SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1272/2008 (REACH) Annex II

SHARP TURBO			
Revision Date	24-September-2021	**Version** 1	**Product No** JTA/UK/022
Publish Date	3-December -2019		

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

SHARP TURBO

400g/l Flufenacet & 200g/l Diflufenican SC

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

Recommended Use Herbicide

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address

JT Agro Ltd
1 Bell Street, Maidenhead, Berkshire,
SL6 1BU, U.K.
Tel: +44 1628 421599 Fax: +44 1628 421623

For further information, please contact

Email address info@jtagro-cropthetics.com

1.4. Emergency telephone number

Emergency information services / official advisory body: National Chemical Emergency Centre (UK):
Tel: 01865 407333 (24 hours)

Telephone number of the company in case of emergencies: Tel: +44 1628 421599

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

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

Hazard class	Hazard category	Hazard statement
Acute Tox.	4	H302 - Harmful if swallowed.
Skins Sens.	1	H317 - May cause an allergic skin reaction.

STOT RE	2	H373 - May cause damage to organs through prolonged or repeated exposure.
Aquatic Acute	1	H400 - Very toxic to aquatic life.
Aquatic Chronic	1	H410 - Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Warning

H302 – Harmful if swallowed. H317-May cause an allergic skin reaction. H373 – May cause damage to organs (nervous system) through prolonged or repeated exposure. H410 – Very toxic to aquatic life with long lasting effects

P280 – Wear protective gloves/protective clothing/eye protection/face protection
P309 + P311 – IF exposed or concerned: Call a POISON CENTER/doctor/ physician.
P501 – Dispose of contents/ container to an approved waste disposal plant.

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

SP 1 Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

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

3.1. Mixtures

n.a.

3.2. Mixtures

Flufenacet (ISO)	
Registration number (REACH)	--
Index	616-032-00-9
EINECS, ELINCS, NLP	-
CAS	142459-59-3
Content %	30-40

Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 STOT RE 2, H3737 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410

Diflufenican	
Registration number (REACH)	--
Index	616-032-00-9
EINECS, ELINCS, NLP	-
CAS	83164-33-4
Content %	10-20
Classification according to Regulation (E1272/2008 (CLP)	Aquatic Chronic 3, H412

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms

Skin Contact

Dab away with polyethylene glycol 400
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

Rinse the mouth thoroughly with water**.**
Do not induce vomiting. Consult doctor immediately.

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
Methemoglobin formulation Cyanosis

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment
Sodium sulphate laxative (1 table spoon and 1 glass of water) with generous amounts of activated charcoal. For methemoglobinemia, 300 mg toluidine blue intravenously or 1 to 2 mg/kg methylene blue intravenously.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media
Not known

5.2. Special hazards arising from the substance or mixture

In case of fire the following can develop:
Oxides of carbon
Oxides of Sulphur
Oxides of nitrogen
Hydrogen cyanide
Toxic gases

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
Dispose of contaminated extinction water according to official regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Keep non-essential personnel away.
Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution – risk of slipping

6.2. Environmental precautions

If leakage occurs, dam up. Resolve leaks if this is possible without risk. 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

Methods for cleaning up Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to section 13. Fill the absorbent material into lockable containers. Clean soiled bottles immediately.

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. Keep away from sources of ignition – Do not smoke. Avoid contact with eyes and skins. Separate storage of protective clothing. 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 feeding stuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.
Suitable container: HDPE

7.2. Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorized individuals. Store product closed and only in original packaging. Not to be stored in gangways or stairwells.
Protect from frost.
Store in a well-ventilated place.
Store in a dry place.
Suitable container:HDPE

7.3. Specific end use(s) No information available at present

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	**Glycerine**	**Control %**
WEL-TWA: 10 MG/M3 (mist)	WEL-STEL: ---	---
Monitoring procedures: BMGV:---	---	5.5 mg/m3 (TWA) Other Information

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 feeding stuffs. 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). Recommended Protective nitrile gloves (EN 374) Minimum layer thickness in mm: 0,4 Permeation time (penetration time) in minutes: >=480. The breakthrough times determined in accordance with EN374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection -Other:	Protective working garments (e.g. safety shoes EN ISO 20345, long -sleeved working garments)
Respiratory protection:	Normal not necessary.
Thermal Hazards:	Not applicable

Addition information on hand protection- No test has 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 the other quality characteristics and varies from manufacture to manufacture. In the case of mixtures, the resistance of glove materials cannot be predicated 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:	Liquid Suspension
Colour:	White, Beige
Odour	Slightly, Characteristic
Odour threshold:	Not determined
pH- value	4 – 6,5 (23˚C)
Melting point/freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash point	> 100˚C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air=1):	Not determined
Density	~1, 24 g/cm3 (20˚C)
Bulk density:	n.a
Solubility(ies):	Not determined
Water solubility:	Dispersion
Partition Coefficient n-octanol /water	Not determined
Auto -ignition temperature:	445 ˚C (ignition temperature)
Decomposition temperature:	Not determined
Viscosity:	150-400 mPas (20˚C, (20/s)
Viscosity:	60-200 mPas (20˚C, (20/s)
Explosive properties:	Product is not explosive. (regulation (EC) 440/2008 A.14. (EXPLOSIVE PROPERTIES)
Oxidizing properties:	No

9.2. Other information

Further safety related physical-chemical data are not known.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not to be expected

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.
Strong heat

10.5. Incompatible materials

See also section 7
Avoid contact with strong alkalis.
Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.

