

ADR:	Accord européen sur le transport des marchandises dangereuses par Route
	(European Agreement concerning the International Carriage of Dangerous Goods by
	Road)
BlmSchV:	Order for the realisation of the Federal Immission Protection Law
CAS:	Chemical Abstracts Service
DIN:	Norm of the German institute of standardization
EC:	Effective concentration
EC50:	Effective concentration, 50 percent
EG:	European Community
EINECS:	European Inventory of Existing Commercial Chemical Substances
EN:	European Standard
GefStoffV:	Ordinance on Hazardous Substances, Germany
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
IATA:	International Air Transport Association
IMDG:	International Maritime Code for Dangerous Goods
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Log K _{ow} :	n-octanol-water partition coefficient
OECD:	Organisation for Economic Co-operation and Development



SOLO GOYA Zapon Lacquer

Page 20 of 20

PBT: RID:	Persistent, bioaccumulateable, toxically Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
TRGS:	Technical rules for danger materials
UN:	United Nations (Vereinte Nationen)
VOC:	Volatile Organic Compounds
vPvB:	very much persistent and very bioaccumulateable
VwVwS:	Administrative regulation of hazardous to waters materials
WGK:	Water hazardous class

16.5 Department issuing safety data sheet

Laboratory, Mrs. Dipl.-Ing. Treiber, <u>b.treiber@c-kreul.de</u>.

16.6 Additional information

The data is based on our present knowledge. The data correspond to the national and EEC legislation. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

It is not permitted to use the product for any other application mentioned in chapter 1 except with a written permission. The user is responsible for the compliance with all valid legal regulation.

This safety data sheet is only valid for SOLO GOYA Zaponlack. It's not valid for other products placed in the according sales displays or sets.