

## Safety data sheet

according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier**Trade name: HTF Graffex 705**Registration number***This Product is a mixture. REACH Registration Number see chapter 3.**All ingredients of this mixture are (pre)registered according to REACH regulation.***1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture***protective impregnation**The product is intended for the general public.***Uses advised against** *No relevant information available.***1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

RMB GmbH  
Hansmertenweg 87  
D-33335 Gütersloh  
GERMANY

Phone: +49 5241 703502

Telefax: +49 5241 703503

**Informing department:** E-Mail: [b.muendkemueller@rmb-solutions.com](mailto:b.muendkemueller@rmb-solutions.com)**1.4 Emergency telephone number:****Telephone number of the company in case of emergencies:**

RMB GmbH

Phone: +49 5241 703502 (during normal office hours)

### SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008***Flam. Liq. 3 H226 Flammable liquid and vapour.**Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.***2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008***The product is labelled according to the CLP regulation.***Hazard pictograms**

GHS02 GHS08

**Signal word** *Danger***Hazard-determining components of labelling:***Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**Hydrocarbons, C11-C13, isoalkanes, <2% aromatics***Hazard statements***H226 Flammable liquid and vapour.**H304 May be fatal if swallowed and enters airways.***Precautionary statements***P101 If medical advice is needed, have product container or label at hand.**P102 Keep out of reach of children.**P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*

(Contd. on page 2)

## Safety data sheet

### according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 1)

*P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*

*P331 Do NOT induce vomiting.*

*P405 Store locked up.*

*P501 Dispose of contents/container to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of by recycling. Contact your local council for details.*

· **Additional information:**

*EUH066 Repeated exposure may cause skin dryness or cracking.*

*1.5 % of the mixture consists of component(s) of unknown toxicity.*

*Contains 1.5 % of components with unknown hazards to the aquatic environment.*

· **2.3 Other hazards** None if used properly.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.1 Substances** This product is a mixture.

· **3.2 Mixtures**

· **Description:** Mixture of solvents

· **Dangerous components:**

EC number: 927-285-2 Reg.nr.: 01-2119480162-45-XXXX	Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics Asp. Tox. 1, H304	40-<60%%
CAS: 90622-57-4 EC number: 920-901-0 Reg.nr.: 01-2119456810-40-XXXX	Hydrocarbons, C11-C13, isoalkanes, <2% aromatics Asp. Tox. 1, H304	15-<25%%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-XXXX	Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER) substance with a Community workplace exposure limit	5 - < 10%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-XXXX	ethyl acetate Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	2.5 - < 5%

· **SVHC**

*This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1$  % (w/w).*

· **Additional information**

*Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).*

*For the wording of the listed hazard phrases refer to section 16.*

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information**

*Instantly remove any clothing soiled by the product.*

*Show safety data sheet if possible.*

· **After inhalation**

*Supply fresh air.*

(Contd. on page 3)

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 2)

- If breathing is difficult, give oxygen.*  
*Seek medical treatment in case of complaints.*
- **After skin contact**  
*Instantly wash with water and soap and rinse thoroughly.*  
*If skin irritation continues, consult a doctor.*
  - **After eye contact**  
*Rinse opened eye for several minutes under running water.*  
*If eye irritation persists: Get medical advice/attention.*
  - **After swallowing**  
*Immediately wash out the mouth with water.*  
*Do not induce vomiting; instantly call for medical help.*  
*Ingestion of the product can cause severe lung injury when aspirated: hospital treatment necessary!*
  - **4.2 Most important symptoms and effects, both acute and delayed**  
*May be fatal if swallowed and enters airways.*  
*Repeated exposure may cause skin dryness or cracking.*
  - **Danger** *Danger of pneumonia.*
  - **4.3 Indication of any immediate medical attention and special treatment needed**  
*Treat symptomatically and directed to relieving any effects.*

