according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

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

· Product identifier

· Product name: GLASS PRIMER SOLL SP01

Article number: SP 01 15; SP 01 30

- · Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- Product category PC1 Adhesives, sealants
- Process category

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises

- · Environmental release category ERC5 Industrial use resulting in inclusion into or onto a matrix
- · Application of the substance / the preparation : Primer for adhesive or sealant
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

UAB HELVINA Parko str. 96

LT-54464 Ramuciai, Kauno r.

Lithuania

Phone: +370 37 308901 Fax: +370 37 308902

Internet: http://www.helvina.lt; email: info@helvina.lt

Emergency telephone number:

Poison control and information office: Tel.: +370 5 236 2052 or +370 687 53378

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness ordizziness.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi: Irritant

R36: Irritating to eyes.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

F; Highly flammable

R11: Highly flammable.

R67: Vapours may cause drowsiness and dizziness.

Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

· Hazard pictograms



· Signal word Danger

· Hazard-determining components of labelling:

methylethylketone

aromatic-aliphatic polyisocyanate

1,6-hexamethylene diisocyanate homopolymer n-butyl acetate

· Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents and container in accordance with local regulations.

Additional information :

Contains isocyanates. May produce an allergic reaction.

- · Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of polyisocvanates in organic solution

Dangerous components:		
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43	methylethylketone Xi R36; F R11 R66-67 ♦ Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	40-60%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-butyl acetate R10-66-67 (*) Flam. Liq. 3, H226; (*) STOT SE 3, H336	20-25%
CAS: 26426-91-5	aromatic-aliphatic polyisocyanate	5-10%

GB

(Contd. of page 1)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

		(Contd. of page 2)
CAS: 28182-81-2 Reg.nr.: 01-2119485796-17	R52/53	4-8%
	•• Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 1333-86-4 EINECS: 215-609-9 Reg.nr.: 01-2119384822-32	carbon black substance with a Community workplace exposure limit	4-8%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate R10 (*) Flam. Liq. 3, H226	< 2.5%

[·] Additional information : For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness, place patient stably in side position for transportation.

- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

- · After swallowing Do not induce vomiting; call for medical help immediately.
- · Most important symptoms and effects, both acute and delayed

Headache

Dizziness

Gastric or intestinal disorders.

Drowsiness

Breathing difficulty

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents CO2, extinguishing powder or water spray.
- For safety reasons unsuitable extinguishing agents Water with full let.
- · Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen cyanide (HCN)

Isocvanates

- · Advice for firefighters
- · Protective equipment: Mount respiratory protective device.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

(Contd. on page 4)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 3)

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

Do not close them (reaction with water forming carbon dioxide).

· Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling

Open and handle receptacle with care

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Prevent any seepage into the ground.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

· Components with lin	nit values that red	quire monitoring	at the workplace:
-----------------------	---------------------	------------------	-------------------

78-93-3 methylethylketone

WEL Short-term value: 899 mg/m³, 300 ppm

Long-term value: 600 mg/m³, 200 ppm

Sk. BMGV

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm

Long-term value: 724 mg/m³, 150 ppm

1333-86-4 carbon black

WEL Short-term value: 7 mg/m3

Long-term value: 3.5 mg/m³

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm

Long-term value: 274 mg/m³, 50 ppm

Sk

· Ingredients with biological limit values:

78-93-3 methylethylketone

BMGV 70 µmol/L

Medium: urine

Sampling time: post shift

Parameter: butan-2-one

(Contd. on page 5)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 4)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment
- General protective and hygienic measures

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke while working.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

Filter AB

Protection of hands:

Solids content:

PVA gloves of superior quality.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- · Eye protection: Tightly sealed goggles.
- · Body protection: Protective work clothing.

9 Physical and chemical properties

· Information on basic physical and chemical properties · General Information · Appearance:			
Form:	Fluid		
Colour:	Black		
Odour:	without		
· Change in condition Melting point/Melting range: undetermined Boiling point/Boiling range: 79 °C			
Flash point:	-8℃		
Self-ignition temperature:	> 200 ℃		
Self igniting:	Product is not selfigniting at room temperature.		
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible		
Explosion limits:			
Lower:	1.8 Vol %		
Upper:	11.5 Vol %		
Density at 20 °C:	0.92		
Solubility in / Miscibility with			
Water:	Partly miscible		
Viscosity: dynamic at 20°C:	50 mPa.s		
Solvent content:			

30 %

(Contd. on page 6)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 5)

· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Possibility of hazardous reactions

Reacts with alcohols, amines, aqueous acids and alkalis.

Reacts with water forming carbon dioxide. Danger of receptacles bursting because of vapour overpressure.

