



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 13/8/2021

Version: 8.1

Language: en-GB,IE

Date of print: 25/8/2021

touch-up pen

Material number 46076L00

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

1.1 Product identifier

Trade name: touch-up pen

UFI: JST0-00VP-S00V-90EY

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

General use: No data available

1.3 Details of the supplier of the safety data sheet

Company name: Grohe AG

Street/POB-No.: Industriepark Edelburg

Postal Code, city: DE-58675 Hemer

WWW: www.grohe.com

E-mail: info@grohe.com

Telephone: +49 (0)2372 93-0

Telefax: +49 (0)2372 93-1322

Department responsible for information:

Telephone: +49 (0)2372 93-2037

sustainability@grohe.com

1.4 Emergency telephone number

GIZ-Nord, Göttingen, Germany,

Telephone: +49 551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Flam. Liq. 3; H226 Flammable liquid and vapour.

STOT SE 3; H336 May cause drowsiness or dizziness.

(EUH066) Repeated exposure may cause skin dryness or cracking.

2.2 Label elements

Labelling (CLP)



Signal word:

Warning

Hazard statements:

H226

Flammable liquid and vapour.

H336

May cause drowsiness or dizziness.

EUH066

Repeated exposure may cause skin dryness or cracking.

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.

P271

Use only outdoors or in a well-ventilated area.

P405

Store locked up.

P501

Dispose of contents/container to hazardous or special waste collection point.



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Special labelling

Text for labelling: Contains: n-Butyl acetate; 2-Methoxy-1-methylethyl acetate

2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect.
Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Pen with liquid active agent:

Contains Mixture of the substances listed below with non-hazardous additions.

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119485493-29-xxxx EC No. 204-658-1 CAS 123-86-4	n-Butyl acetate	25 - 50 %	Flam. Liq. 3; H226. STOT SE 3; H336. (EUH066).
REACH 01-2119475791-29-xxxx EC No. 203-603-9 CAS 108-65-6	2-Methoxy-1-methylethyl acetate	5 - 10 %	Flam. Liq. 3; H226. STOT SE 3; H336.
REACH 01-2119488216-32-xxxx list no. 905-588-0	Reaction mass of ethylbenzene and xylene	< 10 %	Flam. Liq. 3; H226. Acute Tox. 4; H312. Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. STOT SE 3; H335. STOT RE 2; H373. Asp. Tox. 1; H304.
REACH 01-2119457610-43-xxxx EC No. 200-578-6 CAS 64-17-5	Ethanol	2.5 - 5 %	Flam. Liq. 2; H225. Eye Irrit. 2; H319.
REACH 01-2119490979-12-xxxx EC No. 265-185-4 CAS 64742-82-1	Naphtha (petroleum), hydrodesulfurized, heavy	< 0.5 %	Flam. Liq. 3; H226. STOT SE 3; H336. STOT RE 1; H372. Asp. Tox. 1; H304. Aquatic Chronic 2; H411. (EUH066).

Full text of H- and EUH-statements: see section 16.

Hazardous impurities Information about Naphtha (petroleum), hydrodesulfurized, heavy Naphtha (petroleum), hydrodesulfurized heavy: Contents of Benzene < 0.1%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection!



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In case of inhalation:	Provide fresh air. Seek medical aid in case of troubles.
Following skin contact:	Thoroughly wash skin with soap and water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.
After swallowing:	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Subsequently consult physician.

4.2 Most important symptoms and effects, both acute and delayed

Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may have a narcotic effect.
Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, extinguishing powder, carbon dioxide.
In case of large fires Water spray jet, alcohol resistant foam.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapour.
With air, vapours form potentially explosive mixtures, which are heavier than air.
Vapours may proceed on the ground over great distances and cause fire and backflashes.
In case of fire may be liberated: carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Hazchem-Code: •3Y

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.



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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing mist/vapours/spray. If possible, eliminate leakage. Avoid contact with the substance.

Eliminate all ignition sources if safe to do so. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Cordon off downwind area at risk and warn inhabitants. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter soil, sewage, water bodies, lower level rooms or pits. If necessary notify appropriate authorities.

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).

Beware of reignition. Thoroughly clean surrounding area.

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Avoid the formation of aerosol. Do not inhale vapours or mist.

Use only in well-ventilated areas. Do not allow containers to stand open.

Avoid contact with skin and eyes. Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.

When handling large quantities, supply emergency spray. Take off contaminated clothing and wash it before reuse.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Use only explosion-protected equipment/instruments. Do not weld.

In partially filled containers explosive mixtures may form.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep only in the original container in a cool, well-ventilated place.

Keep container tightly closed and dry.

Protect from heat and direct sunlight.

Store containers in upright position. Explosion protection required.

Hints on joint storage:

Do not store together with combustible or self-igniting materials or any highly flammable solids. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

No information available.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
123-86-4	n-Butyl acetate	Europe: IOELV: STEL	723 mg/m ³ ; 150 ppm
		Europe: IOELV: TWA	241 mg/m ³ ; 50 ppm
		Great Britain: MEL/OES-STEL	966 mg/m ³ ; 200 ppm
		Great Britain: MEL/OES-TWA	724 mg/m ³ ; 150 ppm
		Ireland: 15 minutes	723 mg/m ³ ; 150 ppm
		Ireland: 8 hours	241 mg/m ³ ; 50 ppm
108-65-6	2-Methoxy-1-methylethyl acetate	Europe: IOELV: STEL	550 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	275 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Great Britain: WEL-STEL	548 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Great Britain: WEL-TWA	274 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Ireland: 15 minutes	550 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Ireland: 8 hours	275 mg/m ³ ; 50 ppm (may be absorbed through the skin)
64-17-5	Ethanol	Great Britain: WEL-TWA Ireland: 15 minutes	1920 mg/m ³ ; 1000 ppm 1000 ppm
64742-82-1	Naphtha (petroleum), hydrodesulfurized, heavy	Great Britain: WEL-TWA	500 mg/m ³ (Aromatics)
1330-20-7	Xylene (isomeric mixture)	Europe: IOELV: STEL	442 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	221 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Great Britain: WEL-STEL	441 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Great Britain: WEL-TWA	220 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Ireland: 15 minutes	442 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Ireland: 8 hours	221 mg/m ³ ; 50 ppm (may be absorbed through the skin)

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
1330-20-7	Xylene (isomeric mixture)	Great Britain: BMGV, urine	650 mmol/mol creatinine	methyl hippuric acid	end of exposure or end of shift

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.



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Personal protection equipment

Occupational exposure controls

- Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
- Hand protection: Protective gloves according to EN 374.
Glove material: butyl caoutchouc (butyl rubber) - Layer thickness: 0.4 mm
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to EN 166.
- Body protection: Flame retardant, antistatic and chemical resistant protective clothing.
- General protection and hygiene measures:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing mist/vapours/spray.
Avoid contact with skin and eyes.
Take off contaminated clothing and wash it before reuse.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.
When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Colour: white Varying colours
Odour:	Characteristic
Odour threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	78 °C
Flash point/flash point range:	23 °C
Evaporation rate:	No data available
Flammability:	Flammable liquid and vapour.
Explosion limits:	LEL (Lower Explosion Limit): 1.20 Vol-% UEL (Upper Explosive Limit): 7.50 Vol-%
Vapour pressure:	at 20 °C: 13 hPa
Vapour density:	No data available
Density:	at 20 °C: 0.95 g/mL
Water solubility:	Slightly miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	180 °C
Decomposition temperature:	No data available
Viscosity, kinematic:	at 20 °C: 90 s (ISO 4 mm)
Explosive properties:	Product is not explosive. Vapours can form explosive mixtures with air.
Oxidizing characteristics:	No data available



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9.2 Other information

Solvent content: 51 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Flammable liquid and vapour.
Vapours can form explosive mixtures with air.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Heating will lead to pressure increase: Danger of bursting and explosion.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.
ATEmix calculated: > 5,000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix calculated: > 5,000 mg/kg.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix calculated (Vapours): > 20 mg/L

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

Not known to cause sensitization.

Skin sensitisation: Based on available data, the classification criteria are not met.
Not known to cause sensitization.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

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

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

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): STOT SE 3; H336 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Lack of data.

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

Other information:

Information about n-Butyl acetate:

LD50 Rat, oral: 10800 mg/kg

LD50 Rabbit, dermal: > 17600 mg/kg

LC50 Rat, inhalative: > 21 mg/L/4h (vapour)

2-Methoxy-1-methylethyl acetate:

LD50 Rat, oral: 8532 mg/kg

LD50 Rabbit, dermal: > 5000 mg/kg

Information about Reaction mass of ethylbenzene and xylene Reaction mass of ethylbenzene and xylene:

LD50 Rat, oral: 3523 mg/kg

LD50 Rabbit, dermal: 2000 mg/kg

LC50 Rat, inhalative: 11 mg/L (vapour)

LC50 Rat, inhalative: 1.5 mg/L (Aerosol)

Information about Ethanol:

LD50 Rat, oral: 10420 mg/kg

LD50 Rabbit, dermal: > 2000 mg/kg

Information about Naphtha (petroleum), hydrodesulfurized, heavy Naphtha (petroleum), hydrodesulfurized heavy:

LD50 Rat, oral: > 5000 mg/kg

LD50 Rabbit, dermal: > 2000 mg/kg

Symptoms

In case of inhalation: Vapours in high concentrations have anaesthetic effect.

After contact with skin: Repeated exposure may cause skin dryness or cracking.



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SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

UN 1263

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1263, PAINT

14.3 Transport hazard class(es)

ADR/RID:

Class 3, Code: F1

IMDG:

Class 3, Subrisk -

IATA-DGR:

Class 3

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

III

14.5 Environmental hazards

Marine pollutant:

no





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14.6 Special precautions for user

Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 30, UN number UN 1263
Hazard label: 3
Special provisions: 163 367 650
Limited quantities: 5 L
EQ: E1
Package - Instructions: P001 IBC03 LP01 R001
Package - Special provisions: PP1
Special provisions for packing together: MP19
Portable tanks - Instructions: T2
Portable tanks - Special provisions: TP1 TP29
Tank coding: LGBF
Tunnel restriction code: D/E

Sea transport (IMDG)

EmS: F-E, S-E
Special provisions: 163, 223, 367, 955
Limited quantities: 5 L
Excepted quantities: E1
Package - Instructions: P001, LP01
Package - Provisions: PP1
IBC - Instructions: IBC03
IBC - Provisions: -
Tank instructions - IMO: -
Tank instructions - UN: T2
Tank instructions - Provisions: TP1, TP29
Stowage and handling: Category A.
Properties and observations: Miscibility with water depends upon the composition.
Segregation group: none

Air transport (IATA)

Hazard label: Flamm. liquid
Excepted Quantity Code: E1
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L
Passenger and Cargo Aircraft: Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only: Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L
Special provisions: A3 A72 A192
Emergency Response Guide-Code (ERG): 3L

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

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code: •3Y
No data available

National regulations - EC member states

Volatile organic compounds (VOC):
51 % by weight = 485.7 g/L



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Labelling of packaging with <= 125mL content



Signal word:

Warning

Hazard statements:

H336

May cause drowsiness or dizziness.

EUH066

Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P101

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

P102

Keep out of reach of children.

P271

Use only outdoors or in a well-ventilated area.

P405

Store locked up.

P501

Dispose of contents/container to hazardous or special waste collection point.

Further regulations, limitations and legal requirements:

No data available

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H225 = Highly flammable liquid and vapour.

H226 = Flammable liquid and vapour.

H304 = May be fatal if swallowed and enters airways.

H312 = Harmful in contact with skin.

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H332 = Harmful if inhaled.

H335 = May cause respiratory irritation.

H336 = May cause drowsiness or dizziness.

H372 = Causes damage to organs through prolonged or repeated exposure.

H373 = May cause damage to organs through prolonged or repeated exposure.

H411 = Toxic to aquatic life with long lasting effects.

EUH066 = Repeated exposure may cause skin dryness or cracking.



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Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL: Occupational Exposure Limit Value
AS/NZS: Australian Standards/New Zealand Standards
ATEmix: Acute Toxicity Estimate of mixture
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EU: European Union
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LC50: Median lethal concentration
LD50: Lethal dose 50%
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT RE: Specific target organ toxicity - repeated exposure
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

Reason of change: Changes in section 8: occupational exposure limit values

Date of first version: 17/2/2016

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.