

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

TTP Adhesion Promoter (TTP96)

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

Primer/adhesion promoter

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

Tough Technology Products Ltd, 114 Washway Road, Sale,
Cheshire, M33 7RF

Qualified person's e-mail address: sales@ttproducts.com Please DO NOT use for
requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

0044 800 772 0996 (9:00 - 17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Skin Irrit.	2	H315-Causes skin irritation.
Aerosol	1	H222-Extremely flammable aerosol.
Acute Tox.	4	H312+H332-Harmful in contact with skin or if inhaled.
Aerosol	1	H229-Pressurised container: May burst if heated.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H315-Causes skin irritation. H222-Extremely flammable aerosol. H312+H332-Harmful in contact with skin or if inhaled. H229-Pressurised container: May burst if heated.

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P261-Avoid breathing vapours or spray. P280-Wear protective gloves.

P312-Call a POISON CENTER/doctor if you feel unwell.

P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

Without adequate ventilation, formation of explosive mixtures may be possible.

Xylene (mixture of isomers)

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substance

n.a.

3.2 Mixture

Xylene (mixture of isomers)	Substance for which an EU exposure limit value applies.
Registration number (REACH)	--
Index	601-022-00-9
EINECS, ELINCS, NLP	215-535-7
CAS	1330-20-7
content %	60-70
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

Never pour anything into the mouth of an unconscious person!

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂

Extinction powder

Unsuitable extinguishing media

None known

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic gases

Danger of bursting (explosion) when heated

Explosive vapour/air mixture

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping

6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 23.06.2015 / 0004

Replaces revision of / Version: 15.04.2013 / 0003
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TTP Adhesion Promoter

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not store with flammable or self-igniting materials.

Observe special regulations for aerosols!

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").
Store in a well ventilated place.

Keep protected from direct sunlight and temperatures over 50°C.

Store cool

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Xylene (mixture of isomers)		Content %:60-70
WEL-TWA: 50 ppm (220 mg/m ³) (WEL), 50 ppm (221 mg/m ³) (EU)	WEL-STEL: 100 ppm (441 mg/m ³) (WEL), 100 ppm (442 mg/m ³) (EU)	---	
Monitoring procedures:	- Compur - KITA-143 SA (550 325) - Compur - KITA-143 SB (505 998) - Draeger - Xylene 10/a (67 33 161) MTA/MA-030/A92 (Determination of aromatic hydrocarbons (benzene, toluene, ethylbenzene, p-xylene, 1,2,4-trimethylbenzene) in air - Charcoal tube method / Gas chromatography) - 1992 - EU project BC/CEN/ENTR/000/2002-16 card 47-1 (2004)		
BMGV: 650 mmol methyl hippuric acid/mol creatinine in urine, post shift (Xylene, o-, m-, p- or mixed isomers) (BMGV)	Other information: Sk (WEL)		
Chemical Name	Butane		Content %:
WEL-TWA: 600 ppm (1450 mg/m ³)	WEL-STEL: 750 ppm (1810 mg/m ³)	---	
Monitoring procedures:	- Compur - KITA-221 SA (549 459)		
BMGV: ---	Other information: ---		
Chemical Name	Isobutane		Content %:
WEL-TWA: 1000 ppm (ACGIH)	WEL-STEL: ---	---	
Monitoring procedures:	- Compur - KITA-113 SB(C) (549 368)		
BMGV: ---	Other information: ---		

Chemical Name	Propane	Content %:
WEL-TWA: 1000 ppm (ACGIH)	WEL-STEL: ---	---
Monitoring procedures:	- Compur - KITA-125 SA (549 954)	
BMGV: ---	Other information: ---	

Chemical Name	Chlorobenzene	Content %:
WEL-TWA: 1 ppm (4,7 mg/m ³) (WEL), 5 ppm (23 mg/m ³) (EU)	WEL-STEL: 3 ppm (14 mg/m ³) (WEL), 15 ppm (70 mg/m ³) (EU)	---
Monitoring procedures:	- Compur - KITA-178 SB (548 923) - Draeger - Chlorobenzene 5/a (5) (67 28 761) MTA/MA-042/A99 (Determination of chlorinated hydrocarbons II (carbon tetrachloride, chloroform, chlorobenzene) in air - Charcoal tube method / Gas chromatography) - 1999 - EU project BC/CEN/ENTR/000/2002-16 card 18-1 (2004)	
BMGV: ---	Other information: Sk (WEL)	

- WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Xylene (mixture of isomers)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,327	mg/l	
	Environment - sediment, freshwater		PNEC	12,46	mg/kg	
	Environment - soil		PNEC	2,31	mg/kg	
	Environment - marine		PNEC	0,327	mg/l	
	Environment - sediment, marine		PNEC	12,46	mg/kg	
	Environment - sewage treatment plant		PNEC	6,58	mg/l	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	289	mg/m ³	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	289	mg/m ³	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	77	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	180	mg/kg	
Consumer	Human - inhalation	Short term, local effects	DNEL	174	mg/m ³	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	174	mg/m ³	
Consumer	Human - dermal	Long term, systemic effects	DNEL	108 bw/day	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	14,8	mg/m ³	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

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8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

If applicable

Safety gloves made of butyl (EN 374)

Protective Neoprene® / polychloroprene gloves (EN 374).

