Printing date 21.03.2012 Revision: 15.11.2011

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

- · Product identifier
- · Trade name: Orange Solvent Spray / 200ml
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation: Cleaning agent/ Cleaner
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Hager & Werken GmbH&Co.KG

Ackerstrasse 1 47269 Duisburg

Tel.: (+49)203/99269-0 *Fax.:* (+49)203/299283

- · Further information obtainable from: Abteilung Produktsicherheit
- · Emergency telephone number:

Beratungsstelle für Vergiftungserscheinungen und Embryonaltoxikologie, Berlin

Tel.: 0049/030/19240

2 Hazards identification

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



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.

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



F+; Extremely flammable

R12: Extremely flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for 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-lists, and extended by 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.

- · Hazard pictograms GHS02
- · Signal word Danger
- · Hazard statements

H222 Extremely flammable aerosol.

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

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

P251 Pressurized container: Do not pierce or burn, even after use.

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

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

(Contd. on page 2)

Printing date 21.03.2012 Revision: 15.11.2011

Trade name: Orange Solvent Spray / 200ml

(Contd. of page 1)

- · 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.

· Dangerous components:			
012/01/07/07	ethanol	<u></u> F R11	25-50%
EINECS: 200-578-6		🇆 Flam. Liq. 2, H225	
012/01/2007/	butane	F+ R12	25-50%
EINECS: 203-448-7		🏇 Flam. Gas 1, H220; 🥎 Press. Gas, H280	
	propane	(9)	2.5-10%
EINECS: 200-827-9		📀 Flam. Gas 1, H220; 🥎 Press. Gas, H280	
011/01/10 = 0.0	isobutane	♦ F+ R12	<i>≤</i> 2.5%
EINECS: 200-857-2		🚸 Flam. Gas 1, H220; 🥎 Press. Gas, H280	

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

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.
- · 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, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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 product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

(Contd. on page 3)

Printing date 21.03.2012 Revision: 15.11.2011

Trade name: Orange Solvent Spray / 200ml

(Contd. of page 2)

· 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 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.

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:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

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: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands: Not required.
- · 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.

(Contd. on page 4)

Printing date 21.03.2012 Revision: 15.11.2011

Trade name: Orange Solvent Spray / 200ml

· Eye protection:



Tightly sealed goggles

(Contd. of page 3)

T.C 1 . 1 . 1 . 1	
Information on basic physical and ch	nemical properties
General Information	
· Appearance: Form:	Aerosol
Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44°C
· Flash point:	< 0°C
Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	365°C
Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive at vapour mixtures are possible.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	15.0 Vol %
· Vapour pressure at 20°C:	2100 hPa
Density at 20°C:	0.85 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/w	ater): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	74.1 %
VOC (EC)	74.15 %
Other information	No further relevant information available.

Printing date 21.03.2012 Revision: 15.11.2011

Trade name: Orange Solvent Spray / 200ml

(Contd. of page 4)

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.

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

15 01 04 metallic packaging

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · UN-Number
- · ADR, IMDG, IATA UN1950

(Contd. on page 6)

Revision: 15.11.2011 Printing date 21.03.2012

Trade name: Orange Solvent Spray / 200ml

(Contd. of page 5) · UN proper shipping name 1950 AEROSOLS $\cdot ADR$ \cdot IMDG **AEROSOLS** AEROSOLS, flammable \cdot IATA · Transport hazard class(es) $\cdot ADR$ 2 5F Gases. · Class 2.1 ·Label · IMDG, IATA 2.1 · Class · Label 2.1 · Packing group · ADR, IMDG, IATA Void · Environmental hazards: · Marine pollutant: No · Special precautions for user Warning: Gases. · Danger code (Kemler): · EMS Number: F-D,S-U· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

- · Transport/Additional information:
- $\cdot ADR$
- · Tunnel restriction code
- · 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.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- R11 Highly flammable.
- R12 Extremely flammable.

(Contd. on page 7)

Printing date 21.03.2012 Revision: 15.11.2011

Trade name: Orange Solvent Spray / 200ml

(Contd. of page 6)

· Abbreviations and acronyms:

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

ICAO: International Civil Aviation Organization

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

VOC: Volatile Organic Compounds (USA, EU)