	Revision: 11.03.2009
1 Identification of the substance/mixture and of the co	mpany/undertaking
· Product identifier	
• Trade name: <u>Praxi Polish Plus / 400 ml</u> • Relevant identified uses of the substance or mixture and uses a • Application of the substance / the preparation: Cleaning materi	
• Details of the supplier of the safety data sheet • Manufacturer/Supplier:	
Hager & Werken GmbH	
Ackerstr. 1	
47269 Duisburg	
<i>Tel.</i> : +49 203 - 99269-0	
 Further information obtainable from: Abteilung Produktsichers Emergency telephone number: Giftinformationszentrum Nord der Länder Bremen, Hamburg, Mord), Georg August Universität Göttingen, Zentrum Pharmakologie un Robert Koch Straße 40, 37075 Göttingen 	Niedersachsen und Schleswig-Holstein (GIZ
Tel.: 0551/192 40 Fax: 0551/383 1881 Beratungsstelle für Vergiftungserscheinungen und Embryonaltos Tel.: 0049/030/19240	ikologie, Berlin
2 Hazards identification	
Classification according to Regulation (EC) No 1272/2008 GHS02 flame Flam. Aerosol 1 H222 Extremely flammable aerosol.	
GHS02 flame Flam. Aerosol 1 H222 Extremely flammable aerosol. GHS05 corrosion	
$\overrightarrow{F} = GHS02 \ flame$ Flam. Aerosol 1 H222 Extremely flammable aerosol. $\overrightarrow{F} = GHS05 \ corrosion$ Eye Dam. 1 H318 Causes serious eye damage. $\overrightarrow{F} = GHS05 \ corrosin$ $\overrightarrow{F} = F + ; \ Extremely \ flammable$	1999/45/EC
Flam. Aerosol 1 H222 Extremely flammable aerosol. Flam. Aerosol 1 H222 Extremely flammable aerosol. GHS05 corrosion Eye Dam. 1 H318 Causes serious eye damage. Classification according to Directive 67/548/EEC or Directive I F+; Extremely flammable R12: Extremely flammable. Information concerning particular hazards for human and env The product has to be labelled due to the calculation procedured preparations of the EU" in the latest valid version. Warning! Pressurized container. Classification system: The classification is according to the latest editions of the EU-l	ironment: e of the "General Classification guideline for
GHS02 flameFlam. Aerosol 1 H222 Extremely flammable aerosol. $$ GHS05 corrosionEye Dam. 1 H318 Causes serious eye damage.Classification according to Directive 67/548/EEC or Directive 1 $$ F+; Extremely flammableR12: Extremely flammable.Information concerning particular hazards for human and env The product has to be labelled due to the calculation procedure preparations of the EU" in the latest valid version. Warning! Pressurized container.Classification system: The classification is according to the latest editions of the EU-l data.	ironment: e of the "General Classification guideline for
GHS02 flameFlam. Aerosol 1 H222 Extremely flammable aerosol. \overleftarrow{Flam} Aerosol 1 H222 Extremely flammable aerosol. \overleftarrow{Flam} Aerosol 1 H222 Extremely flammable aerosol. \overleftarrow{Flam} GHS05 corrosionEye Dam. 1 H318 Causes serious eye damage.Classification according to Directive 67/548/EEC or Directive 1 $\overleftarrow{F+}$; Extremely flammableR12: Extremely flammable.Information concerning particular hazards for human and envThe product has to be labelled due to the calculation procedurepreparations of the EU" in the latest valid version.Warning! Pressurized container.Classification system:The classification is according to the latest editions of the EU-l data.Label elements	ironment: e of the "General Classification guideline for
GHS02 flameFlam. Aerosol 1 H222 Extremely flammable aerosol. $$ GHS05 corrosionEye Dam. 1 H318 Causes serious eye damage.Classification according to Directive 67/548/EEC or Directive 1 $$ F+; Extremely flammableR12: Extremely flammable.Information concerning particular hazards for human and env The product has to be labelled due to the calculation procedure preparations of the EU" in the latest valid version. Warning! Pressurized container.Classification system: The classification is according to the latest editions of the EU-l data.	ironment: to of the "General Classification guideline for ists, and extended by company and literature
 GHS02 flame Flam. Aerosol 1 H222 Extremely flammable aerosol. GHS05 corrosion Eye Dam. 1 H318 Causes serious eye damage. Classification according to Directive 67/548/EEC or Directive 1 F+; Extremely flammable R12: Extremely flammable. Information concerning particular hazards for human and envertime of the product has to be labelled due to the calculation procedure preparations of the EU" in the latest valid version. Warning! Pressurized container. Classification system: The classification is according to the latest editions of the EU-l data. Label elements Labelling according to EU guidelines: The product has been classified and marked in accordance wit Materials. Code letter and hazard designation of product: 	ironment: to of the "General Classification guideline for ists, and extended by company and literature
GHS02 flameFlam. Aerosol 1 H222 Extremely flammable aerosol. $\overbrace{\begin{tabular}{lllllllllllllllllllllllllllllllllll$	ironment: to of the "General Classification guideline for ists, and extended by company and literature

Printing date 06.03.2012

Revision: 11.03.2009

(Contd. of page 1)

Trade name: Praxi Polish Plus / 400 ml

· Risk phrases:

12 Extremely flammable.

· Safety phrases:

- 2 Keep out of the reach of children.
- *3 Keep in a cool place.*
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24 Avoid contact with skin.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.
- 56 Dispose of this material and its container to hazardous or special waste collection point.
- 60 This material and its container must be disposed of as hazardous waste.

