

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Section 1: Designation of the substance or the mixture, and of the company

1.1 Product identifier

Name of substance / trade name: Test inks 58 – 70mN/m

Product number:

Ink 58: 100034748

Ink 60: 100034749

Ink 62: 100034750

Ink 64: 100022145

Ink 66: 100034751

Ink 68: 100034752

Ink 70: 100034753

Other designations:

Test inks

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

Relevant identified uses:

Testing of surface energy on components.

Uses advised against:

Application to hot surfaces.

1.3 Information on the supplier who provides the Safety Data Sheet

Manufacturer / Supplier

Diener electronic GmbH & Co. KG

Address

Nagolder Str. 61

Country ID/PO code/town

72224 Ebhausen

Contact person for technical information

Mr Christof Diener

Phone / email:

+49 74 58 – 999 31 - 542 / info@plasma.com

1.4 Emergency phone

Section 2: Potential hazards

2.1 Classification of the substance or mixture

Classification pursuant to Directive (EC) No. 1272/2008

Repr. 1B	H360FD	May impair fertility. May cause harm to the unborn child.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Carc. 2	H351	Suspected of causing cancer

2.2 Identifying elements

Identifying elements pursuant to Directive (EC) No. 1272/2008

The substance is classified and labelled pursuant to the CLP Directive.

Hazard pictograms

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -



GHS08

Signal word: **Danger**

Hazard statements

H360FD May impair fertility. May cause harm to the unborn child.

H351 Suspected of causing cancer

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

Precautionary statements

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.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P403+ P233 Store in a well-ventilated place. Keep container tightly closed.

Additional information:

For commercial users only.

2.3 Other hazards

This substance/this mixture does not contain any components in concentrations of 0.1% or higher which are classified as either Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB).

Section 3: Composition/information on components

3.2 Mixtures

Name of substance: **deionized water**

EC No.: 231-791-2

CAS No.: 7732-18-5

REACH registration no.: There is no registration number for this substance since the substance and its use are exempt from registration, no registration of the annual tonnage is required, or registration is scheduled for a later point in time.

Ratio of ink 58: 0%

Ratio of ink 60: 20%

Ratio of ink 62: 40%

Ratio of ink 64: 50%

Ratio of ink 66: 75%

Ratio of ink 68: 80%

Ratio of ink 70: 90%

Classification pursuant to Directive (EC) No. 1272/2008: (source 1)

Not a hazardous substance or hazardous mixture pursuant to Directive (EC) No. 1272/2008.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Name of substance: Formamide
EC No.: 200-842-0
CAS No.: 75-12-7
REACH registration no.: 01-2119496064-35-xxxx

Ratio of ink 58: 100%
Ratio of ink 60: 80%
Ratio of ink 62: 60%
Ratio of ink 64: 50%
Ratio of ink 66: 25%
Ratio of ink 68: 20%
Ratio of ink 70: 10%

Classification pursuant to Directive (EC) No. 1272/2008:

Signal word Hazard

Pictograms



H351 Suspected of causing cancer.
H360FD May impair fertility. May cause harm to the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

Substances of very high concern (SVHC)

Substance name	CAS no.	Wght-%	Listed in	Notes
Formamide	75-12-7	0-50	Candidate list	Repr. A57c

Legend

Candidate list Repr. A57c Substances meeting the criteria of Article 57 and eligible for inclusion in Annex XIV Teratogenic (Article 57c)

(For the wording of the mentioned hazard statements, refer to Section 16)

Section 4: First aid measures

4.1 Description of the first aid measures

In case of aspiration

Provide fresh air. If symptoms occur or in case of doubt, seek medical advice.

In case of skin contact

Skin contact is considered the most frequent type of exposition to test inks at the workplace. Immediately wash skin with plenty of water and soap. If necessary, seek medical advice.

In case of eye contact

As a precaution, rinse eyes with water. If symptoms occur, seek medical advice.

In case of ingestion

Have person rinse their mouth and drink a glass of water. Do not induce vomiting. Seek medical advice immediately and show this container or label.

4.2 Main acute and delayed symptoms and effects

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Respiratory distress
Dizziness
Vertigo
Nausea
Vomiting
Headache

4.3 Information on immediate medical help or special treatments

No data available.