10.6. Hazardous decomposition

See also section 5.2

No decomposition when used as directed

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

SHARP TURBO						
Toxicity/effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	500 – 2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>4000	mg/kg	Rat		

Acute toxicity, by inhalation:	LC50	>2,078	Mg/1/4h	Rat		
Skin corrosion/ irritation:				Rabbit		Not Irritant
Serious eye damage/ irritation:				Rabbit		Not Irritant
Respiratory or skin sensitization:				Guinea Pig	OECD 406 (Skin Sensitization)	Yes (skin contact)
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 single Exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure**.**

Flufenacet (ISO)						
Toxicity/effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative
Reproductive toxicity:				Rat		Negative

Diflufenican						
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		
Acute toxicity, by inhalation	LC50	>4.94	Mg/1/4h	Rat		
Glycerin						
Toxicity/effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>126000	mg/kg	Rat		
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	IUCLID Chem. Data Sheet (ESIS)	
Acute toxicity, by dermal route:	LD50	>10000	mg/kg	Rabbit		
Acute toxicity, by dermal route:				Rabbit	IUCLID Chem. Data Sheet (ESIS)	Not Irritant
Skin corrosion/ irritation:				Rabbit	IUCLID Chem. Data Sheet (ESIS)	
Skin corrosion/ irritation:					OECD 405 (Acute Dermal Irritation/Corrosion)	Not Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Dermal Irritation/Corrosion)	Not Irritant
Serious eye damage/irritation:					OECD 405 (Acute Dermal Irritation/Corrosion)	Not Irritant
Respiratory or skin sensations:						Not Irritant
Respiratory or skin sensations:				Guinea Pig		Not Sensitizing
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity:	NOAEL	2000	mg/kg/d			Negative
Specific target organ toxicity repeated exposure (STOT-RE):	NOAEL		mg/l	Rat		14d
Aspiration hazard:						Negative

Symptoms:						Abdominal pain, drowsiness, diarrhea, vomiting, headaches mucous

						membrane irritation

Section 12: ECOLOGICAL INFORMATION

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

SHARP TURBO							
Toxicity/effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Toxicity to fish:	LC50	96h	12,3	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphina magna		
Toxicity to algae:	EC50	72h	0.00663	mg/l	Pseudokirchnerie ll1 subcapitata		
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
Other organisms:	EC50		0.307	mg/l	Lemna gibba		

Flufenacet (ISO)							
Toxicity/effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Toxicity to fish:	LC50	96h	2,19	mg/l	Lepomis macrochirus		
Toxicity to daphnia:		48h	30,9	mg/l	Daphnia magna		
Toxicity to algae:		72h	0,0002-0,0004	mg/l	Pseudokirchnerie lla subcapitata		

Diflufenican							
Toxicity/effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Toxicity to fish:	LC50	96h	>0,04	mg/l			Does not conform with EU classification
Toxicity to daphnia:	EC50	48h	0,24	mg/l	Daphina Magna		Does not conform with EU classification
Toxicity to algae:	EC50	72h	0,0002-0.0004	mg/l			Does not conform with EU classification

Toxicity to birds:	LD50		>2150	mg/k	Colin virginianus		
Toxicity to birds:	LD50		>4000	mg/k	Anas platyrhnnchos		

Glycerine							
Toxicity/effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Toxicity to fish:	LC50	24h	>5000	mg/l	Carassius auratus		References
Toxicity to fish:	LC50	96h	>5000	mg/l	Carassius auratus		
Toxicity to fish:	LC50	96h	>10000	mg/l	Leuciscus idus		
Toxicity to daphnia:	EC50	24h	>10000	mg/l	Daphnia magna		
Toxicity to daphnia:	EC50	24h	>10000	mg/l	Daphnia magna	IUCLID Chem, Data sheet (ESIS)	
Toxicity to daphnia:	EC5	72h	3200	mg/l			References
Toxicity to algae:	EC50		29000	mg/l	Chlorella vulgaris		
Toxicity to algae:	IC5	7d	>1000	mg/l	Scenedesmus quadricornutum		
Toxicity to algae:	IC5	7d	>1000	mg/l	Scenedesmus capricornutum		References
Persistence and degradability:		14d	63	%		OECD 301 C (Ready Biodegradability-Modified MITI Test (1))	
Persistence and degradability:		14d	63	%		OECD 301 C (Ready Biodegradability-Modified MITI Test (1))	
Bioaccumulative potential:	Log Pow		-1,76				

Bioaccumulative potential:	Log Pow		-2,6				A notable biological accumulation potential is not to be expected (LogPow 1-3)
Results of PBT and vPvB assessment							n.a
Toxicty to bacteria	EC5	16h	>10000	mg/l	Pseudomonas putida		
Other information:	BOD5		0,87	g/g			

Other information:	COD		1,16	g/g			

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 users specific conditions for use and disposal, other waste codes may be allocated under curtails circumstances. (2014/955/EU)
02 01 08 agrochemical waste containing hazardous substances
07 04 99 wastes not otherwise specified
20 01 19 Pesticides
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant
E.g. dispose at suitable refuse site.