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
*CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.*
- **For safety reasons unsuitable extinguishing agents** *Water with a full water jet.*
- **5.2 Special hazards arising from the substance or mixture**  
*Can form explosive gas-air mixtures.*  
*Can be released in case of fire:*  
*Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)*  
*Sulphur dioxide (SO<sub>2</sub>)*  
*Organic decomposition compounds*
- **5.3 Advice for firefighters**
- **Protective equipment:**  
*Wear a self-contained breathing apparatus.*  
*Do not inhale explosion gases or combustion gases.*
- **Additional information**  
*Container explosions may occur under fire conditions. May explode by heat.*  
*Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.*  
*Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*  
*Cool endangered containers with water spray jet.*

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
*Advice for non-emergency personnel:*  
*Advice for emergency responders:*
- **6.2 Environmental precautions:**  
*Damp down gases/fumes/haze with water spray jet.*  
*Prevent spread over a wide area (e.g. by containment or oil barriers).*  
*Do not allow product to reach sewage system or water bodies.*  
*Inform respective authority in case of product reaches water or sewage system.*

(Contd. on page 4)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 3)

- **6.3 Methods and material for containment and cleaning up:**  
Cover drains. Collect, bind, and pump off spills.  
Wipe up with absorbent material (eg. cloth, fleece, sand, diatomite, acid binders, universal binders).  
Collect in closed and suitable containers for disposal.
- **6.4 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 information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Observe label precautions.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).  
Provide adequate ventilation.  
Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:**  
The product forms flammable fumes when heated.  
Flammable mixtures may be formed in empty containers.  
Ground and bond container and receiving equipment.  
Use non-sparking tools.  
Use explosion-proof [electrical/ventilating/lighting] equipment.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Protect from heat.
- **Advices on general occupational hygiene**  
Immediately change contaminated clothing. Preventive skin protection. Wash hands and face after work.  
Avoid close or long term contact with the skin.  
Do not inhale gases / fumes / aerosols.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Keep/store only in labeled original container.  
Provide solvent resistant, sealed floor.
- **Information about storage in one common storage facility:**  
Do not store together with: Oxidising agents.  
Do not store together with: Foodstuffs.
- **Further information about storage conditions:**  
Store container in a well ventilated position.  
Store in cool, dry conditions in well sealed containers.
- **Recommended storage temperature:** +5 °C up to +20 °C
- **Storage class** Class 3A: Flammable liquids (flash point below 55 °C).
- **7.3 Specific end use(s)** See Section 1.2

DE\_EN

(Contd. on page 5)

## Safety data sheet

### according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 4)

### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

##### · 8.1.1 Components with critical values that require monitoring at the workplace:

###### Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics

AGW (Germany)	Long-term value: 600 mg/m <sup>3</sup> C9-C15 Aliphaten; 2 (II) TRGS 900 RCP Methode
---------------	---

###### CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)

AGW (Germany)	Long-term value: 310 mg/m <sup>3</sup> , 50 ppm 1(I);DFG, EU, 11
---------------	---

IOELV (European Union)	Long-term value: 308 mg/m <sup>3</sup> , 50 ppm Skin
------------------------	---

###### CAS: 141-78-6 ethyl acetate

AGW (Germany)	Long-term value: 730 mg/m <sup>3</sup> , 200 ppm 2(I);DFG, EU, Y
---------------	---

IOELV (European Union)	Short-term value: 1468 mg/m <sup>3</sup> , 400 ppm Long-term value: 734 mg/m <sup>3</sup> , 200 ppm
------------------------	--

##### · Occupational exposure limits of decomposition products:

###### CAS: 7446-09-5 sulphur dioxide

AGW (Germany)	Long-term value: 2.5 mg/m <sup>3</sup> , 1 ppm 1(I);AGS, Y
---------------	---

IOELV (European Union)	Short-term value: 2.7 mg/m <sup>3</sup> , 1 ppm Long-term value: 1.3 mg/m <sup>3</sup> , 0.5 ppm
------------------------	---

##### · 8.1.2 DNELs No data available.

##### · 8.1.3 PNECs

###### CAS: 141-78-6 ethyl acetate

PNEC aquatic, freshwater	0.26 mg/l
PNEC sediment, freshwater	1.25 mg/kg dw
PNEC sediment, marine water	0.125 mg/kg dw
PNEC aquatic, marine water	0.026 mg/l
PNEC soil	0.24 mg/kg soil dw

##### · 8.1.4 Ingredients with biological limit values: No data available.

· **Additional information:** The lists that were valid during the compilation were used as basis.

