Toluene

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

1.1 Product identifier

Product name:	Toluene
CAS Number:	108-88-3
EC Number:	203-625-9

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

Identified use:	Identified use: See table in front of appendix for a complete overview of identified uses.

1.3 Details of the supplier of the safety data sheet

Company name:	East Harbour Group Ltd 20 Clough Road, Severalls Industrial Park Colchester, Essex, CO4 9QS United Kingdom
Telephone:	+44 (0) 333 242 0100
Email:	info@eastharbourgroup.com

1.4 Emergency telephone number

Emergency telephone:	0800 246 1274

Section 2: Hazardous identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	**Hazard category**	**Target Organs**	**Hazard statements**
Flammable liquids	Category 2	-	H225
Reproductive toxicity	Category 2	-	H361d
Specific target organ toxicity - repeated exposure	Category 2	-	H373
Aspiration hazard	Category 1	-	H304
Skin corrosion/irritation	Category 2	-	H315
Specific target organ toxicity - single exposure	Category 3	-	H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

Toluene

Most important adverse effects

Human Health	See section 11 for toxicological information. No further information available.
Physical and chemical hazards	See section 9/10 for physicochemical information., No further information available.
Potential environmental effects	See section 12 for environmental information. No further information available.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram

Signal word	Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P310 + P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P352	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Storage

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

Hazardous components which must be listed on the label

Toluene

Toluene

2.3. Other hazards
For Results of PBT and vPvB assessment see section 12.5.
No other information is available.

Section 3: Composition/information on ingredients

3.1. Substances

		Classification (REGULATION (EC) No 1272/2008)	
Hazardous components	**Amount [%]**	**Hazard class / Hazard category**	**Hazard statements**
toluene			
Index-No.: 601-021-00-3 CAS-No.: 108-88-3 EC-No.: 203-625-9 EU REACH Reg. No.: 01-2119471310-51-xxxx	<= 100	Flam. Liq.2 Repr.2 Asp. Tox.1 Skin Irrit.2 STOT RE2 STOT SE3	H225 H361d H304 H315 H373 H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First aid measures

4.1 Description of first aid measures
General advice
First aider needs to protect himself. Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Take off all contaminated clothing immediately.

If inhaled
Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Oxygen, if needed. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus. Call a physician immediately.

In case of skin contact
Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

In case of eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Consult an eye specialist immediately.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms
Inhalation can cause CNS-depression and narcosis. Inhalation may provoke the following symptoms: Irregular cardiac activity

Effects
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment
Treat symptomatically. Symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. No further information available.

Section 5: Fire-fighting measures

5.1 Fire Fighting Media and Instructions:
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media
High volume water jet

5.2. Special hazards arising from the substance or mixture
Specific hazards during firefighting
Highly flammable, Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Flash back possible over considerable distance.

Hazardous combustion products
Carbon monoxide, Carbon dioxide (CO2), Irritant gases/vapours

5.3. Advice for firefighters
Special protective equipment for firefighters
In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further advice
Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Toluene

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions
Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray. Wear respiratory protection.

6.2. Environmental precautions
Environmental precautions
Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up
Methods and materials for containment and cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections
See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

Section 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Keep container tightly closed. Use personal protective equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures
Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers
Keep in an area equipped with solvent resistant flooring. Store in original container.

Advice on protection against fire and explosion

Toluene

Combustible Liquids. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. Use. Only in an area containing explosion proof equipment.

Further information on storage conditions
Keep tightly closed in a dry and cool place. Keep in a well-ventilated place. Keep away from direct sunlight.

