

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

Shotput

700 g/kg Metribuzin CAS 21087-64-9

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

Relevant identified uses of the substance or mixture:

Herbicide

Uses advised against:

Not applicable

1.3 Details of the supplier of the safety data sheet

Makhteshim Agan (UK) Limited, Unit 15, Thatcham Business Village Colthrop Way, UK-Thatcham Berkshire RG19 4LW
Telephone 01635 860555, Fax 01635 861555

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Emergency information services / official advisory body:

National Chemical Emergency Centre (UK): 01865 407333 (24 hours)

Telephone number of the company in case of emergencies:

Tel.: --

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Hazard class	Hazard category	Hazard statement
Aquatic Acute	1	H400-Very toxic to aquatic life.
Aquatic Chronic	1	H410-Very toxic to aquatic life with long lasting effects.

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

N, Dangerous for the environment, R50-53

2.2 Label elements

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



Warning

Hazard statement

H410-Very toxic to aquatic life with long lasting effects.

P102-Keep out of reach of children.

Disposal

P501-Dispose of contents/container to hazardous or special waste collection point.

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EUH401-To avoid risks to human health and the environment, comply with the instructions for use.

SP1 Do not contaminate water with the product or its container.

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

Formulation:

Water-dispersible granulate

3.1 Substance

n.a.

3.2 Mixture

Metribuzin (ISO)	
Registration number (REACH)	--
Index	606-034-00-8
EINECS, ELINCS, NLP	244-209-7
CAS	CAS 21087-64-9
content %	70
Classification according to Directive 67/548/EEC	Harmful, Xn, R22 Dangerous for the environment, N, R50 Dangerous for the environment, R53
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Disodium maleate	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	206-738-1
CAS	CAS 371-47-1
content %	1-<10
Classification according to Directive 67/548/EEC	Irritant, Xi, R36/37/38
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Sodium diisopropylnaphthalenesulphonate	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	215-343-3
CAS	CAS 1322-93-6
content %	1-<10
Classification according to Directive 67/548/EEC	Harmful, Xn, R20/22 Irritant, Xi, R36/37
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H332 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT SE 3, H335

Citric acid monohydrate	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	201-069-1
CAS	CAS 5949-29-1
content %	1-<10
Classification according to Directive 67/548/EEC	Irritant, Xi, R36
Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319

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

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.

Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Ingestion

Give copious water to drink - consult doctor immediately.

Keep Data Sheet available.

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.

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

Water

Unsuitable extinguishing media

n.a.

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Vapours hazardous to health

Organic decomposition products

Oxides of carbon

Oxides of sulphur

Oxides of nitrogen

5.3 Advice for firefighters

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

6.2 Environmental precautions

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

Prevent from entering drainage system.

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

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

As a precaution, douse dust with water.

6.4 Reference to other sections

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

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 build up of dust.

I.e. caution - note danger of explosive-dust

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.

Observe regulations for keeping separated.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Protect against moisture and store closed.

Only store at temperatures from -5°C to 35°C.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB	Chemical Name	China stone	Content %:
	WEL-TWA: 2 mg/m3 (res. dust)	WEL-STEL: ---	---
	BMGV: ---	Other information: ---	

GB 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.

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.

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:

Protective Neopren gloves (EN 374).

Protective nitrile gloves (EN 374)

Protective hand cream recommended.