Section 5: Firefighting measures

5.1 Extinguishing agents

Suitable: Adapt fire extinguishing measures to the surroundings.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam
Unsuitable: depending on environment

5.2 Special hazards posed by the substance or mixture

May form explosive mixtures with air when heated.
In case of fire, formation of dangerous fire gases and vapours possible.
May be released in case of fire:
Carbon monoxide and carbon dioxide

5.3 Notes for firefighting

If possible, remove the container from the hazard zone.
Other information Vapours heavier than air. Pay attention to backfire

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use the specified personal protective equipment. See sections 8. Avoid contact with eyes and skin. Do not breath in vapour/aerosol.

6.2 Environmental precautions

Dilute with plenty of water. Absorb spilled liquids with universal binder (e.g. diatomaceous earth, vermiculite, sand) and dispose of according to regulations.
Clean soiled items and floors.
Prevent release into the sewers or to the surface and ground water.

6.3 Methods and materials for containment and cleaning up

Absorb spilled liquids with absorptive agents, such as: sand, vermiculite or powdered limestone. Place in suitable, sealed containers for disposal and dispose of according to regulations. Ensure sufficient ventilation.

6.4 Reference to other Section

For information on safe handling, see section 7.
For information on safe personal protective equipment, see section 8.
For information on disposal, see section 13

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling according to the Laboratories Directives (TRGS 526)

Do not leave bottles open.

General hygiene:

- Do not eat, drink or smoke in areas where work is done.
- Wash your hands thoroughly after using the substance.
- Ensure good ventilation/extraction at the workplace.

Fire and explosion protection measures

Have breathing apparatus equipment available on site.

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions

Do not refill inks. Keep in original container only.

Keep containers tightly closed.

Store at room temperature.

Keep in a dry place.

Protect from overheating/warming.

Store separate from food.

Requirements in storage rooms and containers

Storage class 6.1C (flammable, acutely toxic cat. 3 / hazardous substances with toxic or chronic effects)

Only substances of the same storage class should be stored together.

Storage of the substance or mixture together or jointly with the following substances is prohibited:

- pharmaceuticals, food or forage, including their additives;
- infectious, radioactive and explosive substances;
- gases;
- other explosive substances of storage class 4.1A;
- heavily oxidising substances of storage class 5.1A;
- ammonium nitrate and preparations containing ammonium nitrate;
- organic peroxides and self-reactive substances.

Storing of the substance or mixture together or jointly with the following substances is permitted under certain conditions only (for details, refer to TRGS 510):

- pyrophoric substances;
- substances which release flammable gases when in contact with water;
- oxidising substances of storage class 5.1B.

The substance should not be stored together or jointly with substances with which hazardous chemical reactions are possible.

Storage together with the test inks 30–56mN/m and 73-105 mN/m is possible without any restrictions.

Storage class: 6.1C

Classification according to the German Health and Safety at Work Regulations (BetrSichV)

Combustible

7.3 Specific end uses

Industry- and sector-specific guidelines

Please refer to our Technical Data Sheet for additional information.

Replacement product with smaller health hazards: Diener non-toxic / coloured test inks

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Section 8: Limiting and monitoring exposure / personal protective equipment

8.1 Parameters to be monitored

Limit values for exposure at the workplace and/or biological limit values

Relevant DNEL/DMEL/PNEC and other threshold values

relevant for human health (DNEL)

Formamide; CAS: 75-112-7

DNEL (oral, chronic): Not determined

DNEL (by skin, chronic) 952 µg/kg

DNEL (by inhalation, chronic) 6.6 mg/m³

Values relevant for the environment: (PNEC)

Formamide; CAS: 75-12-7

End point	Threshold value	Environmental compartment	Duration of exposure
PNEC	0.5 mg/l	Sweet water	Short-term (single exposure)
PNEC	0.5 mg/l	Sea water	Short-term (single exposure)
PNEC	100 mg/l	Sewage plant	Short-term (single exposure)
PNEC	1.26 mg/kg	Sweet water sediment	Short-term (single exposure)
PNEC	151 µg/kg	Ground	Short-term (single exposure)
PNEC	5 mg/l	Water	Continuously

8.2 Limiting and monitoring exposure

Suitable technical control equipment

The usual precautions when handling chemical agents must be applied. Wash your hands before breaks and at the end of work. Do not eat, drink or smoke at the workplace.

Pregnant women should absolutely avoid any inhalation and skin contact.

Keep away from food, drink and forage.

Immediately take off all contaminated, soaked clothing.

Store the protective clothing separately.

Avoid contact with eyes and skin

Individual protective measures – personal protective equipment

The design of personal protective equipment must be selected depending on the concentration and quantity of hazardous substances specific to the respective workplace. The chemical resistance of the protective equipment should be clarified with the suppliers.