Reacts with strong oxidizing agents.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:			
78-93-3 m	78-93-3 methylethylketone		
Oral	LD50	3300 mg/kg (rat)	
Dermal	LD50	5000 mg/kg (rbt)	
123-86-4	123-86-4 n-butyl acetate		
Oral	LD50	14000 mg/kg (rat)	
Inhalative	LC50/4 h	>21.0 mg/l (rat)	

- · Primary irritant effect:
- on the skin:

Frequent or prolonged contact may irritate and cause dermatitis.

Irritant to skin and mucous membranes.

- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Other information: -
- · Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

(Contd. on page 7)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

· Other adverse effects No further relevant information available.

(Contd. of page 6)

13 Disposal considerations

- · Waste treatment methods
- Recommendation

Must be disposed of in an incinerator for hazardous waste according to official regulations.

- Waste disposal key: 08 04 09*
- · Uncleaned packaging :
- · Recommendation: Disposal must be made according to official regulations.

14 I	rans	oort	Intori	nation	

· UN-Number · ADR, IMDG, IATA	UN1866
· UN proper shipping name · ADR	1866 RESIN SOLUTION (vapour pressure at 50℃ not more than 110 kPa)
· IMDG, IATA	RESIN SOLUTION

- · Transport hazard class(es)
- · ADR, IMDG, IATA



· Class	3 Flammable liquids.	
· Label	3	
· Packing group		
ADR, IMDG, IATA	II .	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Warning: Flammable liquids.	
Danger code (Kemler):	33	
EMS Number:	F-E, <u>S-E</u>	
Transport in bulk according to Annex II of		
MARPOL73/78 and the IBC Code	Not applicable.	
· Transport/Additional information:		
· ADR		
· Limited quantities (LQ)	5L	
· Transport category	2	
· Tunnel restriction code	D/E	
· UN "Model Regulation":	UN1866, RESIN SOLUTION (vapour pressure at50 ℃ not more than 110 kPa), 3,II	

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has been carried out.

GE

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 7)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This data sheet is particularly in accordance with the european regulations 1907/2006/EC, 1272/2008/EC and their amendments; it is written according to annex II of the european regulation 453/2010/EC.

· Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- R10 Flammable.
- R11 Highly flammable.
- R20 Harmful by inhalation.
- R36 Irritating to eyes.
- R37 Irritating to respiratory system.
- R43 May cause sensitisation by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

Department issuing MSDS: Laboratory

- · Contact: cf. § 1
- · Review :

An asterisk in the margin of a paragraph means amendments in comparison to the former version.

· 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

GB

(Contd. on page 9)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 8)

Annex: Exposure scenario

· Name methylethylketone

· Short title of the exposure scenario

Industrial use for rigid foam, coatings and adhesives and sealants

Professional end use in rigid foam, coatings, adhesives and sealants and other composite material Consumer end use in rigid foam, coatings and adhesives and sealants

· Sector of Use

SU3 Industrial uses: uses of substances as such or in preparations at industrial sites SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

· Product category

PC1 Adhesives, sealants

PC9a Coatings and paints, thinners, paint removers

· Process category

PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC7 Industrial spraying

PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicatedfacilities

PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC10 Roller application or brushing

PROC11 Non industrial spraying

PROC13 Treatment of articles by dipping and pouring

PROC19 Hand-mixing with intimate contact and only PPE available

Environmental release category

ERC2 Formulation of preparations

ERC4 Industrial use of processing aids in processes and products, not becoming part of articles

ERC5 Industrial use resulting in inclusion into or onto a matrix

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8d Wide dispersive outdoor use of processing aids in open systems

ERC8f Wide dispersive outdoor use resulting in inclusion into or onto a matrix

· Conditions of use According to directions for use.

· Duration and frequency

SU21, PC1 (adhesives, sealants):

Leisure adhesives PC1:

Concentrations up to 30 %

365 days/year

up to 4 hour(s) per day

Exposed skin surface: 35.73 cm² Amounts used/applied per event: 9 g

Room volume : > 20 m³ Do-it-yourself adhesives PC1 :

Concentration of substance in product : up to 30 %

Up to 6 h per day, 1 days per year Exposed skin surface : 110 cm²

Amounts used/applied per event : 6390g

Room volume: $> 20 \, \text{m}^3$

Provide good general ventilation (at least 0.6 air change(s) per hour)

Sealing products PC1:

Concentration of substance in product: up to 20 %

365 days/year

Exposed skin surface: 35.73 cm²

(Contd. on page 10)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

Amounts used/applied per event: 75g

1 hour(s)/day

Room volume: > 34 m3

Provide good general ventilation (at least 0.6 air change(s) per hour)

SU21,PC9a (coatings and paintings, solvents, thinners):