#### · 8.2 Exposure controls

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

· **8.2.1 Engineering Controls:** See section 7. No additional measures necessary.

· **8.2.2 Personal protective equipment**

##### · Breathing equipment:

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

exceeding exposure limit values

insufficient ventilation

spray application

aerosol or mist formation

(Contd. on page 6)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 5)

· **Recommended filter device for short term use:**

Respirator with combination filter for vapour/particulate (EN 141). ABEK-P-filter.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. The measures have to be properly documented.

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

· **Protection of hands:**

· **By short-term hand contact:** Use skin protection cream for preventive skin protection.

· **By long-term hand contact:** Chemical-resistant protective gloves (EN 374).

· **Material of gloves**

Nitrile rubber, nitrile latex (NBR)

Recommended thickness of the material:  $\geq 0.33$  mm

· **Penetration time of glove material**

>480 min

Value for the permeation: Level  $\leq 6$

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL Camatril® 730 (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

· **As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.11$  mm

Breakthrough time: 480 min

For example KCL 741 Dermatril® L.

· **Not suitable are gloves made of the following materials:**

Leather gloves

Rigid gloves

· **Eye protection:**

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Tightly sealed safety glasses according to EN166.

· **Body protection:**

Not required at determined application.

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

· **8.2.3 Limitation and supervision of exposure into the environment** See sections 6 and 7.

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **9.1.1 Appearance:**

**Form:**

Fluid

**Colour:**

Colourless

· **Smell:**

Weak, characteristic

(Contd. on page 7)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 6)

· <b>Odour threshold:</b>	No data available.
· <b>9.1.2 Safety relevant basic data:</b>	
· <b>pH-value:</b>	No data available / Not applicable
· <b>Change in condition</b>	
· <b>Melting point/freezing point:</b>	<-20 °C (*)
· <b>Initial boiling point and boiling range:</b>	≥180-≤198 °C (*)
· <b>Flash point:</b>	23 °C (EN ISO 13736)
· <b>Inflammability (solid, gaseous)</b>	No data available / Not applicable
· <b>Ignition temperature:</b>	Not relevant.
· <b>Decomposition temperature:</b>	No data available / Not applicable
· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
· <b>Critical values for explosion:</b>	
· <b>Lower:</b>	0.6 Vol % (*)
· <b>Upper:</b>	7 Vol % (*)
· <b>Oxidising properties</b>	No data available / Not applicable
· <b>Steam pressure at 20 °C:</b>	>1 hPa (*)
· <b>Density at 20 °C</b>	780 kg/m <sup>3</sup> (ISO 387)
· <b>Relative density at 20 °C</b>	0.78 (ISO 15212-1)
· <b>Vapour density</b>	No data available / Not applicable
· <b>Evaporation rate</b>	No data available / Not applicable
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient: n-octanol/water:</b>	No data available / Not applicable
· <b>Viscosity:</b>	
· <b>dynamic:</b>	Not applicable.
· <b>kinematic at 40 °C:</b>	<20.5 mm <sup>2</sup> /s
· <b>Surface tension:</b>	No data available / Not applicable
· <b>9.1.3 Data relevant with regard to physical hazard classes (supplemental)</b>	
· <b>Corrosiveness to metals</b>	
· <b>Conclusion/Classification</b>	Based on available data, the classification criteria are not met.
· <b>9.2 Other information</b>	*Information refers to the main component.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** See section 10.3.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.

