

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



Article No.: 241X00
Print date 27.05.2015
Version 1.14

Edge Pen
Revision date 22.05.2015
Issue date 22.05.2015

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

1.1. Product identifiers

Article No. (manufacturer/supplier): 241X00
Identification of the substance or mixture Edge Pen
Art.No.: 243000, 243900
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

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].

Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
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.
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

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H335 May cause respiratory 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.
P233 Keep container tightly closed.
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.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P370 + P378 In case of fire: Use foam to extinguish.
P501 Dispose of contents/container to industrial incineration plant.

contains:

4-methylpentan-2-one
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.

3. Composition / Information on ingredients

3.1. **Substances**

not applicable

3.2. **Mixtures**

Product description / chemical characterization

Description Acrylic resin lacquer

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
204-658-1 123-86-4 607-025-00-1	01-2119485493-29-0000 n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	25 - 50
203-550-1 108-10-1 606-004-00-4	01-2119473980-30-0000 4-methylpentan-2-one Flam. Liq. 2 H225 / Acute Tox. 4 H332 / Eye Irrit. 2 H319 / STOT SE 3 H335	20 - 25
918-668-5	01-2119455851-35-0000 Solvent naphtha (petroleum), light arom.; Low boiling point, naphtha - unspecified Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / STOT SE 3 H335 / STOT SE 3 H336 / Aquatic Chronic 2 H411	5 - 10
201-159-0 78-93-3 606-002-00-3	01-2119457290-43-0000 butanone Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	5 - 10
203-603-9 108-65-6 607-195-00-7	01-2119475791-29 2-methoxy-1-methylethyl acetate Flam. Liq. 3 H226	2,5 - 5

Additional information

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

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

Wt %	Ingredient (Designation)
5 - 15 %	aromatic hydrocarbons

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

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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).

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.

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).

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.

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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

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

4-methylpentan-2-one

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

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

Solvent naphtha (petroleum), light arom.; Low boiling point, naphtha - unspecified

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 short-term oral (acute), Workers: 600 mg/kg

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

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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:

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

Filtering device (full mask or mouthpiece) with filter:AX1

Hand protection

For prolonged or repeated handling the following glove material must be used: FKM (fluoro 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.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state liquid

Colour characteristic

Odour characteristic

Safety relevant basis data

	Unit	Method	Remark
Flash point:	16 °C	calculated.	
Ignition temperature in °C:	n.a.		
Lower explosion limit	1,3 Vol-%	calculated.	

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Upper explosion limit	14,0 Vol-%	calculated.
Vapour pressure at 20 °C:	15,96 mbar	calculated.
Density at 20 °C:	0,95 g/cm ³	calculated.
Vapour density; Bulk density	N.A. kg/m ³	
Water solubility (g/L)	insoluble	
pH at 20 °C:	N.A.	
Viscosity at 20 °C	100 s 3 mm	EN ISO 2431
Distribution coefficient (n-octanol / water) (log P O/W)	N.A.	
solvent content:		
Organic solvents:	73 Wt %	
Water:	0 Wt %	
Initial boiling point and boiling range	80 °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.

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 angeführten Produkte bei sachgemäßem Umgang

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

4-methylpentan-2-one

oral, LD50, Rat: > 2000 mg/kg

skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness:

May cause drowsiness or dizziness.

Aspiration hazard

Solvent naphtha (petroleum), light arom.; Low boiling point, naphtha - unspecified

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Aspiration hazard

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 .

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

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

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

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

080111 waste paint and varnish containing organic solvents or other dangerous substances

packaging

Recommendation

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

14. Transport information

14.1. UN number

1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint
Sea transport (IMDG): PAINT
Air transport (ICAO-TI / IATA-DGR): Paint

14.3. Transport hazard class(es)

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14.4. Packing group

II

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/E
SPECIAL PROVISIONS 640D

Sea transport (IMDG)

EmS-No. F-E, S-E

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

not applicable

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: 693,208

VOC-value (in g/L) ASTM D 2369: 693,208

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

Chemical safety assessments for substances in this preparation were not carried out.

16. Other information

Full text of classification in section 3:

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.