Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

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

1.1. **Product identifiers**

Article No. (manufacturer/supplier):	372XX0
Identification of the substance or mixture	PF Covering Lacquer Art.No. 372000, 372900 all colours, all gloss values

1.2. **Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses:
Coating (Paint, Varnish).

Uses advised against:
Do not use for products which come into contact with the food stuffs.

1.3. **Details of the supplier of the safety data sheet**

supplier (manufacturer/importer/downstream user/distributor)

Heinrich König & Co.KG	
An der Rosenhelle 5	Telephone: +49 6101 53600
D-61138 Niederdorfelden	Telefax: +49 6101 5360 11
Dept. responsible for information:	
laboratory	+49 6101 536071
Only available during office hours:	Monday - Thursday 08:00 - 17:00 Friday 08:00 - 13:30
E-mail (competent person)	SDB@heinrich-koenig.de

1.4. **Emergency telephone number**

Emergency telephone number	Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification *

2.1. **Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Aerosol 1 / H222	Aerosol	Extremely flammable aerosol.
Aerosol 1 / H229	Aerosol	Pressurised container: May burst if heated.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. **Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Danger

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container to industrial incineration plant.

contains:

n-butyl acetate

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. **Other hazards**

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/ information on ingredients *

3.1. **Substances**

not applicable

3.2. **Mixtures**

Product description / chemical characterization

Description Aerosol

Hazardous ingredients

Classification according to Regulation (EC) No. 1272/2008 [CLP]

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
204-065-8 115-10-6 603-019-00-8	01-2119472128-37-xxxx dimethyl ether Flam. Gas 1 H220 / compressed gas H280	25 < 50
204-658-1 123-86-4 607-025-00-1	01-2119485493-29-xxxx n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	10 < 20
203-550-1 108-10-1 606-004-00-4	01-2119473980-30-xxxx 4-methylpentan-2-one Flam. Liq. 2 H225 / Acute Tox. 4 H332 / Eye Irrit. 2 H319 / STOT SE 3 H335	10 < 20
918-668-5	01-2119455851-35-xxxx Hydrocarbons, C9, aromatics Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / STOT SE 3 H335 / STOT SE 3 H336 / Aquatic Chronic 2 H411	5 < 7
201-159-0 78-93-3 606-002-00-3	01-2119457290-43-xxxx butanone Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	3 < 5
203-603-9 108-65-6 607-195-00-7	01-2119475791-29-xxxx 2-methoxy-1-methylethyl acetate Flam. Liq. 3 H226	1 < 2,5

Additional information

* Substance with a common (EC) occupational exposure limit value.
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact
Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. **Most important symptoms and effects, both acute and delayed**
In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. **Indication of any immediate medical attention and special treatment needed**
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:
strong water jet

5.2. **Special hazards arising from the substance or mixture**
Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**
Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**
Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**
Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. **Methods and material for containment and cleaning up**
Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**
Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:
Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. **Conditions for safe storage, including any incompatibilities**

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection *

8.1. **Control parameters**

Occupational exposure limit values:

butanone
INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

TWA: 600 mg/m3; 200 ppm
STEL: 899 mg/m3; 300 ppm

4-methylpentan-2-one
INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1

TWA: 208 mg/m3; 50 ppm
STEL: 416 mg/m3; 100 ppm

n-butyl acetate
INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

TWA: 724 mg/m3; 150 ppm
STEL: 966 mg/m3; 200 ppm

2-methoxy-1-methylethyl acetate
INDEX No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6

TWA: 274 mg/m3; 50 ppm
STEL: 548 mg/m3; 100 ppm

dimethyl ether
INDEX No. 603-019-00-8 / EC No. 204-065-8 / CAS No. 115-10-6

TWA: 766 mg/m3; 400 ppm
STEL: 958 mg/m3; 500 ppm

Additional information

TWA : long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

DNEL:

dimethyl ether
INDEX No. 603-019-00-8 / EC No. 204-065-8 / CAS No. 115-10-6
DNEL long-term inhalative (systemic), Workers: 1894 mg/m³
DNEL long-term inhalative (systemic), Consumer: 471 mg/m³