(Contd. on page 8)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 7)

- **10.3 Possibility of hazardous reactions**  
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised  
Violent reactions with strong alkalis and oxidizing agents
- **10.4 Conditions to avoid** Open flames and other ignition sources.
- **10.5 Incompatible materials:**  
Strong oxidizing agents  
Alkalis (bases, lyes)  
Strong acids
- **10.6 Hazardous decomposition products:** Decomposition products in case of fire: see section 5.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
The mixture is classified based on calculation method referring to the classified substances present in the mixture.
- **Hazardous substances:**

· **Experimental/calculated data:**

**Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**

Acute oral toxicity	LD50	>5,000 mg/kg bw (rat) (OECD 423)
Acute dermal toxicity	LD50	>3,160 mg/kg bw (rabbit) (OECD402)
Acute inhalation toxicity	LC50/4h/vapor	>4,951 mg/l (rat) (OECD403)

**CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics**

Acute oral toxicity	LD50	>5,000 mg/kg bw (rat) (OECD 401)
Acute dermal toxicity	LD50	>2,000 mg/kg bw (rat) (OECD402)
Acute inhalation toxicity	LC 50	(LD50 greater than saturated vapour press) (Classification criteria not met)

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

Acute oral toxicity	LD50	>5,000 mg/kg bw (rat) (OECD 401)
Acute dermal toxicity	LD50	>2,000 mg/kg bw (rabbit) (OECD402)
Acute inhalation toxicity	LC50/4h/vapor	55-60 mg/l (rat) (OECD403)

**CAS: 141-78-6 ethyl acetate**

Acute oral toxicity	LD50	4,934 mg/kg bw (rat) (OECD 401)
Acute dermal toxicity	LD50	20,000 mg/kg bw (rabbit) (No guideline followed)
Acute inhalation toxicity	LC50/4h/vapor	>20 mg/l (conversion value)

· **Product/Mixture:**

· **Acute toxicity estimate (ATE(MIX)) - Calculation method:**

**Fleckstop**

Acute oral toxicity	-	(Not relevant)
Acute dermal toxicity	-	(Not relevant)
Acute inhalation toxicity	-	(Not relevant)

· **Classification:**

**Fleckstop**

No acute toxicity (Classification criteria not met)

(Contd. on page 9)



**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 8)

- **Skin corrosion/irritation**
- **Hazardous substances:**

· **Experimental/calculated data:****Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**

Result/evaluation: No irritation IUCLID (Classification criteria not met) (Labelling with EUH066)

**CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics**

Result/evaluation: No irritation IUCLID (Classification criteria not met) (Labelling with EUH066)

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

Result/evaluation: No irritation (rabbit) (OECD404)

**CAS: 141-78-6 ethyl acetate**

Result/evaluation: No irritation (Classification criteria not met) (Weight of evidence approach)

- 
- Product/Mixture:**

· **Classification:****Fleckstop**

Not irritating (Classification criteria not met) (Additivity principle)

- **Serious eye damage/irritation**
- **Hazardous substances:**

· **Experimental/calculated data:****Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**

Result/evaluation: Not irritating (rabbit) (OECD 405)

**CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics**

Result/evaluation: Not irritating (rabbit) (OECD 405)

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

Result/evaluation: Not irritating (rabbit) (no guideline available)

**CAS: 141-78-6 ethyl acetate**Result/evaluation: Eye irritation, Category 2 (Harmonised (legal) classification.)  
Not irritating (rabbit) (OECD 405)

- 
- Product/Mixture:**

· **Classification:****Fleckstop**

Not irritating (Classification criteria not met) (Additivity principle)

- **Respiratory or skin sensitisation**
- **Hazardous substances:**

· **Experimental/calculated data:****Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**Result/evaluation: Does not cause skin sensitisation (guinea pig) (OECD406)  
Does not cause respiratory sensitization (Not classified (data lacking)) (no study available)**CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics**Result/evaluation: Does not cause skin sensitisation (guinea pig) (OECD406)  
Does not cause respiratory sensitization (Not relevant) (no study available)

(Contd. on page 10)

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 9)

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

Result/evaluation:	Does not cause skin sensitisation	(experience with human exposure) (no guideline available)
	Does not cause respiratory sensitization	(Not classified (data lacking)) (no study available)

**CAS: 141-78-6 ethyl acetate**

Result/evaluation:	Does not cause skin sensitisation	(guinea pig) (OECD406)
	Does not cause respiratory sensitization	(Not relevant) (no study available)