Eye / face protection

Wear protective glasses. To protect your eyes, use only eyewear tested and approved according to official standards, such as NIOSH (US) or EN 166 (EU).

Skin protection

Wear gloves for work. Check the gloves for intactness before putting them on.

Remove them without touching the outside

surface of the gloves to avoid skin contact with

this product. Dispose of contaminated gloves after use in compliance with

the statutory regulations and good laboratory practice. Wash and dry your hands.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

The selected protective gloves must meet the specifications of the EC Directive 2016/425 and the derived standard EN 374.

Gloves

Glove material

Butyl rubber, strength: 0.7 mm

The selection of a suitable glove not only depends on the material but also on additional quality features which are different for each manufacturer.

Permeation time of the glove material

Permeation value: Level ≥ 6 (>480min)

The exact penetration time must be obtained from the protective glove manufacturer and must be observed.

Other skin protection

Impermeable protective clothing. The type of protective equipment must be selected in keeping with the concentration and quantity of the hazardous substance at the respective workplace.

Breathing protection

Breathing protection is required in case of: formation of aerosol or mist. Type: A (against organic gases and vapours with boiling point > 65 °C, code colour: brown).

The wearing time limits according to GefStoffV in connection with the Regulations for the Use of Respiratory Protective Equipment (BGR 190) must be observed.

Limiting and monitoring environmental exposure

Prevent release into the sewers or to the surface and ground water.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Optical appearance

- Aggregate state: Liquid
- Colour: transparent

Odour : neutral

Odour threshold: Not determined

pH value :

Ink 58	8.0 – 8.5
Ink 60	7.0 – 7.5
Ink 62	7
Ink 64	6.5
Ink 66	6.5
Ink 68	6.5
Ink 70	6.5

Melting point / freezing point: Not determined

Initial boiling point and boiling range:

Ink 58	218.3 °C
Ink 60 - 70	>190 °C

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Flash point: Ink 58 - 70	>60 °C
Evaporation rate:	Not determined
Flammability (solid, gaseous):	Not applicable
Upper/lower flammability or explosion limits:	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined
Relative density:	
Ink 58	1.14
Ink 60	1.118
Ink 62	1.098
Ink 64	1.094
Ink 66	1.07
Ink 68	1.024
Ink 70	1.017
Solubility:	Soluble in water
Distribution coefficient: n-Octanol/water :	
CAS: 75-12-7	-0.82 (25 °C) log KOW (ECHA)
Spontaneous ignition temperature:	Not applicable
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not determined

9.2 Other data

Surface tension 58 - 70 mN/m at 20 °C

Section 10: Stability and reactivity

10.1 Reactivity

-

Chemical stability

10.2 Under normal environmental conditions and the temperature and pressure conditions to be expected during storage and handling, the material is stable.

10.3 Risk of hazardous reactions

Exothermic reaction with: alkalis, oxidation agents
Risk of explosion: phosphoroxide, hydrogen peroxide

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

10.4 Conditions to be avoided

Heat, flames, sparks and hot surfaces. Temperatures above 140 °C

10.5 Incompatible materials

Strong oxidizing agents, strong acids, aluminium, light metals and copper

10.6 Hazardous decomposition products

Hazardous combustion products: see sections 5.

Section 11: Toxicology

11.1 Information on toxicological effects

Acute toxicity

Formamide; CAS: 75-112-7

LD50 (oral, rat): 5,325 mg/kg (published value ECHA source 1)

ATE_{mix} LD50 oral

Ink 58	5,325mg/kg
Ink 60	6,656mg/kg
Ink 62	8,320mg/kg
Ink 64	11,576mg/kg
Ink 66	21,300mg/kg
Ink 68	32,078mg/kg
Ink 70	53,250mg/kg

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Formamide; CAS: 75-112-7

LD50 (by skin, rabbit): 17,000 mg/kg (published value, source 3)

ATE_{mix} LD50 by skin

Ink 58	17,000mg/kg
Ink 60	21,250mg/kg
Ink 62	26,563mg/kg
Ink 64	36,957mg/kg
Ink 66	68,000mg/kg
Ink 68	102,410mg/kg
Ink 70	170,000mg/kg

Formamide; CAS: 75-112-7

LC50 (by inhalation, vapour, rat, 4h): 21 mg/kg /l (published value ECHA source 1)

ATE_{mix} LC50 by inhalation, vapours

Ink 58	21 mg/l
Ink 60	26 mg/l
Ink 62	33 mg/l
Ink 64	46 mg/l
Ink 66	84 mg/l
Ink 68	127 mg/l
Ink 70	210 mg/l

Burning/irritating effect on the skin

The mixture has not been classified. Minor irritation is possible.
Hazard of resorption by skin

Severe eye damage/irritation

The mixture has not been classified. Minor irritation is possible.