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 A P 3 (EN 14387), code colour brown, white

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

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:	Solid
Colour:	Beige
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	9,2 (1 %, CIPAC MT 75.3)
Melting point/freezing point:	125,3 (OECD 102 (Melting Point/Melting Range), Metribuzin (ISO))
Initial boiling point and boiling range:	Not determined
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	No (Regulation (EC) 440/2008 A.10. (FLAMMABILITY (SOLIDS)))
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	0,121 mPa (20°C, OECD 104 (Vapour Pressure), Metribuzin (ISO))
Vapour pressure:	0,255 mPa (25°C, OECD 104 (Vapour Pressure), Metribuzin (ISO))
Vapour density (air = 1):	Not determined
Density:	Not determined
Bulk density:	0,52 g/ml (CIPAC MT 186, (pour density))
Bulk density:	0,53 g/ml (CIPAC MT 186, (tapdensity))
Solubility(ies):	Not determined
Water solubility:	90,2 % (CIPAC MT 174, Dispersion)
Partition coefficient (n-octanol/water):	1,7 (25°C, OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method), Metribuzin (ISO), (log Pow, pH 6,9))
Auto-ignition temperature:	No (Regulation (EC) 440/2008 A.16. (RELATIVE SELF-IGNITION TEMPERATURE FOR SOLIDS))
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive.
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

See also Subsection 10.2 to 10.6.

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur during storage and handling under normal conditions.

Avoid contact with other chemicals.

10.4 Conditions to avoid

See also section 7.

Protect from humidity.

10.5 Incompatible materials

See also section 7.

Avoid contact with other chemicals.

Avoid contact with strong oxidizing agents.

Avoid contact with strong alkalis.

10.6 Hazardous decomposition products

See also section 5.2

SECTION 11: Toxicological information

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

Classification based on toxicological analyses.

Shotput

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC0	>4,8	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	(limit test)
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:						No(Magnusson and Kligman maximisation study)
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.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification based on toxicological analyses.

Metribuzin (ISO)

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	984	mg/kg	Rat		Female
Acute toxicity, by oral route:	LD50	322	mg/kg	Rat		WHO
Acute toxicity, by oral route:	LD50	1010	mg/kg	Rat		Male
Acute toxicity, by dermal route:	LD50	>20000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	>0,6	mg/l/4h	Rat		(max. att. conc.)
Skin corrosion/irritation:				Rabbit		Not irritant
Serious eye damage/irritation:				Rabbit		Not irritant

Respiratory or skin sensitisation:						No(Buehler)
Germ cell mutagenicity:						Negative
Carcinogenicity:	NOEL	20	mg/kg	Rat		
Carcinogenicity:	NOEL	1,9	mg/kg bw/d	Rat		
Reproductive toxicity:	NOEL	30	mg/kg	Rat		
Reproductive toxicity:	NOEL	3	mg/kg bw/d	Rat		
Symptoms:						breathing difficulties, headaches, nausea
Other information:	ADI	0,013	mg/kg			

Sodium diisopropylnaphthalenesulphonate

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>600- <2000	mg/kg	Rat		

Citric acid monohydrate

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Irritant
Respiratory or skin sensitisation:						No indications of such an effect.
Respiratory or skin sensitisation:						Not sensitizing
Germ cell mutagenicity:						Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity:						None
Symptoms:						vomiting, cornea opacity, coughing, stomach pain, mucous membrane irritation

China stone

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Serious eye damage/irritation:						Mechanical irritation possible.
Respiratory or skin sensitisation:						No indications of such an effect.

SECTION 12: Ecological information

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

Shotput

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to fish:	NOEC/NOEL	96h	100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	

Toxicity to daphnia:	NOEC/NO EL	48h	100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	EbC50	72h	47	µg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	ErC50	72h	86	µg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	EyC50	72h	45,6	µg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	NOEC/NO EL	72h	36	µg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment:							n.d.a.
Other adverse effects:							n.d.a.
Toxicity to bacteria:	NOEC/NO EL		1,579	mg/l		OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Metribuzin (ISO)							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	64	mg/l	Oncorhynchus mykiss		Does not conform with EU classification.
Toxicity to fish:	LC50		80,3	mg/l	Oncorhynchus mykiss		
Toxicity to fish:	LC50	96h	142	mg/l	Leuciscus idus		Does not conform with EU classification.
Toxicity to daphnia:	EC50		19	mg/l			
Toxicity to daphnia:	EC50	48h	35	mg/l	Daphnia magna		Does not conform with EU classification.
Toxicity to algae:	EC50	96h	21	mg/l	Scenedesmus subspicatus		Does not conform with EU classification.
Toxicity to algae:	EC50		0,02	mg/l			
Persistence and degradability:	DT50		14-25	d			
Persistence and degradability:	DT50		<1	d			H2O
Toxicity to insects:	LD50		35	µg/bee			