Concentration of substance in product : up to 50 %

3 days/year Up to 2 h per day

Exposed skin surface: 857.5 cm² Amounts used/applied per event: 491 g

Room volume: $> 20 \, \text{m}^3$

Provide good general ventilation (at least 0.6 air change(s) per hour)

- · Physical parameters
- · Physical state Fluid
- Concentration of the substance in the mixture

SU22:

Weight fraction substance in the product (when used as cleaning agent PROC 10) : up to maximum of 25 %

Weight fraction substance in the product (when used as cleaning agent with low-pressure cleaning equipment PROC 10): up to maximum of 5 %

Weight fraction substance in the product (when used as cleaning agent with high-pressure cleaning equipment PROC 11): up to maximum of 1 %

- · Other operational conditions
- · Other operational conditions affecting environmental exposure

Observe section 6 of the Safety Data Sheet (Accidental release measures).

Other operational conditions affecting worker exposure

Avoid contact with the skin and eyes.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

Ensure adequate ventilation, especially in closed rooms.

- · Other operational conditions affecting consumer exposure Keep out of the reach of children.
- Other operational conditions affecting consumer exposure during the use of the product Application temperature: room temperature
- · Risk management measures
- · Worker protection

Do not eat, drink, smoke while working.

SU3:

Avoid direct contact with skin. Identify potential areas for indirect contact with the skin. Wear gloves (EN 374) if there is a risk of contact of the substance with the skin. Remove impurities / quantities immediately after spilling. Wash skin immediately after handling. Complete basic training of personnel, so that exposure is minimized and eventually the skin problems are reported. Other measures of skin protection are required, such as waterproof clothing and a protective mask during activities with high spread, leading to the likely significant release of aerosols (e.g. spraying). Mixing operations (closed systems): provide adequate general ventilation (not less than 3 to 5 air changes per hour).

Preparation of material for application / blending operations (open systems): provide adequate controlled ventilation (10 to 15 air changes per hour).

Spray (automatic / robotic): carry out in ventilated booth with laminar air flow.

Spray: ensure an adequate controlled ventilation (10 to 15 air changes per hour). Wear a respiratory protection (standard EN 140 with Type A filter or better).

Roller coating, spraying and flow coating: provide additional ventilation where emissions occur. Storage with occasional controlled exposure: store substance in a closed system. SU 22:

Avoid direct contact with skin. Identify potential areas for indirect contact with the skin. Wear gloves (EN 374) if there is a risk of contact of the substance with the skin. Remove impurities / quantities immediately after spilling. Wash skin immediately after handling. Complete basic training of personnel, so that exposure is minimized and eventually the skin problems are reported. Other measures of skin protection are required, such as waterproof clothing and a protective mask during activities with high spread, leading to the likely significant release of aerosols (e.g. spraying). Preparation of material for indoor application: provide adequate controlled ventilation (10 to 15 air

(Contd. on page 11)

(Contd. of page 9)

according to REACH 1907/2006/EC, article 31 and 453/2010 from 20.05.2010

Printing date 18.10.2013 Revision: 09.02.2015

Trade name: SOLL SP01

(Contd. of page 10)

changes per hour); avoid activities with more than 1 hour exposure.

Preparation of material for outdoor application: ensure that exploitation takes place outdoors; avoid activities with more than 1 hourexposure.

Indoor roller coating, spraying and flow coating: ensure adequate controlled ventilation (10 to 15 air changes per hour); wear respiratory protection (standard EN 140 with Type A filter or better).

Outdoor roller coating, spray and flow coating: ensure that the operation takes place outdoors, wear respiratory protection (standard EN 140 with Type A filter or better).

Indoor spraying: carry out in ventilated booth with laminar air flow.

Outdoor spraying: ensure that the operation takes place outdoors; avoid activities with more than 4 hours exposure; wear a full face respirator according to standard EN136 with Type A filter or better. Cleaning and maintenance of equipment: extinguish systems before opening and maintenance of equipment; avoid activities with more than 4 hours exposure.

Storage with occasional controlled exposure: store substance in a closed system; ensure an adequate controlled ventilation (10 to 15 air changes per hour).

Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

· Personal protective measures

Do not inhale gases / fumes /aerosols.

Tightly sealed goggles.

Avoid contact with the eyes.

Measures for consumer protection

Ensure adequate labelling.

Protective gloves

Tightly sealed goggles.

Keep locked up and out of the reach of children.

Environmental protection measures

Avoid release to the environment. Obtain special instructions / refer to Safety Data Sheet.

- Water Do not allow to reach ground water, water bodies or sewage system.
- · Soil Prevent contamination of soil.
- · Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.
- · Disposal measures Disposal must be made according to official regulations.
- · Disposal procedures Product residues are incinerated as special waste.

GE