· Special labelling of certain preparations:

Contains Duftstoff. May produce an allergic reaction. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

25.6 % by mass of the contents are flammable

• 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 substances listed below with nonhazardous additions.

CAS: 64742-47-8	Distillates (petroleum), hydrotreated light	10-25%
EINECS: 265-149-8	Xn R65	
	🐼 Asp. Tox. 1, H304	-
CAS: 106-97-8	butane	10-25%
EINECS: 203-448-7	\blacktriangleright F+R12	
	🐼 Flam. Gas 1, H220; 🔗 Press. Gas, H280	-
CAS: 68439-50-9	Fettalkohol, C12-C14 (3 EO)	2.5-10%
	🗙 Xi R41; 🏪 N R50	
	📀 Eye Dam. 1, H318; 🕸 Aquatic Acute 1, H400	-
CAS: 74-98-6	propane	2.5-10%
EINECS: 200-827-9		
	🚸 Flam. Gas 1, H220; 🔶 Press. Gas, H280	
CAS: 63449-41-2	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	≤ 2.5%
EINECS: 264-151-6	🔁 C R34; 🗙 Xn R21/22; 🏪 N R50	
	Skin Corr. 1B, H314; 🚯 Aquatic Acute 1, H400; 🚸 Acute Tox. 4,	-
	H302; Acute Tox. 4, H312	
	Duftstoff	≤ 2.5%
	🗙 Xn R65; 🗙 Xi R43; 🏪 N R51/53	
	♦ Flam. Liq. 3, H226; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ↑ Skin Sens. 1, H317	

4 First aid measures

· Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.

Printing date 06.03.2012

Revision: 11.03.2009

(Contd. of page 2)

Trade name: Praxi Polish Plus / 400 ml

- · After eye contact: Rinse opened eye for several minutes under running water.
- *After swallowing:* If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

• *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.*

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

- · Information about fire and explosion protection:
- Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- · Conditions for safe storage, including any incompatibilities
- Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.
 Observe official regulations on storing packagings with pressurized containers.

- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

• Specific end use(s) No further relevant information available.

(Contd. on page 4)

Printing date 06.03.2012

Revision: 11.03.2009

Trade name: Praxi Polish Plus / 400 ml

(Contd. of page 3)

8 Exposure controls/personal protection • Additional information about design of technical facilities: No further data; see item 7. · Control parameters · Ingredients with limit values that require monitoring at the workplace: 106-97-8 butane WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene) • Additional information: The lists valid during the making were used as basis. · Exposure controls · Personal protective equipment: • General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. • Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Use suitable respiratory protective device in case of insufficient ventilation. Protection of hands: Protective gloves · Material of gloves 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. · Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. · Eye protection: Tightly sealed goggles 9 Physical and chemical properties · Information on basic physical and chemical properties · General Information · Appearance: Form: Aerosol Colour: Whitish · Odour: Characteristic · Odour threshold: Not determined. Not determined. · pH-value: · Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: -44°C $< 0^{\circ}C$ · Flash point: (Contd. on page 5)

Printing date 06.03.2012

Revision: 11.03.2009

Trade name: Praxi Polish Plus / 400 ml

	(Contd. of page
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	210°C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air vapour mixtures are possible.
Explosion limits:	
Lower:	0.5 Vol %
Upper:	8.5 Vol %
Vapour pressure at 20°C:	2100 hPa
Density at 20°C:	0.936 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Fully miscible.
Segregation coefficient (n-octanol/w	ater): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	12.9 %
Water:	60.5 %
VOC (EC)	12.89 %
Solids content:	0.3 %
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 No dangerous reactions known.
- · 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:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

(Contd. on page 6)

Printing date 06.03.2012

Revision: 11.03.2009

Trade name: Praxi Polish Plus / 400 ml

(Contd. of page 5)

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.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

07 06 04* other organic solvents, washing liquids and mother liquors

• Uncleaned packaging:

- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

UN-Number		
ADR, IMDG, IATA	UN1950	
UN proper shipping name		
ADR	1950 AEROSOLS	
IMDG	AEROSOLS	
IATA	AEROSOLS, flammable	
Transport hazard class(es)		
ADR		
Class	<i>2</i> 5F Gases.	
Label	2.1	
IMDG, IATA		
2/		

Printing date 06.03.2012

Revision: 11.03.2009

Trade name: Praxi Polish Plus / 400 ml

	(Contd. of	page
· Label	2.1	
· Packing group · ADR, IMDG, IATA	Void	
• Environmental hazards: • Marine pollutant:	No	
 Special precautions for user Danger code (Kemler): EMS Number: 	Warning: Gases. - F-D,S-U	
• Transport in bulk according to Annex . MARPOL73/78 and the IBC Code	II of Not applicable.	
· Transport/Additional information:		
· ADR · Tunnel restriction code	D	
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1	

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Relevant phrases

- H220 Extremely flammable gas.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- R12 Extremely flammable.
- R21/22 Harmful in contact with skin and if swallowed.
- *R34 Causes burns.*
- *R41 Risk of serious damage to eyes.*
- *R43 May cause sensitisation by skin contact.*
- *R50* Very toxic to aquatic organisms.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- *R65 Harmful: may cause lung damage if swallowed.*
- 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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)