Advice on common storage
Keep away from combustible material. Incompatible with strong acids and oxidizing agents. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)
Specific use(s)
Identified use: See table in front of appendix for a complete overview of identified uses.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Component	**toluene**	**CAS-No. 108-88-3**
Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)		
DNEL		
Workers, Long-term - systemic effects, Inhalation	192 mg/m3	
DNEL		
Workers, Long-term - local effects, Inhalation	192 mg/m3	
DNEL		
Workers, Acute - systemic effects, Inhalation	384 mg/m3	
DNEL		
Workers, Acute - local effects, Inhalation	384 mg/m3	
DNEL		
Workers, Long-term - systemic effects, Skin contact	384 mg/kg bw/day	
DNEL		
Consumers, Long-term - systemic effects, Inhalation	56.5 mg/m3	
Consumers, Long-term - local effects, Inhalation	56.5 mg/m3	
Consumers, Acute - systemic effects, Inhalation	226 mg/m3	
Consumers, Acute - local effects, Inhalation	226 mg/m3	
Consumers, Long-term - systemic effects, Skin contact	226 mg/kg bw/day	
Consumers, Long-term - systemic effects, Ingestion	8.13 mg/kg bw/day	
Predicted No Effect Concentration (PNEC)		
Fresh water (AF = 1), extrapolated	0.68 mg/l	
Marine water (AF = 1), extrapolated	0.68 mg/l	
Intermittent releases (AF = 1), extrapolated	0.68 mg/l	
Sewage treatment plant (STP) (AF = 1), extrapolated	13.61 mg/l	
Fresh water sediment Partition coefficient	16.39 mg/kg dry weight (d.w.)	

Toluene

Marine sediment	16.39 mg/kg dry weight (d.w.)
Soil	2.89 mg/kg dry weight (d.w.)
Partition coefficient	

Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), as amended, Time Weighted Average (TWA): 50 ppm, 191 mg/m3
UK. EH40 Workplace Exposure Limits (WELs), as amended, Short Term Exposure Limit (STEL): 100 ppm, 384 mg/m3
UK. EH40 Workplace Exposure Limits (WELs), as amended, Skin designation: Can be absorbed through the skin.
EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA): 50 ppm, 192 mg/m3 Indicative
EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL): 100 ppm, 384 mg/m3 Indicative
ELV (IE), Skin designation: Can be absorbed through the skin.
ELV (IE), Time Weighted Average (TWA): 50 ppm, 192 mg/m3 Indicative OELV
ELV (IE), Short Term Exposure Limit (STEL): 100 ppm, 384 mg/m3, (15 minutes) Indicative OELV

8.2. Exposure controls

Appropriate engineering controls

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection

Advice

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air. Respiratory protection complying with EN 141. Recommended Filter type: A In case of intensive or longer exposure use self-contained breathing apparatus.

Hand protection

Advice

Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Material	fluorocarbon rubber
Break through time	>= 8 h
Glove thickness	0.4 mm

Eye protection

Advice	Safety goggles

Toluene

Skin and body protection
Advice
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Wear appropriate chemical resistant clothing and boots.

Environmental exposure controls
General advice
Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	aromatic
Odour Threshold	1.74 ppm
pH	Not applicable
Melting point/range	-95 °C
Boiling point/boiling range	110 - 111 °C
Flash point	4 °C
Evaporation rate	no data available
Flammability (solid, gas)	Highly flammable.
Upper explosion limit	7.1 %(V)
Lower explosion limit	1.2 %(V)
Vapour pressure	30 - 35 hPa (20 °C)
Relative vapour density	3.1
Density	0.871 g/cm3 (15 °C)
Water solubility	0.5 g/l (15 °C)
Partition coefficient: n-octanol/water	log Kow 2.65 (measured)
Auto-ignition temperature	480 - 536 °C
Thermal decomposition	no data available
Viscosity, dynamic	0.6 mPa.s (20 °C)
Viscosity, kinematic	0.63 mm2/s (25 °C)
Explosivity	Formation of explosive air/vapour mixtures is possible.
Oxidizing properties	not oxidising

9.2. Other information

Molecular weight	92.14 g/mol

Section 10: Stability and Reactivity

Toluene

10.1. Reactivity

Advice No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions Materials to avoid Strong acids Oxidizing agents Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.Keep away from direct sunlight.