Sensitising of the respiratory tract/skin

The mixture has not been classified. The mixture does not contain any substances classified as sensitising.

Germ cell mutagenicity

The mixture has not been classified. The mixture does not contain any substances classified as mutagenic.

Carcinogenicity

Suspected of causing cancer. The inks contain a component classified as category 2 (suspected of causing cancer), which is present in a concentration of more than 1%.

Toxicity to reproduction

May impair fertility.
May cause harm to the unborn child.

Specific target organ systemic toxicity with single exposure

The mixture has not been classified. The mixture contains no substances classified as specifically target organ systemic toxic with single exposure.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Specific target organ systemic toxicity with multiple exposure

May cause damage to organs through prolonged or repeated exposure.

The inks contain a component classified as category 2, which is present in a concentration of more than 10%.

Aspiration hazard

The mixture has not been classified. The mixture does not contain any substances classified as hazardous on aspiration.

Symptoms and effects (delayed and chronic) with information about type of exposure

After inhalation of large amounts

Vertigo

Headache

Unconsciousness

After swallowing of large amounts

Nausea

Vomiting

After resorption of large amounts

Loss of consciousness

Liver and kidney damage Loss of postural reflexes and ataxia (lack of voluntary coordination of muscle movements).

Section 12: Ecological information

12.1 Toxicity

Formamide; CAS: 75- 12- 7 (published value ECHA source 1)

Toxicity to fish (LC50, 96h): 6,569 g/l

Toxicity to daphnia (EC50, 48h): 500 mg/l

Toxicity to algae (NOEC, 72h): 125 mg/l

Toxicity to micro-organisms (EC50, 30min): 1 g/l

12.2 Persistence and degradability

Biological degradability: 90-100 % / 28d (OECD 301E)

Readily biodegradable

12.3 Bioaccumulative potential

Due to the n-Octanol/water partition coefficient, accumulation in organisms is not to be expected.

12.4 Mobility in the soil

Formamide; CAS: 75-12-7

The adsorption coefficient standardised for organic carbon 0.177

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable

12.6 Other adverse effects

No other relevant information available.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Section 13: Disposal considerations

13.1 Waste treatment methods

Treatment of contaminated packages

Have residual volumes and non-reusable solutions disposed of by a recognized disposal company. Dispose of the content/container in keeping with the local/regional/national/international waste disposal regulations.

Waste code according to List of Wastes Regulation (LoW)

070104* (other organic solvents, washing liquids & mother liquors)

Non-cleaned packaging

Non-dried out packaging containing residues must be disposed of as containers containing hazardous residues. 150110 (Packages contaminated with hazardous substances or containing residues thereof)

Cleaned packaging

Non-contaminated, clean packaging can be recycled. Glass waste. Recommended cleaning agent: water

Special precautions

The product and its container must be disposed of as hazardous waste.

Appropriate EU or other regulations

The allocation of a waste code number in accordance with the European Waste Catalogue (AVV) is to be carried out in consultation with the regional waste disposal company.

Section 14: Transport information (source 4)

14.1 UN number

UN 2810

14.2 UN proper shipping name

ADR/RID

TOXIC ORGANIC LIQUID, N.O.S (ETHYLENE GLYCOLMONOETHYLETHER UN1171, FORMAMIDE, UN-)

IMDG Code / ICAO-TI / IATA-DGR

TOXIC LIQUID, ORGANIC, N.O.S.

14.3 Transport hazard classes

6.1 (Toxic organic liquid)

14.4 Packing group

III

14.5 Environmental hazards

Identification of environmentally hazardous substances

ADR/RID / IMDG code / ICAO-TI / IATA-DGR: yes / no

Marine Pollutant: yes / no

14.6 Special precautions for user

See sections 6-8

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

14.7 Transport in bulk according to Appendix II of the MARPOL Convention and the IBC Code

Contamination category (X, Y or Z): Not specified

Vessel type (1, 2 or 3): Not specified

Section 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 (Substances that deplete the ozone layer):

Not listed.