· **Product/Mixture:**· **Classification:****Fleckstop**

Not sensitizing (Classification criteria not met) (assessment based on ingredients)

· **Experience with human exposure:** No data available.· **Additional toxicological information:**

May be fatal if swallowed and enters airways. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.  
Repeated exposure may cause skin dryness or cracking.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**· **Germ cell mutagenicity****Product/Mixture:****Classification:**

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

· **Carcinogenicity****Product/Mixture:****Classification:**

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

· **Reproductive toxicity****Product/Mixture:****Classification:**

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

· **STOT-single exposure****Product/Mixture:****Classification::**

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

· **STOT-repeated exposure****Product/Mixture:****Classification:**

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

· **Aspiration hazard****Product/Mixture:****Classification:**

Viscosity: See Section 9.

May be fatal if swallowed and enters airways.

DE\_EN

(Contd. on page 11)

## Safety data sheet

### according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 10)

### SECTION 12: Ecological information

#### · 12.1 Toxicity

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

#### · Aquatic toxicity:

#### · Hazardous substances:

#### · Experimental/calculated data:

##### Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics

NOELR/21d	1 mg/l (Daphnia magna (water flea)) (OECD 211)
LL50 / 96 h	>1,000 mg/l (rainbow trout (Oncorhynchus mykiss)) (OECD 203)
EL50 / 72 h	>1,000 mg/l (Pseudikirchneriella subcapitata) (OECD 201)

##### CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

EC50/48 h	>1,000 mg/l (Daphnia magna (water flea))
LC50/96 h	>1,000 mg/l (rainbow trout (Oncorhynchus mykiss))

##### CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)

EC50/72 h	>1,000 mg/l (Pseudikirchneriella subcapitata) (OECD 201)
LC50/96 h	>1,000 mg/l (Poecilia reticulata (guppy)) (OECD 203)

##### CAS: 141-78-6 ethyl acetate

EC10/16h	2,900 mg/l (Pseudomonas putida (bacteria))
EC50/48 h	717 mg/l (Daphnia magna (water flea))
LC50/96 h	230 mg/l (Pimephales promelas (fathead minnow))

#### · Product/Mixture:

#### · Classification:

##### Fleckstop

No aquatic toxicity (Classification criteria not met) (Additivity principle)

#### · 12.2 Persistence and degradability

#### · Hazardous substances:

##### Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics

Persistence	(No data available)
Biodegradability	77.6 % (28 d) (OECD 301 F Manometric Respirometry Test)

##### CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

Persistence	(No data available)
Biodegradability	42 % (28 d) (OECD 301 F Manometric Respirometry Test)

##### CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)

Persistence	(No data available)
Biodegradability	96 % (28 d) (OECD 301 F Manometric Respirometry Test)

##### CAS: 141-78-6 ethyl acetate

Persistence	(No data available)
Biodegradability	100 % (28 d) (OECD 301 E)

#### · Product/Mixture:

#### · Result / evaluation:

The product is easily biodegradable.

(Contd. on page 12)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 11)

The statement is derived from the properties of the single components.

· **12.3 Bioaccumulative potential**

· **Hazardous substances:**

**Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics**

Bioaccumulative potential (No data available)

**CAS: 90622-57-4 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics**

Bioaccumulative potential (Bioaccumulation is not expected)

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

log P(o/w) 0.004 (25 °C) (OECD107 (Partition Coefficient, shake flask method))

**CAS: 141-78-6 ethyl acetate**

Bio concentration factor (BCF) 30

log P(o/w) 0.73 (experimental)

· **Product/Mixture:**

· **Result / evaluation:** Bioaccumulation is not expected.