Thermal decomposition no data available

10.5. Incompatible materials

Materials to avoid Strong oxidizing agents, Strong acids, Strong bases, Halogenated compounds

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides

Section 11: Toxicological Information

11.1. Information on toxicological effects

Component **toluene** **CAS-No. 108-88-3**

Acute toxicity

Oral

LD50 5580 mg/kg (Rat, male) (OECD Test Guideline 401)

Inhalation

LC50 28.1 mg/l (Rat, male and female; 4 h; vapour) (OECD Test Guideline 403)

LC50 25.7 mg/l (Rat, male; 4 h; vapour) (OECD Test Guideline 403)

LC50 30 mg/l (Rat, female; 4 h; vapour) (OECD Test Guideline 403)

Dermal

LD50 > 5000 mg/kg (Rabbit, male)

Irritation

Skin

Result Irritating to skin. (Rabbit) (OECD Test Guideline 404)

Eyes

Result No eye irritation (Rabbit) (OECD - Guideline 405)

Sensitisation

Toluene

Result	not sensitizing (Maximisation Test; Guinea pig) (OECD Test Guideline 406)

CMR effects

Carcinogenicity

(negative, Rat, Fischer 344/DuCrj, male and female)(Inhalation)(OECD Test Guideline 453)

CMR Properties

Carcinogenicity	Animal testing did not show any carcinogenic effects.
Mutagenicity	In vitro tests did not show mutagenic effects
	In vivo tests did not show mutagenic effects
Teratogenicity	Animal experiments showed teratogenic effects.
	Suspected of damaging the unborn child.
Reproductive toxicity	Animal testing did not show any effects on fertility.

Genotoxicity in vitro

Result	negative (In vitro gene mutation study in mammalian cells; with and without metabolic activation) (OECD Test Guideline 476) negative (In vitro gene mutation study in bacteria; with and without metabolic activation) (OECD Test Guideline 471)

Genotoxicity in vivo

Result	negative (Chromosome aberration test in vivo; Rat) (intraperitoneal)

Specific Target Organ Toxicity

Single exposure

Inhalation	Target Organs: Central nervous system. May cause drowsiness or dizziness.

Repeated exposure

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

Other toxic properties

Repeated dose toxicity

NOAEL	625 mg/kg bw/day
LOAEL	1250 mg/kg bw/day
	(Mouse, B6C3F1, male and female) (Oral)
NOAEL	625 mg/kg bw/day
LOAEL	1250 mg/kg bw/day
	(Rat, Fischer F344, male and female) (Oral)
NOAEC	300 ppm
	(Rat, Fischer F344, male and female) (Inhalation; vapour)
NOAEC	1131 mg/m³
	(Rat, Fischer F344, male and female) (Inhalation; vapour)

Aspiration hazard

May be fatal if swallowed and enters airways.

Toluene

Section 12: Ecological Information

12.1 Toxicity

Component	**toluene**	**CAS-No. 108-88-3**

Acute toxicity

Fish

LC50 5.5 mg/l (Oncorhynchus kisutch (coho salmon); 96 h) (flow-through test)

Toxicity to daphnia and other aquatic invertebrates

LC50 3.78 mg/l (Ceriodaphnia dubia (water flea); 48 h) (US-EPA)

Algae

EC50 134 mg/l (Chlamydomonas angulosa; 3 h)

Bacteria

EC50 84 mg/l (Nitrosomonas sp; 24 h)

12.2. Persistence and degradability

Component	**toluene**	**CAS-No. 108-88-3**

Persistence and degradability

Persistence

Result Oxidises rapidly by photo-chemical reactions in air.

Biodegradability

Result 86 % (Exposure Time: 20 d) Readily biodegradable.

12.3. Bioaccumulative potential

Component	**toluene**	**CAS-No. 108-88-3**

Bioaccumulation

Result log Kow 2.73 (20 °C; pH 7)
BCF: 90; The product has low potential bioaccumulation.

