



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 16/04/2015 Revision date: 06/03/2024 Supersedes version of: 07/04/2021 Version: 13.0

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

1.1. Product identifier

1.1. Product identilier			
Product form	: Substance		
Substance name	: DIPHENYL		
Chemical name	: biphenyl; diphenyl		
EC Index-No.	: 601-042-00-8		
EC-No.	: 202-163-5		
CAS-No.	: 92-52-4		
Product code	: B2039		
Product group	: End product		
Other means of identification	: Biphenyl		
1.2. Relevant identified uses of the	e substance or mixture and uses advised against		
1.2.1. Relevant identified uses			
Main use category	: Professional use		
Use of the substance/mixture	: Laboratory chemicals		
Function or use category	: Laboratory chemicals		
1.2.2. Uses advised against			
No additional information available			
1.3. Details of the supplier of the s	safety data sheet		
Elemental Microanalysis Ltd			
1 Hameldown Road			
Okehampton, Devon, EX20 1UB			
GB United Kingdom			
T +44 1837 54446			
enquiries@microanalysis.co.uk, https://www.elementalmicroanalysis.com/			
1.4. Emergency telephone numbe	ır		
Emergency number	: +44 (0) 7990 767375		
SECTION 2: Hazards identif	ication		
2.1 Classification of the substance	e or mixture		

2.1.	Classification	of	the	substance of	or	mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Respiratory	H335
tract irritation	
Skin corrosion/irritation, Category 2	H315
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



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Signal word (CLP) Hazard statements (CLP)	 Warning H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H315 - Causes skin irritation.
Precautionary statements (CLP)	H410 - Very toxic to aquatic life with long lasting effects.P261 - Avoid breathing dust, fume.
	P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves. P312 - Call a POISON CENTER, doctor if you feel unwell.
	P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances		
Substance type	: Mono-constituent	
Name	: DIPHENYL	
CAS-No.	: 92-52-4	
EC-No.	: 202-163-5	
EC Index-No.	: 601-042-00-8	

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
BIPHENYL	CAS-No.: 92-52-4 EC-No.: 202-163-5 EC Index-No.: 601-042-00-8	100	Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

3.2. Mixtures

Not applicable

SECTION 4: First aid measur	res
4.1. Description of first aid measure	es
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.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
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 inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.

Treat symptomatically.

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SECTION 5: Firefighting measure	S	
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam.	
5.2. Special hazards arising from the sub	stance or mixture	
Hazardous decomposition products in case of fire : Toxic fumes may be released.		
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental re	elease measures
6.1. Personal precautions, prot	tective equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2. 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".
6.2. Environmental precautions	5
Avoid release to the environment.	
6.3. Methods and material for o	containment and cleaning up
For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other section	IS

For further information refer to section 13.

7.1. Precautions for safe handling	g
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.
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 locked up. Store in a well-ventilated place. Keep container tightly closed. Keep coo
7.3. Specific end use(s)	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

DIPHENYL (92-52-4)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	63 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	11.17 mg/m ³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	1.9 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	3.3 mg/m ³		
Long-term - systemic effects, dermal	38 mg/kg bodyweight/day		
PNEC (Water)			
PNEC aqua (freshwater)	0.017 mg/l		
PNEC aqua (marine water)	0.0017 mg/l		
PNEC aqua (intermittent, freshwater)	0.17 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	2.69 mg/kg dwt		
PNEC sediment (marine water)	0.269 mg/kg dwt		
PNEC (Soil)			
PNEC soil	0.528 mg/kg dwt		
PNEC (Oral)			
PNEC oral (secondary poisoning)	16.7 mg/kg food		
PNEC (STP)			
PNEC sewage treatment plant	10 mg/l		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

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8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Pale yellow.
Molecular mass	: 154.2 g/mol Source: HSDB
Odour	: Characteristic odour.
Odour threshold	: Not available
Melting point	: 69.45001 °C Decomposition: 'no'
Freezing point	: Not applicable
Boiling point	: 255.25 °C Atm. press.: 760 mm Hg Decomposition: 'no'
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: -5.8 – 0.6 % Source: IPCS
Flash point	: 235 °F Source: NIOSH
Auto-ignition temperature	: 570 °C Source: ECHA
Decomposition temperature	: Not available
рН	: 5.5
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: 7.5 mg/l at 25°C Source: ECHA
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 4.1 Source: ECHA
Vapour pressure	: 0.00119 kPa Temp.: 25 °C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.18 Source: ECHA
Relative vapour density at 20°C	: 5.3 Source: HSDB
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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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).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified 	
DIPHENYL (92-52-4)		
LD50 oral rat	3150 mg/kg Source: ECHA, HSDB	
LD50 dermal	5010 mg/kg	
BIPHENYL (92-52-4)		
LD50 oral rat	3150 mg/kg Source: ECHA, HSDB	
Skin corrosion/irritation	: Causes skin irritation. pH: 5.5	
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5.5	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
DIPHENYL (92-52-4)		
NOAEL (animal/male, F0/P)	100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)	
BIPHENYL (92-52-4)		
NOAEL (animal/male, F0/P)	100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)	
STOT-single exposure	May cause respiratory irritation.	
BIPHENYL (92-52-4)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