· **12.4 Mobility in soil** Remarks: No data available

· **Ecotoxicological effects:**

· **Behaviour in sewage processing plants:** Remarks: No data available

· **Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):**

· **Hazardous substances:**

**CAS: 34590-94-8 Dipropylene glycol monomethyl ether (PPG-2 METHYL ETHER)**

EC20 >1,000 mg/l (Activated sludge organisms) (OECD 209)

· **Product/Mixture:** Remarks: No data available

· **Additional ecological information:**

· **General notes:** Danger to drinking water if even small quantities leak into soil.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **13.1.1 Appropriate disposal / Product/Mixture:**

**Recommendation:**

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

Dispose of in accordance with local and national regulations.

· **List of proposed waste codes/waste designations in accordance with EWC:**

07 00 00 WASTES FROM ORGANIC CHEMICAL PROCESSES

07 01 00 wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals

07 01 03\* organic halogenated solvents, washing liquids and mother liquors

14 00 00 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08)

14 06 00 waste organic solvents, refrigerants and foam/aerosol propellants

14 06 02\* other halogenated solvents and solvent mixtures

HP 3 Flammable

(Contd. on page 13)

DE\_EN

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00



Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 12)

- 13.1.2 Appropriate disposal / Package:
- 13.1.2 Recommendation:  
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

### SECTION 14: Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· ADR/RID/ADN, IMDG, IATA</li> </ul>	UN1993
<ul style="list-style-type: none"> <li>· 14.2 UN proper shipping name</li> <li>· ADR/RID/ADN</li> <li>· IMDG, IATA</li> </ul>	UN1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE) FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE)
<ul style="list-style-type: none"> <li>· 14.3 Transport hazard class(es)</li> <li>· ADR/RID/ADN</li> </ul>	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> <li>· IMDG, IATA</li> </ul> <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>
<ul style="list-style-type: none"> <li>· 14.4 Packing group</li> <li>· ADR/RID/ADN, IMDG, IATA</li> </ul>	3 (F1) Flammable liquids. 3  3 Flammable liquids. 3
<ul style="list-style-type: none"> <li>· 14.5 Environmental hazards:</li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· 14.6 Special precautions for user</li> <li>· Kemler Number:</li> <li>· EMS Number:</li> <li>· Stowage Category</li> </ul>	Warning: Flammable liquids. 30 F-E,S-E A
<ul style="list-style-type: none"> <li>· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> <li>· ADR/RID/ADN</li> <li>· Excepted quantities (EQ):</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>	E1 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 D/E

(Contd. on page 14)

DE\_EN

## Safety data sheet

### according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

Trade name: HTF Graffex 705

(Contd. of page 13)

· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE), 3, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **European Regulations and Directives:**
  - **Directive 2010/75/EU on industrial emissions: VOC-Content:**
  - **Directive 2004/42/EC on the limitation of emissions of volatile organic compounds: not regulated**
  - **Regulation (EU) No 98/2013 on the marketing and use of explosives precursors: Not regulated.**
  - **Regulation (EU) No. 528/2012 on biocides: Not regulated.**
  - **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]:**
  - **Seveso category P5c FLAMMABLE LIQUIDS**
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements 5000 t**
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements 50000 t**
  - **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP) Not regulated**
  - **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3**
  - **Regulation (EU) No 649/2012 Not regulated.**
- 
- **National regulations**
  - Observe in addition any national regulations!
  - Act on the Protection Against Hazardous Substance (Chemicals Act- ChemG)
  - Poisoning information ordinance - ChemGiftInfoV
  - Ordinance on Hazardous Substances - GefStoffV
  - German Food and Feed Code (LFGB)
  - Act on making products available on the market (Product Safety Act)
  - **Information about limitation of use:**
  - Observe restrictions to employment for juveniles.
  - Observe employment restrictions for pregnant and nursing mothers.
  - **Ordinance on Hazardous Substances (12. BImSchV):**
  - P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b
  - **Solvents Regulation (31st BImSchV): See information on Directive 2010/75/EU.**
  - **Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.**
  - **15.2 Chemical safety assessment:**
  - For the following substances of this mixture a chemical safety assessment has been carried out:
  - Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2 % aromatics [EC nr. 919-857-5]
  - hydrocarbons, C11-C13, isoalkanes, <2 % aromatics
  - ethyl acetate

