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

1.1 Product identifier

Trodat Maxlight Premium Ink Black

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

1.2.1 Relevant uses

Ink

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Trodat GmbH
Linzerstr. 156
4600 Wels / AUSTRIA
Phone +43 (0) 7242 239 - 0
Fax +43 (0) 7242 239 - 940
Homepage www.trodat.net
E-mail trodat@trodat.net

Address enquiries to

Technical information trodat@trodat.net

Safety Data Sheet sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

1.4 Emergency telephone number

Company +43 (0) 7242 239 - 0 Mo-Fr 8:00 - 16:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Eye Dam. 1: H318 Causes serious eye damage.
Skin Irrit. 2: H315 Causes skin irritation.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms



Signal word DANGER

Contains: 2-Ethylhexane-1,3-diol

Hazard statements

H318 Causes serious eye damage.
H315 Causes skin irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves / eye protection / face protection.
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 / doctor.

2.3 Other hazards

Environmental hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
40 - < 50	2-Ethylhexane-1,3-diol
	CAS: 94-96-2, EINECS/ELINCS: 202-553-5, EU-INDEX: 612-040-00-1, Reg-No.: 01-2120000832-71-XXXX
	GHS/CLP: Eye Dam. 1: H318
10 - < 15	2-methylpentane-2,4-diol
	CAS: 107-41-5, EINECS/ELINCS: 203-489-0, EU-INDEX: 603-053-00-3, Reg-No.: 01-2119539582-35-XXXX
	GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315

Comment on component parts For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult a doctor immediately.
Shield unaffected eye.

Ingestion Seek medical advice immediately.
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam, dry powder, water spray jet, carbon dioxide
Fire extinguishing method of surrounding areas must be considered.

Extinguishing media that must not be used Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.
Wear suitable protective equipment. For personal protection see SECTION 8.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid contact with eyes and skin. Use personal protective equipment.

Take off contaminated clothing and wash before reuse.
Do not eat, drink or smoke when using this product.
Wash face and/or hands before break and end of work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.
Provide floor with bunding.

Do not store together with oxidizing agents.

Keep container in a well-ventilated place.
Keep container tightly closed.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

DNEL

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
Industrial, dermal, Long-term - systemic effects, 2 mg/kg bw/day
Industrial, inhalative, Acute - local effects, 98 mg/m³
Industrial, inhalative, Long-term - local effects, 49 mg/m³
Industrial, inhalative, Long-term - systemic effects, 14 mg/m³
general population, oral, Long-term - systemic effects, 1 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 1 mg/kg bw/day
general population, inhalative, Acute - local effects, 49 mg/m³
general population, inhalative, Long-term - local effects, 25 mg/m³
general population, inhalative, Long-term - systemic effects, 3.5 mg/m³
2-Ethylhexane-1,3-diol, CAS: 94-96-2
Industrial, dermal, Acute - systemic effects, 228.9 mg/kg bw/day
Industrial, dermal, Long-term - systemic effects, 76.3 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0.17 mg/kg bw/day
general population, dermal, Acute - systemic effects, 114.5 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 38.2 mg/kg bw/day

PNEC

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
oral (food), 100 mg/kg
soil, 0.11 mg/kg
sediment (seawater), 0.179 mg/kg
sediment (freshwater), 1.79 mg/kg
sewage treatment plants (STP), 20 mg/l
seawater, 0.0429 mg/l
freshwater, 0.429 mg/l
2-Ethylhexane-1,3-diol, CAS: 94-96-2
oral (food), 3.3 mg/kg food
soil, 0.17 mg/kg soil dw
sediment (seawater), 0.16 mg/kg sediment dw
sediment (freshwater), 1.6 mg/kg sediment dw
sewage treatment plants (STP), 3 mg/L
seawater, 0.01 mg/L
freshwater, 0.1 mg/L

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	If there is a risk of splashing: Tightly fitting goggles. (EN 166:2001)
Hand protection	> 0.11 mm. Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	light protective clothing
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Not required under normal conditions. In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	black
Odor	characteristic
Odour threshold	No information available.
pH-value	No information available.
pH-value [1%]	No information available.
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	> 93°C / > 199°F
Flammability	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	No information available.
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	partially miscible
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	not applicable
Kinematic viscosity	No information available.
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.
Reactions with reducing agents.
Reactions with acids.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No decomposition if used and stored according to specifications.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

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

Acute oral toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
LD50, oral, Rat, 4000 mg/kg
2-Ethylhexane-1,3-diol, CAS: 94-96-2
LD50, oral, Rat, > 2000 mg/kg

Acute dermal toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
LD50, dermal, Rabbit, 13 000 mg/kg
2-Ethylhexane-1,3-diol, CAS: 94-96-2
LD50, dermal, Rabbit, > 2000 mg/kg

Acute inhalational toxicity

Product
Based on the available information, the classification criteria are not fulfilled.

Serious eye damage/irritation Risk of serious damage to eyes.
Calculation method

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
Rabbit, in vivo, irritant
2-Ethylhexane-1,3-diol, CAS: 94-96-2
Rabbit, OECD 405, corrosive

Skin corrosion/irritation Irritant
Calculation method

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
Rabbit, in vivo, irritant
2-Ethylhexane-1,3-diol, CAS: 94-96-2
Rabbit, OECD 403, irritant

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
Guinea pig, in vivo, non-sensitizing

Specific target organ toxicity — Based on the available information, the classification criteria are not fulfilled.

single exposure

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
2-Ethylhexane-1,3-diol, CAS: 94-96-2
NOAEL, dermal, Rat, 1884 mg/kg bw/day
NOAEL, oral, Rat, 100 mg/kg bw/day

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
in vitro, negativ
2-Ethylhexane-1,3-diol, CAS: 94-96-2
Rat, in vivo mammalian somatic cell study: cytogenicity, OECD 474, negativ
in vitro gene mutation study in bacteria, OECD 471, negativ

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

- Fertility

Substance
2-Ethylhexane-1,3-diol, CAS: 94-96-2
NOAEL, dermal, Rat, 3768 mg/kg bw/d (Effect on fertility)

- Development

Substance
2-Ethylhexane-1,3-diol, CAS: 94-96-2
NOAEL, dermal, Rat, 942 mg/kg bw/d (Effect on developmental toxicity)
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on developmental toxicity)

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
2-Ethylhexane-1,3-diol, CAS: 94-96-2
NOAEL, dermal, mouse, 215 mg/kg bw/day

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties No information available.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
2-methylpentane-2,4-diol, CAS: 107-41-5
LC50, fish, > 100 mg/l
EC50, Daphnia magna, > 100 mg/l
IC50, Bacteria, > 100 mg/l
2-Ethylhexane-1,3-diol, CAS: 94-96-2
EC50, (24h), Daphnia magna, 811 mg/l
LC0, (48h), Leuciscus idus, > 1000 mg/l
EC10, Pseudomonas putida, 1300 mg/l (18 h)

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	CAS 107-41-5: Biodegradable.

12.3 Bioaccumulative potential

CAS 107-41-5: log Pow: -0.14

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Ecological data of complete product are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Coordinate disposal with the authorities if necessary.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 080313

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.
Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150102
150107

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex I (REACH)	The product is not subject to Annex I restrictions.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2023)
NATIONAL REGULATIONS (EU):	
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (2010/75/CE)	not applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H318 Causes serious eye damage.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

This document does not comply with Regulation (EC) No 1907/2006, article 31 (5) and may be used for internal purposes only.

Classification procedure
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)

Modified position
none

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