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DIPHENYL (92-52-4)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity	
Ecology - general : Hazardous to the aquatic environment, short-term : (acute)	Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
DIPHENYL (92-52-4)	
LC50 - Fish [1]	3 mg/l Test organisms (species): Pimephales promelas
EC50 96h - Algae [1]	1.772 mg/l Test organisms (species): other:
LOEC (chronic)	0.33 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.229 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '87 d'
BIPHENYL (92-52-4)	
LC50 - Fish [1]	3 mg/l Test organisms (species): Pimephales promelas
EC50 96h - Algae [1]	1.772 mg/l Test organisms (species): other:
LOEC (chronic)	0.33 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

0.229 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo

12.2. Persistence and degradability

No additional information available

NOEC chronic fish

12.3. Bioaccumulative potential

DIPHENYL (92-52-4)		
Partition coefficient n-octanol/water (Log Pow) 4.1 Source: ECHA		
BIPHENYL (92-52-4)		
Partition coefficient n-octanol/water (Log Pow) 4.1 Source: ECHA		
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		

gairdneri) Duration: '87 d'

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12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
HP Code	 HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin
	irritation or damage to the eye.
	LID44 "Excelsion" which we can be an experience of the second later of the second state of the second stat

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applied : 375
or having a net mass per sin		ackagings containing a net qu or less for solids, are not subj and 4.1.1.4 to 4.1.1.8.		
14.1. UN number or ID n	umber			
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shippin	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL)	Environmentally hazardous substance, solid, n.o.s. (BIPHENYL)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL)
Transport document descr	iption			
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (BIPHENYL), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BIPHENYL), 9, III
14.3. Transport hazard o	class(es)			
9	9	9	9	9
14.4. Packing group				
III	III	III	III	III
14.5. Environmental haz	zards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

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ADR IMDG	ΙΑΤΑ	ADN	RID
No supplementary information available			
4.6. Special precautions for user			
Overland transport			
Classification code (ADR)	: M7		
Special provisions (ADR)	: 274, 335, 375, 601		
imited quantities (ADR)	: 5kg		
xcepted quantities (ADR)	: E1		
acking instructions (ADR)	: P002, IBC08, LP02, R001		
pecial packing provisions (ADR)	: PP12, B3		
lixed packing provisions (ADR)	: MP10		
ortable tank and bulk container instructions (ADR)	: T1, BK1, BK2, BK3		
ortable tank and bulk container special provisions	: TP33		
ADR)			
ank code (ADR)	: SGAV, LGBV		
ehicle for tank carriage	: AT		
ransport category (ADR)	: 3		
pecial provisions for carriage - Packages (ADR)	: V13		
pecial provisions for carriage - Bulk (ADR)	: VC1, VC2		
Special provisions for carriage - Loading, unloading			
nd handling (ADR)			
azard identification number (Kemler No.)	: 90		
Drange plates			
	<u>90</u> 3077		
unnel restriction code (ADR)	: -		
AC code	: 2Z		
ransport by sea			
Special provisions (IMDG)	: 274, 335, 966, 967, 969		
imited quantities (IMDG)	: 5 kg		
excepted quantities (IMDG)	: E1		
Packing instructions (IMDG)	: LP02, P002		
pecial packing provisions (IMDG)	: PP12		
3C packing instructions (IMDG)	: IBC08		
3C special provisions (IMDG)	: B3		
ank instructions (IMDG)	: BK1, BK2, BK3, T1		
ank special provisions (IMDG)	: TP33		
mS-No. (Fire)	: F-A		
mS-No. (Spillage)	: S-F		
Stowage category (IMDG)	: A		
towage and handling (IMDG)	: SW23		
ir transport			
CA Excepted quantities (IATA)	: E1		
CA Limited quantities (IATA)	: Y956		
CA limited quantity max net quantity (IATA)	: 30kgG		
CA packing instructions (IATA)	: 956		
CA max net quantity (IATA)	: 400kg		
AO packing instructions (IATA)	: 956		
AO max net quantity (IATA)	: 400kg		
pecial provisions (IATA)	: A97, A158, A179, A197, A215		
RG code (IATA)	: 9L		
nland waterway transport			
Classification code (ADN)	: M7		
pecial provisions (ADN)	: 274, 335, 375, 601		