4-methylpentan-2-one
INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1
DNEL long-term dermal (systemic), Workers: 11,8 mg/kg
DNEL acute inhalative (local), Workers: 208 mg/m³
DNEL acute inhalative (systemic), Workers: 208 mg/m³
DNEL long-term inhalative (local), Workers: 83 mg/m³
DNEL long-term inhalative (systemic), Workers: 83 mg/m³
DNEL long-term oral (repeated), Consumer: 4,2 mg/kg

DNEL long-term dermal (systemic), Consumer: 4,2 mg/kg
DNEL acute inhalative (local), Consumer: 155,2 mg/m³
DNEL acute inhalative (systemic), Consumer: 155,2 mg/m³
DNEL long-term inhalative (local), Consumer: 14,7 mg/m³
DNEL long-term inhalative (systemic), Consumer: 14,7 mg/m³

Hydrocarbons, C9, aromatics
EC No. 918-668-5
DNEL long-term dermal (systemic), Workers: 25 mg/kg
DNEL long-term inhalative (systemic), Workers: 150 mg/m³
DNEL long-term oral (repeated), Consumer: 11 mg/kg
DNEL long-term dermal (systemic), Consumer: 11 mg/kg
DNEL long-term inhalative (systemic), Consumer: 32 mg/m³

butanone
INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3
DNEL long-term dermal (systemic), Workers: 1161 mg/kg
DNEL long-term inhalative (systemic), Workers: 600 mg/m³
DNEL long-term oral (repeated), Consumer: 31 mg/kg
DNEL acute dermal, short-term (local), Consumer: 412 mg/kg
DNEL long-term dermal (systemic), Consumer: 412 mg/kg
DNEL long-term inhalative (systemic), Consumer: 106 mg/m³

n-butyl acetate
INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
DNEL acute inhalative (systemic), Workers: 960 mg/m³
DNEL long-term inhalative (systemic), Workers: 480 mg/m³
DNEL acute inhalative (systemic), Consumer: 859,7 mg/m³
DNEL long-term inhalative (systemic), Consumer: 102,34 mg/m³

PNEC:

dimethyl ether
INDEX No. 603-019-00-8 / EC No. 204-065-8 / CAS No. 115-10-6
PNEC sediment, freshwater: 0,681 mg/kg
PNEC, Soil: 0,045 mg/kg
PNEC sewage treatment plant (STP): 160 mg/L

4-methylpentan-2-one
INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1
PNEC aquatic, freshwater: 0,6 mg/L
PNEC aquatic, marine water: 0,06 mg/L
PNEC aquatic, intermittent release: 1,5 mg/L
PNEC sediment, freshwater: 8,27 mg/kg
PNEC sediment, marine water: 0,83 mg/kg
PNEC, Soil: 1,3 mg/kg
PNEC sewage treatment plant (STP): 27,5 mg/L

butanone
INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3
PNEC aquatic, freshwater: 55,8 mg/L
PNEC aquatic, marine water: 55,8 mg/L
PNEC sediment, freshwater: 285 mg/kg
PNEC sediment, marine water: 285 mg/kg
PNEC, Soil: 22,5 mg/kg
PNEC sewage treatment plant (STP): 709 mg/L

n-butyl acetate
INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
PNEC aquatic, freshwater: 0,18 mg/L
PNEC aquatic, marine water: 0,018 mg/L
PNEC aquatic, intermittent release: 0,36 mg/L
PNEC sediment, freshwater: 0,981 mg/kg
PNEC sediment, marine water: 0,0981 mg/kg
PNEC, Soil: 0,0903 mg/kg

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and

solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (DGUV–R 112-190). Use only respiratory protection equipment with CE-symbol including four digit test number.
Filtering device (full mask or mouthpiece) with filter: A

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties *

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

Appearance:	
Physical state	Aerosol
Colour	refer to label
Odour	characteristic

Safety relevant basis data		Unit	Method	Remark
Flash point:	-41	°C	calculated.	
Ignition temperature in °C:	226	°C	calculated.	
Lower explosion limit	2,4	Vol-%	calculated.	
Upper explosion limit	26,2	Vol-%	calculated.	
Vapour pressure at 20 °C:	2318,07	mbar	calculated.	
Density at 20 °C:	0,80	g/cm³	calculated.	
Vapour density; Bulk density	n.a.	kg/m³		
Water solubility (g/L)	insoluble			
pH at 20 °C:	N.A.			
Viscosity at 20 °C	8 s 4 mm		DIN 53211	
Distribution coefficient (n-octanol / water) (log P O/W)	n.a.			
solvent content:				
Organic solvents:	85	Wt %		
Water:	0	Wt %		
Initial boiling point and boiling range	-25	°C	calculated.	
Melting point/freezing point	n.a.	°C		
Evaporation rate	n.a.	°C		
Auto-ignition temperature:	n.a.	°C		
Decomposition temperature:	n.a.	°C		

9.2. **Other information:**

Explosive properties not explosive.
Not oxidising.
Odour threshold: not determined
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 10: Stability and reactivity

10.1. **Reactivity**

No known hazardous reactions.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**
Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides. Keine Entstehungsgefahr der oben ange=führten Produkte bei sachgemäßem Umgang

SECTION 11: Toxicological information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]
No data on preparation itself available.

11.1. **Information on toxicological effects**

Acute toxicity

2-methoxy-1-methylethyl acetate
oral, LD50, Rat: 8532 mg/kg
dermal, LD50, Rat: > 5000 mg/kg
Based on available data the classification criteria are not met.

dimethyl ether
oral, LD50, Rat: > 10000 mg/kg
Based on available data the classification criteria are not met.

4-methylpentan-2-one
oral, LD50, Rat: > 2193 mg/kg
Method: OECD 401
dermal, LD50, Rat: > 2000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: (4 h)
Harmful by inhalation.

Hydrocarbons, C9, aromatics
oral, LD50, Rat: 3592 mg/kg
Method: OECD 401
dermal, LD50, Rabbit: > 3160 mg/kg
Method: OECD 402
Based on available data the classification criteria are not met.

butanone
oral, LD50, Rat: > 3300 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: 5000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: 10000 mg/L (4 h)
Based on available data the classification criteria are not met.

n-butyl acetate
oral, LD50, Rat: 10760 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: > 14112 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: 23,4 mg/L (4 h)
Method: OECD 403
Based on available data the classification criteria are not met.

skin corrosion/irritation; Serious eye damage/eye irritation

4-methylpentan-2-one

Eyes
Causes serious eye irritation.

butanone
Eyes, Rabbit
Method: OECD 405
Causes serious eye irritation.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

4-methylpentan-2-one
Specific target organ toxicity (single exposure), Irritation:
Irritating to respiratory system.

Hydrocarbons, C9, aromatics
Specific target organ toxicity (single exposure), Irritation:
May cause respiratory irritation.
Specific target organ toxicity (single exposure), drowsiness:
May cause drowsiness or dizziness.

butanone
Specific target organ toxicity (single exposure), drowsiness:
May cause drowsiness or dizziness.

n-butyl acetate
Specific target organ toxicity (single exposure), drowsiness:
May cause drowsiness or dizziness.

Aspiration hazard

Hydrocarbons, C9, aromatics
Aspiration hazard
May be fatal if swallowed and enters airways.

Practical experience/human evidence

Other observations:
Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information *

overall evaluation
Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]
There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. **Toxicity**

2-methoxy-1-methylethyl acetate
Fish toxicity, LC50, Oncorhynchus mykiss: 100 - 180 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna: > 500 mg/L (48 h)
Based on available data the classification criteria are not met.

4-methylpentan-2-one
Fish toxicity, LC50: > 179 mg/L (96 h)
Method: OECD 202
Daphnia toxicity, EC50, Daphnia magna: > 200 mg/L (48 h)

Method: OECD 202
Bacteria toxicity, EC50, Pseudomonas putida: 275 mg/L (16 h)
Based on available data the classification criteria are not met.

Hydrocarbons, C9, aromatics
Fish toxicity, LC50, Oncorhynchus mykiss: 9,2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 3,2 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 2,6 - 2,9 mg/L (72 h)
Based on available data the classification criteria are not met.

butanone
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 2990 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna: 308 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 1972 mg/L (72 h)
Method: OECD 201
Bacteria toxicity, EC0, Pseudomonas putida: 1150 mg/L (16 h)
Based on available data the classification criteria are not met.

n-butyl acetate
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 18 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 44 mg/L (48 h)
Algae toxicity, EC50, Desmodesmus subspicatus.: 647,7 mg/L (72 h)
Based on available data the classification criteria are not met.

Long-term Ecotoxicity

4-methylpentan-2-one
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 30 - 35 mg/L (21 d)
Method: OECD 211
Based on available data the classification criteria are not met.

Hydrocarbons, C9, aromatics
Fish toxicity, LC50: (96 h)
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. **Persistence and degradability**

2-methoxy-1-methylethyl acetate
Biodegradation: 100 % (8 d)
Readily biodegradable (according to OECD criteria).

4-methylpentan-2-one
Biodegradation:: 83 % (28 d)
Method: OECD 301 F
Readily biodegradable (according to OECD criteria).

Hydrocarbons, C9, aromatics
Biodegradation:
Readily biodegradable (according to OECD criteria).

butanone
Biodegradation: 98 % (28 d)
Readily biodegradable (according to OECD criteria).

n-butyl acetate
Biodegradation, aerobic: 83 % (28 d)
Readily biodegradable (according to OECD criteria).

12.3. **Bioaccumulative potential**

2-methoxy-1-methylethyl acetate
Distribution coefficient (n-octanol / water) (log P O/W): 0,43
Method: Log KOC

dimethyl ether
Distribution coefficient (n-octanol / water) (log P O/W): < 4

4-methylpentan-2-one
Distribution coefficient (n-octanol / water) (log P O/W): 1,38 - 1,9

Method: OECD 117

butanone

Distribution coefficient (n-octanol / water) (log P O/W): 0,3

n-butyl acetate

Distribution coefficient (n-octanol / water) (log P O/W): 2,3

12.4. **Mobility in soil**

Toxicological data are not available.

12.5. **Results of PBT assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. **Other adverse effects**

No data available

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

150110	packaging containing residues of or contaminated by dangerous substances

packaging
Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. **UN number**

UN 1950

14.2. **UN proper shipping name**

Land transport (ADR/RID):	Aerosols, flammable
Sea transport (IMDG):	AEROSOLS
Air transport (ICAO-TI / IATA-DGR):	Aerosols, flammable

14.3. **Transport hazard class(es)**

2.1

14.4. **Packing group**

n.a.

14.5. **Environmental hazards**

Land transport (ADR/RID)	n.a.
Marine pollutant	n.a.

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code	D

Sea transport (IMDG)

EmS-No.	F-D, S-U

14.7. **Transport in bulk according to Annex II of MARPOL and the IBC Code**

not applicable

SECTION 15: Regulatory information *

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 680,885
VOC-value (in g/L) ASTM D 2369: 680,885

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. **Chemical Safety Assessment**

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No. CAS No.	Chemical name	REACH No.
201-159-0 78-93-3	butanone	01-2119457290-43-xxxx
203-550-1 108-10-1	4-methylpentan-2-one	01-2119473980-30-xxxx
204-658-1 123-86-4	n-butyl acetate	01-2119485493-29-xxxx
203-603-9 108-65-6	2-methoxy-1-methylethyl acetate	01-2119475791-29-xxxx
204-065-8 115-10-6	dimethyl ether	01-2119472128-37-xxxx
918-668-5	Hydrocarbons, C9, aromatics	01-2119455851-35-xxxx

SECTION 16: Other information *

Full text of classification in section 3:

Flam. Gas 1 / H220	Flammable gases	Extremely flammable gas.
compressed gas / H280	Gases under pressure	Contains gas under pressure; may explode if heated.
Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

Additional information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations.Without written approval, the product must not be used for purposes different from those mentioned in chapter 1.It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations.The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version