### SECTION 16: Other information

- **16.1 Indication of changes:**
- This data sheet contains changes from the previous version in section(s):
- 1,3,4,6,7,8,9,11,12,15,16

(Contd. on page 15)

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 14)

- **Replaces version of:** 28.08.2017(2.0)
- **16.2 Relevant R-, H- and EUH-phrases (number and full text):**  
*H225 Highly flammable liquid and vapour.*  
*H304 May be fatal if swallowed and enters airways.*  
*H319 Causes serious eye irritation.*  
*H336 May cause drowsiness or dizziness.*
- **16.3 Training hints** Provide adequate information, instruction and training for operators.
- **16.4 Sources of key data used to compile the data sheet:**  
*Data arise from reference works and literature.*  
*Raw material SDS*  
*CEFIC ERICards Database (<http://www.ericards.net>)*  
*Hazardous materials information system GisChem ([www.gischem.de](http://www.gischem.de))*  
*The Hazardous Substances Database of Countries (Germany) (GDL) (<http://www.gefahrstoff-info.de>)*  
*TOXNET (<http://toxnet.nlm.nih.gov/index.html>)*  
*International Chemical Safety Cards (ICSC) (<http://www.ilo.org/dyn/icsc/showcard.home>)*  
*CheLIST (<http://chelist.jrc.ec.europa.eu/>)*  
*Classification & labelling inventory of ECHA ([http://echa.europa.eu/clp/c\\_1\\_inventory\\_en.asp](http://echa.europa.eu/clp/c_1_inventory_en.asp))*  
*eChemPortal ([http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en))*  
*GESTIS database ([www.dguv.de/bgia/de/gestis/stoffdb/index.jsp](http://www.dguv.de/bgia/de/gestis/stoffdb/index.jsp))*  
*Registered substances by ECHA (<http://echa.europa.eu/en/information-on-chemicals/registered-substances>)*
- **16.5 Additional Information:**  
*The particulars given in the Material Safety Data Sheet only apply to the described product in connection with its appropriate utilization. These particulars are based on the latest state of our knowledge and information. In particular, they serve the purpose of describing our product under the aspect of hazards caused by such product and pertaining safety actions. They do not constitute any guarantee of product quality and/or quality features. The particulars given in this Material Safety Data Sheet are required in accordance with article 31 and annex II of the Regulation (EC) No 1907/2006.*

<b>· Classification for mixtures and used evaluation method according to regulation (EC)1207/2008 [CLP]:</b>	
Flammable liquids	Bridging principles
Aspiration hazard	On basis of test data

- **16.6 Any Abbreviations and acronyms used in this document:**  
*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
*AGW: Occupational Exposure Limits*  
*Asp. Tox. 1: Aspiration hazard – Category 1*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*CLP: Classification, Labelling and Packaging of substances and mixtures*  
*DIN: Deutsches Institut für Normung (German Institute for Standardization)*  
*DNEL: Derived No-Effect Level*  
*EU: European Union*  
*EC: European Community*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*ELINCS: European List of Notified Chemical*  
*EC50: Effective concentration, 50 percent*  
*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*  
*IMDG: International Maritime Code for Dangerous Goods*  
*IATA: International Air Transport Association*  
*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*  
*IOELV: Indicative Occupational Exposure Limit Values*  
*Flam. Liq. 2/3: Flammable liquids – Category 2/3*  
*PBT: Persistent Bioaccumulative and Toxic*

(Contd. on page 16)

DE\_EN

**Safety data sheet**  
**according to Regulation (EC) No. 1907/2006**

Printing date: 11.11.2019

Version number: 3.00

Revision: 11.11.2019

**Trade name: HTF Graffex 705**

(Contd. of page 15)

*REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**OECD: Organisation for Economic Cooperation and Development**RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)**PNEC: Predicted No-Effect Concentration (REACH)**SVHC: Substance of Very High Concern**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**vPvB: very Persistent and very Bioaccumulative**TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)**VOC: Volatile Organic Compounds (USA, EU)*

· \* **Data compared to the previous version altered.** Data changed compared with the previous version.

DE\_EN