Protective nitrile gloves (EN 374)

Protective Viton® / fluoroelastomer gloves (EN 374)

Minimum layer thickness in mm:

0,7

Permeation time (penetration time) in minutes:

>480

Protective hand cream recommended.

The recommended maximum wearing time is 50% of breakthrough time.

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:

If OES or MEL is exceeded.

Filter A2 P2 (EN 14387), code colour brown, white

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Aerosol, Substance: Liquid
Colour:	According to specification
Odour:	Solvent
Odour threshold:	Not determined
pH-value:	n.a.
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	n.a.
Flash point:	<0 °C

Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	1,1 Vol-% (Xylene (mixture of isomers))
Upper explosive limit:	7,0 Vol-% (Xylene (mixture of isomers))
Vapour pressure:	Not determined
Vapour density (air = 1):	Vapours heavier than air.
Density:	0,86 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive. Possible build up of explosive/highly flammable vapour/air mixture.
Oxidising properties:	No
9.2 Other information	
Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

TPO Primer						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.

Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

Xylene (mixture of isomers)

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2840	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>1700	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	21,7	mg/l/4h	Rat		Vapours, Does not conform with EU classification.
Skin corrosion/irritation:				Rabbit		Irritant
Serious eye damage/irritation:				Rabbit		Slightly irritant
Respiratory or skin sensitisation:					(Patch-Test)	Negative
Symptoms:						breathing difficulties, drying of the skin., drowsiness, unconsciousness, burning of the membranes of the nose and throat, vomiting, skin affections, heart/circulatory disorders, coughing, headaches, drowsiness, dizziness, nausea

Butane

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						ataxia, breathing difficulties, drowsiness, unconsciousness, frostbite, disturbed heart rhythm, headaches, cramps, intoxication, dizziness, nausea and vomiting.

Isobutane

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		

Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:	n.d.a.						
Other information:	AOX		0,06	%			

Xylene (mixture of isomers)

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	8,2	mg/l	Oncorhynchus mykiss		
Toxicity to fish:	LC50	96h	86	mg/l	Leuciscus idus		
Toxicity to daphnia:	EC50	24h	75,5	mg/l	Daphnia magna		
Toxicity to algae:	IC50	72h	10	mg/l			
Persistence and degradability:							Readily biodegradable
Bioaccumulative potential:	BCF		0,6-15				
Bioaccumulative potential:	Log Pow		>3				

Butane

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Bioaccumulative potential:	Log Pow		2,98				A notable biological accumulation potential is not to be expected (LogPow 1-3).
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Propane

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Bioaccumulative potential:	Log Pow		2,28				A notable biological accumulation potential is not to be expected (LogPow 1-3).
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Chlorobenzene

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	7,4	mg/l	Lepomis macrochirus		
Toxicity to fish:	LC50	96h	7,46	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	EC50	48h	10,7	mg/l	Daphnia magna		
Toxicity to algae:	ErC50	48h	220	mg/l	Pseudokirchneria subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	15	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	
Bioaccumulative potential:	BCF		10-100				(Fish)
Bioaccumulative potential:	Log Pow		2,89				A notable biological accumulation potential is not to be expected (LogPow 1-3).
Mobility in soil:	H (Henry)		0,00345	atm*m3/mol			25°C
Mobility in soil:	Koc		79				

Toxicity to annelids:	LC50	2d	29	mg/cm2	Eisenia foetida		
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

08 01 11 waste paint and varnish containing organic solvents or other hazardous substances

16 05 04 gases in pressure containers (including halons) containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Take full aerosol cans to problem waste collection.

Take emptied aerosol cans to valuable material collection.

For contaminated packing material

Pay attention to local and national official regulations.

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

15 01 04 metallic packaging

SECTION 14: Transport information

General statements

UN number: 1950

Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 1950 AEROSOLS

Transport hazard class(es):

2.1

Packing group:

-

Classification code:

5F

LQ (ADR 2015):

1L

Environmental hazards:

Not applicable

Tunnel restriction code:

D

Transport by sea (IMDG-code)

UN proper shipping name:

AEROSOLS

Transport hazard class(es):

2.1

Packing group:

-

EmS:

F-D, S-U

Marine Pollutant:

n.a

Environmental hazards:

Not applicable

Transport by air (IATA)

UN proper shipping name:

Aerosols, flammable

Transport hazard class(es):

2.1

Packing group:

-

Environmental hazards:

Not applicable

Special precautions for user

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety regulations.

Precautions must be taken to prevent damage.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

Observe youth employment law (German regulation).

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1 - 16

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Employee training in handling dangerous goods is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Irrit. 2, H315	Classification according to calculation procedure.
Aerosol 1, H222	Classification based on test data.
Acute Tox. 4, H312+H332	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on test data.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

Skin Irrit. — Skin irritation

Aerosol — Aerosols

Acute Tox. — Acute toxicity - dermal / inhalation

Flam. Liq. — Flammable liquid

Acute Tox. — Acute toxicity - inhalation

Acute Tox. — Acute toxicity - dermal

Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWC European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill

LCLo lowest published lethal concentration

LD Lethal Dose of a chemical

LD50 Lethal Dose, 50% kill

LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level

LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available

n.c. not checked

n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level

NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon

PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration

POCP Photochemical ozone creation potential

ppm parts per million

PROC Process category

PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.