For Contaminated packaging

Pay attention to local and national office regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

Section 14: TRANSPORT CONSIDERATIONS

General statement

UN number 3082

Transport by road/by rail (ADR/RID)

UN Proper Shipping Name:
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUFENACET (ISO), DIFLUFENCIAN)
Transport hazard class(es) 9
Packing group: III
Classification code: M6
LQ (ADR 2015): 5
Environmental Hazards: Environmentally hazardous
Tunnel Restriction Code: E

Transport by Sea (IMDG-code)

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUFENACET (ISO), DIFLUFENCIAN)
Transport hazard class(es) 9
Packing group: III

EmS: F-A, S-F
Marine Pollutant: Yes
Environmental hazards class(es): Environmentally hazardous

Transport by air (IATA)

UN proper shipping name:
Environmentally hazardous substance, liquid, (FLUFENACET (ISO), DIFLUFENCIAN)
Transport hazard class(es) 9
Packing group III
Environmental hazards Environmentally hazardous

Special precautions for user
Persona 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 IBC Code
Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code with packaging 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 regulations).
Observe law on protection of expectant mothers (German regulations).
Observe plant protection medium law.

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.
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 (EG0 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/200/ (CLP)	Evaluation method used
Acute Tox. 4, H302	Classification based on test data.
Skin Sens. 1, H317	Classification according to calculation procedure. Classification based on test date.
STOT RE 2, H372	Classification according to calculation procedure.
Aquatic Acute 1, H400	Classification based on test date.

Aquatic Chronic1, H410	Classification based on test date.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the products and the constituents (specified in Section 2 and 3).
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Acute Tox. - Acute toxicity – oral
Skin Sens. – Skin Sensitization
STOT RE -- Specific target organ toxicity- repeated exposure
Aquatic Acute —Hazardous to aquatic environment – acute
Aquatic Chronic—Hazardous to aquatic environment—chronic

Any abbreviations and acronyms used in the the document

AC Article Categories
Acc., acc to according, according to
ACGIH American Conference of Governmental Industrial Hygienists
ADR Accord European relative au transport international des merchandises Dangereuses par Route (= European Agreement concerning the international Carriage of Dangerous Goods by Road)
AOEL Acceptable Operator Exposure Level
AOX Absorbable organic halogen compounds
Approx. approximately
Art., Art no Article number
ATE Acute Toxicity Estimate according to Regulation (EC)1272/2008 (CLP)
BAM Bundesanstalt fur Materialforschung und-prufing (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt fur Arbeitsschutz und Arbeitsmedzin (= 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-menthyl-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 od Performance Test for Fuels, Lubricants and Other Fluids
CESIO Committee European des Agents de Surface et de leurs Intermediaries 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 fur SchweiBen 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 Chemical 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 Catalouge
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
LCLC Lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose 50% kill
LDLo Lethal Dose Low
LOAELL 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.d.a not checked
NIOSH National Institute of Occupational Safety and Health (United State of America)
NOAEC No Observed Adverse Effective Concentration
NOAEL No Observed Adverse Effect Level
ODP Ozone Depletion Potential
OECD Organization for Economic Co-operation and Development

org. organic
PAH polycyclic aromatic hydrocarbon
PBT persistent, bioaccumulative and toxic
PC Chemical product category
PE Polyethylene
PNEC Predicated No Effect Concentration
POCP Process category
ppm parts per million
PROC Process Category
PTFE Polytetrafluorethylene
REACH Registration, Evaluation, Authorization and Restrictions of chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restrictions of chemicals
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations with out 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 Regalement concernant le transport International ferroviaire de marchandises Dangerous (=Regulation concerning the international Carriage of Dangerous Goods by Rail)
SADT Self-Accelerating Decomposition Temperature
SAR Structure Activity Relationship
SU Sector of use
SVHC Substance of very high concern
Tel. Telephone
ThOD Theoretical oxygen demand
TOC Total organic carbon
TRGS Technishe Regeln fur Gefahrstoffe (=Technical Regulations for Hazardous Substance)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordunng uber brennbare Flussigkeiten (= Regulation for flammable liquids (Austria))
WEL-TWA, WEL-STEL WEL-TWA WEL-TWA= Workplace Exposure Limit-Long-term exposure limit (8-hour TWA (=time weightedaverage) reference period), WEL-STEL= Workplace Exposure Limit- Short-term exposure limit (15-minute referenceperiod) (EH40, UK).
WHO World Health Organization
Wwt wet weight

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet