

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

1.1. Product identifier

Product name : MARKER PEN - Green
UFI : KJGY-68JY-300D-3G6W
Product code : BDS000897BU

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

Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Paints

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226
Acute toxicity (inhalation:dust,mist) Category 4 H332
Skin corrosion/irritation, Category 2 H315
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful if inhaled. Causes skin irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Warning

Contains :

o-xylene

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

H332 - Harmful if inhaled.

Precautionary statements (CLP) :

P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 - Avoid breathing vapours.

P280 - Wear protective gloves.

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P332+P313 - If skin irritation occurs: Get medical advice/attention.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Extra phrases

: For professional users only.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
o-xylene substance with a Community workplace exposure limit	CAS-No.: 95-47-6 EC-No.: 202-422-2 EC Index-No.: 601-022-00-9 REACH-no: 01-2119485822-30	25 – 50	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Irrit. 2, H315
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$] substance with national workplace exposure limit(s) (GB) (Note 10)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2 REACH-no: 01-2119489379-17	25 – 50	Carc. 2, H351

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. If signs/symptoms develop, get medical attention.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Seek medical attention if irritation develops.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Seek medical attention if irritation develops.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Firefighting instructions : Move containers from fire area if it can be done without personal risk. Use standard firefighting procedures and consider the hazards of other involved materials.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Wear appropriate protective equipment and clothing during clean-up.
Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Following product recovery, flush area with water. Take up small spills with dry chemical absorbent. Clean surface thoroughly to remove residual contamination.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For disposal of contaminated materials refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid prolonged exposure. Handle in accordance with good industrial hygiene and safety procedures.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container closed when not in use.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

o-xylene (95-47-6)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	o-Xylene
IOEL TWA	221 mg/m ³ 50 ppm
IOEL STEL	442 mg/m ³ 100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)

United Kingdom - Occupational Exposure Limits

Local name	Titanium dioxide
WEL TWA (OEL TWA)	4 mg/m ³ respirable 10 mg/m ³ total inhalable
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Use eye protection according to EN 166. Safety glasses with side shields.

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear suitable gloves tested to EN374. The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Nitrile gloves are recommended.

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Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Approved organic vapour respirator. Filter type: A

Thermal hazards

Thermal hazard protection:

Not expected to present a significant hazard under anticipated conditions of normal use. Wear appropriate thermal protective clothing, when necessary.

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Brown.
Odour	: Aromatic.
Odour threshold	: Not available
Melting point	: -25 °C
Freezing point	: Not available
Boiling point	: 144 °C
Flammability	: Flammable liquid and vapour.
Lower explosion limit	: 0.9 vol %
Upper explosion limit	: 6.7 vol %
Flash point	: 25.5 °C (closed cup)
Auto-ignition temperature	: 463 °C
Decomposition temperature	: Not available
pH	: Not applicable
Viscosity, kinematic	: Not available
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not applicable
Vapour pressure	: 0.7 kPa at 20 °C
Vapour pressure at 50°C	: Not available
Density	: 1.28 g/cm ³ at 20 °C
Relative density	: 1.28 at 20 °C
Relative vapour density at 20°C	: 3.7
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid temperatures exceeding the flash point.

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10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Inhalation:dust,mist: Harmful if inhaled.

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ATE CLP (dust,mist)	3.231 mg/l/4h
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o-xylene (95-47-6)

LD50 oral rat	3523 mg/kg
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Skin corrosion/irritation	: Causes skin irritation. pH: Not applicable
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

Endocrine disrupting properties	
Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

o-xylene (95-47-6)

LC50 - Fish [1]	2.6 – 11.23 mg/l
EC50 - Crustacea [1]	> 3.4 mg/l Ceriodaphnia dubia
LOEC (chronic)	3.16 mg/l Daphnia magna (21 d)
NOEC chronic fish	0.714 mg/l Danio rerio (35 d)

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12.2. Persistence and degradability

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Persistence and degradability	Not established. No data is available on the degradability of this product.
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12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Kow)	Not applicable
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o-xylene (95-47-6)

Partition coefficient n-octanol/water (Log Pow)	3.12
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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Results of PBT assessment	Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII
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12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

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Other information	No other effects known
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW, EC 2000/532) : According to the European Waste Catalogue (EWC), Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1263	UN 1263	UN 1263	UN 1263	UN 1263
14.2. UN proper shipping name				
PAINT	PAINT	Paint	PAINT	PAINT

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ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 1263 PAINT, 3, III, (D/E)	UN 1263 PAINT, 3, III	UN 1263 Paint, 3, III	UN 1263 PAINT, 3, III	UN 1263 PAINT, 3, III
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-E	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 163, 367, 650
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •3Y

Transport by sea

Special provisions (IMDG)	: 163, 223, 367, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1, TP29
Stowage category (IMDG)	: A

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Properties and observations (IMDG) : Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3, A72, A192
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 163, 367, 650
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 163, 367, 650
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

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Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
9.1	Flash point	Modified

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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit

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Abbreviations and acronyms:

PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.

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