

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

PS24

Version number: 7.0 Replaces version of: 2016-08-30 (6) Revision: 2017-04-13 First version: 25.05.2014

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

1.1	Product identifier		
	Trade name		PS24 Stainless Steel Pickling Spray
	Registration number (l	REACH)	not relevant (mixture)
	CAS number		not relevant (mixture)
1.2	Relevant identified u	ses of the substance or r	nixture and uses advised against
	Relevant identified use	25	Pickling Spray for Stainless Steel Surfaces
	Uses advised against		Do not use for products which come into direct contact with the skin
1.3	Details of the supplie	er of the safety data shee	et
	Duralloy PO Box 19, Campbelltown NSW 2	560 Australia	
	Phone:	# 1300369456	
	e-mail (competent per	son)	sales@duralloy.net.au
1.4	Emergency telephone	e number	
	As above or next toxicol	ogical information centre.	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Classification acc. to GHS							
Section	Hazard class	Category	Hazard class and category	Hazard state- ment			
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290			
3.10	acute toxicity (oral)	3	Acute Tox. 3	H301			
3.1D	acute toxicity (dermal)	2	Acute Tox. 2	H310			
3.1I	acute toxicity (inhal.)	3	Acute Tox. 3	H331			

Classification acc. to GHS						
Section	Hazard class	Category	Hazard class and category	Hazard state- ment		
3.2	skin corrosion/irritation	1A	Skin Corr. 1A	H314		
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318		

for full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

Spillage and fire water can cause pollution of watercourses.

Additional information

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

2.2 Label elements

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

Signal word danger

Pictograms

GHS05, GHS06



Hazard statements

H290	May be corrosive to metals.
H301+H331	Toxic if swallowed or if inhaled.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.

Precautionary statements

P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin
	with water/shower.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.

Hazardous ingredients for labelling

Hydrofluoric acid, nitric acid

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

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Description of the mixture

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	M-Factors
nitric acid	CAS No 7697-37-2 EC No 231-714-2 REACH Reg. No 01-2119487297- 23-xxxx	25 - < 50	Ox. Liq. 2 / H272 Met. Corr. 1 / H290 Acute Tox. 3 / H331 Skin Corr. 1A / H314 Eye Dam. 1 / H318		
Hydrofluoric acid	CAS No 7664-39-3 EC No 231-634-8 Index No 009-003-00-1 REACH Reg. No 01-2119458860- 33-xxxx	5-<10	Met. Corr. 1 / H290 Acute Tox. 2 / H300 Acute Tox. 1 / H310 Acute Tox. 2 / H330 Skin Corr. 1A / H314 Eye Dam. 1 / H318		

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours. Self-protection of the first aider.

Following inhalation

Provide fresh air.

Mouth to mouth resuscitation should be avoided. Use alternative methods, preferably with oxygen or compressed air driven apparatus.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Wash with plenty of soap and water. Rub with a gel containing calcium gluconate. Call a physician immediately. Causes poorly healing wounds.

Following eye contact

Rinse cautiously with water for several minutes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse copiously with a calcium gluconate solution.

Following ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

Notes for the doctor

none

4.2 Most important symptoms and effects, both acute and delayed

These information are not available.

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10. Substance or mixture corrosive to metals.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

use suitable breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Chemical protection suit.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to clean up a spill

Collect spillage. Universal binder. Avoid mixing with flammable or combustible substances (e.g. sawdust).

Appropriate containment techniques

Neutralisation techniques. Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. When diluting, always stir the product into standing water.

Specific notes/details

Reactivity in dry state.

Handling of incompatible substances or mixtures

Do not mix with alkali. