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)	22860000
Identification of the substance or mixture	LUKAS PINSELREINIGER Brushcleaner

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

Relevant identified uses
Paints for Arts, Hobby & Craft

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

Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd	
Peacock Lane	Telephone: +44 (0) 1344 461083
Bracknell, RG12 8SS	Telefax: +44 (0) 1344 486511
ENGLAND	

Dept. responsible for information:

E-mail	Philip.Gray@daler-rowney.com

1.4. **Emergency telephone number**

Emergency telephone:	+44 (0) 1344 461000

SECTION 2: Hazards identification

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

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

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

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs through prolonged or repeated exposure.
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.

2.2. **Label elements**

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

Hazard pictograms

Danger

Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of the reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapour.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P331 Do NOT induce vomiting.

contains:

Alkohols, C9-11-iso-, C10-rich, ethoxylated
Hydrocarbons, C9, aromatics
Xylene

Supplemental Hazard information (EU)

not applicable

2.3. **Other hazards**

SECTION 3: Composition / information on ingredients

3.2. **Mixtures**

Product description / chemical characterization

Description Solvents/Thinner

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
918-668-5 649-356-00-4	01-2119455851-35-xxxx Hydrocarbons, C9, aromatics STOT SE 3 H335 / STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 / Flam. Liq. 3 H226	50 - 100
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32 Xylene Flam. Liq. 3 H226 / Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Asp. Tox. 1 H304 / STOT RE 2 H373 / STOT SE 3 H335	12,5 - 20
	Alkohols, C9-11-iso-, C10-rich, ethoxylated Acute Tox. 4 H302 / Eye Dam. 1 H318	5 - 10
202-849-4 100-41-4 601-023-00-4	02-2119752523-40 ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304	2,5 - 5
203-539-1 107-98-2 603-064-00-3	1-methoxy-2-propanol Flam. Liq. 3 H226 / STOT SE 3 H336	2,5 - 5

Additional information

Full text of classification: see section 16

Labelling for contents according to regulation (EC) No. 648/2004:

Wt %	Ingredient (Designation)
5 - 15 %	Alkohols, C9-11-iso-, C10-rich, ethoxylated
> 30 %	Hydrocarbons, C9, aromatics

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

Take off immediately all contaminated clothing. 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**

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.

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. See protective measures under point 7 and 8.

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 section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**
Observe protective provisions (see section 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 section 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 (TRBS 2153)".

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:

ethylbenzene
INDEX No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
TWA: 441 mg/m3; 100 ppm
STEL: 552 mg/m3; 125 ppm

1-methoxy-2-propanol
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2
TWA: 375 mg/m3; 100 ppm
STEL: 560 mg/m3; 150 ppm

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

DNEL:

1-methoxy-2-propanol
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2
DNEL long-term dermal (systemic), Workers: 50.6 mg/kg
DNEL acute inhalative (local), Workers: 553.5 mg/m³
DNEL long-term inhalative (systemic), Workers: 369 mg/m³
DNEL long-term dermal (systemic), Consumer: 18.1 mg/kg
DNEL long-term inhalative (systemic), Consumer: 43.9 mg/m³

Hydrocarbons, C9, aromatics
INDEX No. 649-356-00-4 / 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 (local), Consumer: 11 mg/kg
DNEL acute inhalative (local), Consumer: 32 mg/m³

PNEC:

1-methoxy-2-propanol
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2
PNEC aquatic, freshwater: 10 mg/l
PNEC aquatic, marine water: 1 mg/l
PNEC sediment, freshwater: 41.6 mg/kg
PNEC sediment, marine water: 4.17 mg/kg
PNEC sewage treatment plant (STP): 100 mg/l

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 (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Use the following filter types for cleaning waste gases:0

Hand protection
For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber) / FKM (fluoro rubber)
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 EN ISO 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	Liquid
Colour	clear
Odour	characteristic

Safety relevant basis data		Unit	Method	Remark
Flash point (°C):	36	°C	DIN 53213	
Ignition temperature in °C:	200	°C		
Lower explosion limit:	0,6	Vol-%		
Upper explosion limit:	7	Vol-%		
Vapour pressure at 20 °C::	6			
Density at 20 °C::	0,88	g/cm³		
Water solubility (g/L):	insoluble			
pH at 20 °C::	-			
Viscosity at 20 °C::	21 s 3 mm		EN ISO 2431	
Solvent separation test (%):	< 3	%	ADR/RID	
Solid content (%):	0,00	Wt %		
	90	Wt %		
	0	Wt %		

9.2. **Other information**

SECTION 10: Stability and reactivity

10.1. **Reactivity**

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 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**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
No data on preparation itself available.

11.1. **Information on toxicological effects**

Acute toxicity

ethylbenzene
oral, LD50, Rat: 3500 mg/kg
dermal, LD50, Rat: 5000 mg/kg

1-methoxy-2-propanol
oral, LD50, Rat: 4016 mg/kg
dermal, LD50, Rabbit: 2000 mg/kg

Hydrocarbons, C9, aromatics
oral, LD50, Rat: 3592 mg/kg
dermal, LD50, Rat: > 3160 mg/kg
inhalative (vapours), LC50, Rat: > 10.2 mg/l (4 h)

Xylene
oral, LD50, Rat: 3523 mg/kg
dermal, LD50, Rabbit: > 4200 mg/kg
inhalative (vapours), LC50, Rat: 21.7 mg/l (4 h)

skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye damage.

Alkohols, C9-11-iso-, C10-rich, ethoxylated
Skin (4 h)

Xylene
Skin (4 h)
Irritant.

Respiratory or skin sensitisation

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Toxicological data are not available.

Specific target organ toxicity

May cause respiratory irritation.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

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

There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. **Toxicity**

ethylbenzene
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 1.8 mg/l (48 h)
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4.6 mg/l (72 h)

1-methoxy-2-propanol
Fish toxicity, LC50, Leuciscus idus (golden orfe): 6812 mg/l (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 23300 mg/l (48 h)

Alkohols, C9-11-iso-, C10-rich, ethoxylated
Algae toxicity, ErC50 10 - 100 mg/l (72 h)

Hydrocarbons, C9, aromatics
Fish toxicity, LC50, fish 1 - 10 mg/l (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 3.2 mg/l (48 h)

Xylene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2.6 mg/l (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 1 mg/l (48 h)
Method: OECD 202
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4.36 mg/l (73 h)
Method: OECD 201

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

ethylbenzene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 4.2 mg/l (96 h)

Hydrocarbons, C9, aromatics
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 9.2 mg/l (96 h)

Xylene
Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): > 1.3 mg/l (56 D)

12.2. **Persistence and degradability**

ethylbenzene
, Biodegradation:: 70 - 80 % (28 D)

Alkohols, C9-11-iso-, C10-rich, ethoxylated
: evaluation Readily biodegradable (according to OECD criteria)

Hydrocarbons, C9, aromatics
:
Photo-chemical elimination

Xylene
Biodegradation:, OECD 301 F: 87.8 % (28 D)

12.3. **Bioaccumulative potential**

1-methoxy-2-propanol
Partition coefficient: n-octanol/water: -0.44
Method: Log KOC

Hydrocarbons, C9, aromatics
Partition coefficient: n-octanol/water: 3.7 - 6.7

Bioconcentration factor (BCF)

Xylene
Bioconcentration factor (BCF), Oncorhynchus mykiss (Rainbow trout): 7.2 - 25.9

12.4. **Mobility in soil**
Toxicological data are not available.

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

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

12.6. **Other adverse effects**

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
200129* detergents containing 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 1993

14.2. **UN proper shipping name**

Land transport (ADR/RID):	Flammable liquid, n.o.s. (Kohlenwasserstoffe, C9, Aromaten, xylene)
Sea transport (IMDG):	FLAMMABLE LIQUID, N.O.S. (Kohlenwasserstoffe, C9, Aromaten, xylene)
Air transport (ICAO-TI / IATA-DGR):	Flammable liquid, n.o.s. (Kohlenwasserstoffe, C9, Aromaten, xylene)

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

3

14.4. **Packing group**

III

14.5. **Environmental hazards**

Land transport (ADR/RID)	UMWELTGEFÄHRDEND
Marine pollutant	p / Kohlenwasserstoffe, C9, Aromaten

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

Further information

Land transport (ADR/RID)

tunnel restriction code	D/E

Sea transport (IMDG)

EmS-No.	F-E, S-D

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:	792
VOC-value (in g/L) ASTM D 2369:	792

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.
215-535-7 1330-20-7	Xylene	01-2119488216-32

SECTION 16: Other information

Full text of classification in section 3:

STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
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.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.