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Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A***
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of
	transport in bulk.
Rail transport	
Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions	: TP33
(RID)	
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading	: CW13, CW31
and handling (RID)	
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

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)

15.1.2. National regulations

No additional information available

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

Abbreviations and acronyms: ADN European Agreement concerning the International Carriage of Dangerous Goods by Noad ATE European Agreement concerning the International Carriage of Dangerous Goods by Noad ATE Acute Toxichy Estimate BCF Bioconcentration factor BLV Biological limit value BDD Biochemical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL Derived Minimal Effect level EC-No. European Conmunity number EC-No. European Standard International Agency for Research on Cancer International Agency for Research on Cancer IARC International Martime Dangerous Goods LOS4 Lowest Observed Adverse Effect Level LOS4 Lowest Observed Adverse Effect Concentration NOAEC No-Observed Adverse Effect Concentration NOAEC No-Observed Adverse Effect Concentration NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOAEC No-Observed Adverse Effect Concentration NOAEC No-Observed Adverse Effect Concentration	SECTION 16: Other information		
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road ATE Acute Toxicity Estimate BCF Bioconcentration factor BLV Biological limit value BOD Biochamical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL Derived Minimal Effect level EC-No. European Community number EC50 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Agency for Research on Cancer IATA International Maritime Dangerous Goods LOSO Median lethal concentration ID50 Median lethal concentration NAEL No-Observed Adverse Effect Level NOAEL No-Observed Adverse Effect Level NOAEL No-Observed Effect Concentration NOAEL No-Observed Adverse Effect Level NOAEL No-Observed Effect Concentration NOAEL No-Observed Adverse Effect Level NOAEL No-Observed Effect Concentration RID	Abbreviations and ac	ronyms:	
ATEAcute Toxicity EstimateBCFBioconcentration factorBLVBiological limit valueBDDBiochemical oxygen demand (BDD)CODChemical oxygen demand (CDD)DMELDerived Minimal Effect levelDNELDerived-No Effect LevelEC-No.European Community numberEC50Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Agency for Research on CancerIATAInternational Arransport AssociationIMDGInternational Arransport AssociationINDGInternational Martine Dangerous GoodsLOS0Median lethal concentrationLDS0Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed ElmitPBTPersistent Bioocumulative ToxicPNECPredicted No-Effect ConcentrationOELOccupational Exposure LimitPBTPersistent Bioacumulative ToxicPNECPredicted No-Effect ConcentrationSDSSalety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCValalle Organic CompoundsCAS-No.Chemical Abstract Service numberNO.	ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
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 ECS0 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Air Transport Association IMDS International Air Transport Association IDS0 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Effect Concentration NOAEC No-Observed Effect Level NOCC Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Perelected No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STF Sewage tre	ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
BI Biological limit value BOD Biochemical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL Derived Minimal Effect level EC-No. European Community number ECS0 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Agency for Research on Cancer IATA International Maritime Dangerous Goods LCS0 Median lefhal dose LOAEL Lowest Observed Adverse Effect Level NAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Level NOEC No-Observed Adverse Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Perelicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet	ATE	Acute Toxicity Estimate	
BOD Biochemical oxygen demand (BOD) COD Chemical oxygen demand (BOD) DMEL Derived Minimal Effect level DNFL Derived-No Effect Level EC-No. European Community number ECS0 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IARA International Maritime Dangerous Goods LOS0 Median lethal concentration LDS0 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOAEL No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEC No-Observed Effect Concentration OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration SIS<	BCF	Bioconcentration factor	
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VOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service numberN.O.S.Not Otherwise SpecifiedvPvBVery Persistent and Very Bioaccumulative	ThOD	Theoretical oxygen demand (ThOD)	
CAS-No. Chemical Abstract Service number N.O.S. Not Otherwise Specified vPvB Very Persistent and Very Bioaccumulative	TLM	Median Tolerance Limit	
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vPvB Very Persistent and Very Bioaccumulative	CAS-No.	Chemical Abstract Service number	
	N.O.S.	Not Otherwise Specified	
ED Endocrine disruptor	vPvB	Very Persistent and Very Bioaccumulative	
	ED	Endocrine disruptor	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

The classification complies with

: ATP 12

Safety Data Sheet (SDS)_EMAL, EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.