Regulation (EC) No. 850/2004 (Persistent hazardous substances, organic):

Not listed.

Regulation (EC) No. 689/2008 (Import and export of hazardous chemicals):

Not listed.

Regulation (EC) No. 648/2004 (Regulation of detergents):

Not listed.

Restrictions according to Title VIII of Regulation (EC) No. 1907/2006:

Not applicable.

National laws (Germany)

Water hazard class

WGK 1 (self-assessed): slightly hazardous to water.

Formamide; CAS: 75-12-7: WGK 1

ID number 1509 Classification acc. to AwSV, Enclosure 1 (4)

Solvents Regulation (31. BImSchV)

VOC ratio: 100% (formamide; CAS: 75-12-7)

Hazardous Incident Ordinance (12. BImSchV)

Enclosure I, no. 6

Storage class pursuant to TRGS 510:

6.1 Flammability liquids

Other relevant regulations

Substances of very high concern (SVHC)

Substance name	CAS no.	Wght-%	Listed in	Notes
Formamide	75-12-7	0-50	Candidate list	Repr. A57c
2-Ethoxy-ethanol	110-80-5	50-100		

Legend

Candidate list Substances meeting the criteria of Article 57 and eligible for inclusion in Annex XIV

Repr. A57c Teratogenic (Article 57c)

15.2 Chemical safety assessment

No chemical safety assessment was carried out on the mixture.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Section 16: Other data

Revisions compared to last version

No revisions made.

Literature references and sources for data

Regulations

REACH Directive (EC) No. 1907/2006, last modified by Regulation (EU) 2017/1000

CLP Directive (EC) No. 1272/2008, last modified by Regulation (EU) 2017/776

Source 1 <https://echa.europa.eu/de/legislation-obligation/-/obligations/100.028.902>

Source 2 <https://echa.europa.eu/de/brief-profile/-/briefprofile/100.003.459>

Source 3 Toxicological Data, compiled by the National Institute of Health (NIH), USA, selected and distributed by Technical Database Services (TDS), New York, 2009

Source 4 <https://adrdangerousgoods.com/ger/substances/0002020/un2810-giftiger-organischer-flussiger-stoff-n-a-g/>

Internet

GESTIS-Stoffdatenbank (dguv.de)

www.baua.de

www.gischem.de

www.echa.europa.eu/en/candidate-list-table

Methods pursuant to Article 9 of Regulation (EC) No. 1272/2008 for evaluation of the information used for classification purposes

Physical hazards: Evaluation of test data (flash point, boiling point, pH value)

Health and environmental hazards: Mathematical method

Wording of the hazard statements and/or safety statements referred to in Sections 2 to 15

H360FD	May impair fertility. May cause harm to the unborn child
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+ P233	Store in a well-ventilated place. Keep container tightly closed.
Repr. 1B	Toxicity to reproduction, category 1B
STOT RE 2	Specific target organ systemic toxicity (repeated exposure), category 2
Carc. 2	Carcinogenicity, category 2

Training for employees

Working with this hazardous substance does not require any mandatory training.

Please contact Diener electronic for information on proper handling of these test inks.

Safety Data Sheet pursuant to Directive (EC) No. 1907/2006

Prepared on: 2021-07-05

Revised on: 2021-07-05

Valid from: 03/2021

Version: 1

Replaces version: -

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AwSV	German Ordinance on Installations for the Handling of Substances Hazardous to Water
BImSchV	German Air Pollution Control Act
CAS	Chemical Abstracts Service
DIN	Standard of the Deutsches Institut für Normung
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization-Technical Instructions
IMDG-Code	International Maritime Code for Dangerous Goods
ISO	Standard of the International Standards Organization
IUCLID	International Uniform Chemical Information Database
LC	Lethal Concentration
LD	Lethal Dose
log Kow	octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, bio-accumulative, toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TRGS	Technical Regulations for Hazardous Substances
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bio-accumulative
VwVwS	German Administrative Regulation Regarding Water Pollutants
WGK	German Water Hazard Class

Additional information

Disclaimer

To our best knowledge, the specifications in this Safety Data Sheet correspond to the state of know-how at the time of printing. The information is intended to provide guidance on the safe handling of the product specified in this Safety Data Sheet during storage, processing, transport and disposal. The information cannot be applied to other products. Insofar as the product is mixed, blended or processed with other materials or subjected to treatment, the information in this Safety Data Sheet cannot be transferred to the new material thus produced, unless expressly stated otherwise herein