Sodium diisopropylnaphthalenesulphonate							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	48h	275	mg/l			
Bioaccumulative potential:	BCF		< 6				

Citric acid monohydrate							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	440-760	mg/l	Leuciscus idus		
Toxicity to fish:	LC50	96h	440-706	mg/l	Carassius auratus		
Toxicity to daphnia:	EC50	72h	120	mg/l	Daphnia magna		

Toxicity to algae:		7d	425	mg/l	Scenedesmus quadricauda		
Toxicity to algae:	IC5	7d	640	mg/l	Scenedesmus quadricauda		Anhydrous substance
Persistence and degradability:		2d	98	%		OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	
Bioaccumulative potential:	Log Pow		<1				
Toxicity to bacteria:	EC50		>1000 0	mg/l	Pseudomonas subspicata	DIN 38412 T.8	
Other information:	BOD		526	mg/g			
Water solubility:			600	mg/l			20°C

China stone							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Persistence and degradability:							Not relevant for inorganic substances.
Water solubility:							Insoluble

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. (2001/118/EC, 2001/119/EC, 2001/573/EC)

02 01 08 agrochemical waste containing dangerous substances

07 04 99 wastes not otherwise specified

20 01 19 pesticides

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

Waste needs special observation measures (according to Waste Types Catalogue).

For contaminated packing material

Pay attention to local and national official regulations

Re-use of packing materials is prohibited.

SECTION 14: Transport information

General statements

UN number: 3077

Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METRIBUZIN)

Transport hazard class(es):

9

Packing group:

III

Classification code:

M7

LQ (ADR 2011):

5 kg

LQ (ADR 2009):

27

Environmental hazards:

environmentally hazardous

Tunnel restriction code:

E

Transport by sea (IMDG-code)

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METRIBUZIN)

Transport hazard class(es):

9

Packing group:

n.a.

EmS:

F-A, S-F

Marine Pollutant:

Yes

Environmental hazards:

environmentally hazardous



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

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Transport by air (IATA)

UN proper shipping name:

Environmentally hazardous substance, solid, n.o.s. (METRIBUZIN)

Transport hazard class(es):

9

Packing group:

III

Environmental hazards:

environmentally hazardous

**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 73/78 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.

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:

Yes

Comply with trade association/occupational health regulations.

Regulation (EC) No 1907/2006, Annex XVII

Ensure all national/local regulations are observed.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections:

2

Observe plant protection medium law.

ID:

FSG 01094 H-1

TA air:

III 3.1.5

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
Aquatic Acute 1, H400	Classification according to calculation procedure.
Aquatic Chronic 1, H410	Classification according to calculation procedure.

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

20/22 Harmful by inhalation and if swallowed.

22 Harmful if swallowed.

36 Irritating to eyes.

36/37 Irritating to eyes and respiratory system.

36/37/38 Irritating to eyes, respiratory system and skin.

50 Very toxic to aquatic organisms.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

53 May cause long-term adverse effects in the aquatic environment.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Aquatic Acute — Hazardous to the aquatic environment - acute

Acute Tox. — Acute toxicity - oral

Skin Irrit. — Skin irritation

Eye Irrit. — Eye irritation

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

Acute Tox. — Acute toxicity - inhalation

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

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaire 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
 IUCILIDInternational Uniform ChemicalL 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
 LOAELLowest 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
 NIOSHNational 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)
 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.

These statements were made by:

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

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Shotput

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