12.4. Mobility in soil

Component	**toluene**	**CAS-No. 108-88-3**

Mobility

Water Floats on water.
Soil Mobile in soils

Surface tension

Result 28.5 mN/m (20 °C)

12.5. Results of PBT and vPvB assessment
Data for the product
Results of PBT and vPvB assessment
Result

Toluene

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

Component **toluene** **CAS-No. 108-88-3**

Results of PBT and vPvB assessment

Result This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

Component **toluene** **CAS-No. 108-88-3**

Biochemical Oxygen Demand (BOD)

Result 2150 mg/l

Chemical Oxygen Demand (COD)

Result 2520 mg/g

Additional ecological information

Result Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

Section 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not empty into drains. Contact waste disposal services.

Contaminated packaging

Empty remaining contents. Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.

European Waste Catalogue Number

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport Information

14.1. UN number

1294

14.2. UN proper shipping name

ADR TOLUENE
RID TOLUENE
IMDG TOLUENE

Toluene

IATA_C	TOLUENE
IATA_P	TOLUENE

14.3. Transport hazard class(es)

ADR-Class
3
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code)
3; F1; 33; (D/E)
RID-Class
3
(Labels; Classification Code; Hazard Identification Number)
3; F1; 33
IMDG-Class
3
(Labels; EmS)
3; F-E, S-D
IATA_C-Class
3
(Labels)
3
IATA_P-Class
3
(Labels)
3

14.4. Packaging group

ADR	II
RID	II
IMDG	II
IATA_C	II
IATA_P	II

14.5. Environmental hazards

Environmentally hazardous according to ADR	no
Environmentally hazardous according to RID	no
Marine Pollutant according to IMDG-Code	no
Environmentally hazardous according to IATA	no
Environmentally hazardous according to IATA	no

14.6. Special precautions for user

Note Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG Not applicable.

Toluene

Section 15: Regulatory Information

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

Data for the product

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)
Not listed
EU. REACH Annex XIV, Substances Subject to Authorization
Not listed

Component **toluene** **CAS-No. 108-88-3**

EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals
The substance/mixture does not fall under this legislation.

EU. Regulation 273/2004, Drug Precursors, Category 3
Scheduled substance Combined Nomenclature (CN) code: 2902 30 00

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)
Point Nos.: 48; Listed
EC Number: 203-625-9

EU. Regulation No. 1223/2009 on cosmetic products, Annex III: List of Restricted Substances in Cosmetic Products
Reference number: 185; Listed

EU. Directive 2012/18/EU (SEVESO III) Annex I
Lower-tier requirements: 5,000 tonnes; Part 1: Categories of dangerous substances; P5c: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b, The information given is valid if the product is stored below the boiling point and at a pressure of 1013 hPa.
Upper-tier requirements: 50,000 tonnes; Part 1: Categories of dangerous substances; P5c: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b, The information given is valid if the product is stored below the boiling point and at a pressure of 1013 hPa.

Notification status

toluene

Regulatory List	Notification	Notification number
AICS	YES	
DCS (JP)	YES	(3)-60
DCS (JP)	YES	(3)-2
DSL	YES	
EINECS	YES	203-625-9
ENCS (JP)	YES	(3)-2
IECSC	YES	
INSQ	YES	
ISHL (JP)	YES	(3)-2

Toluene

ISHL (JP)	YES	2-(8)-869
JEX (JP)	YES	(3)-2
KECI (KR)	YES	97-1-298
KECI (KR)	YES	KE-33936
NZIOC	YES	HSR001227
PICCS (PH)	YES	
TSCA	YES	

15.2. Chemical safety assessment
A Chemical Safety Assessment has been carried out for this substance.

Section 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Abbreviations and Acronyms

BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
PBT	persistent, bioaccumulative and toxic
REACH Auth. No.:	REACH Authorisation Number

Toluene

REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
PNEC	predicted no-effect concentration
STOT	specific target organ toxicity
SVHC	substance of very high concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
vPvB	very persistent and very bioaccumulative

Further information

Key literature references and sources for data

Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for product classification

The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.

Hints for trainings

The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

Other information

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.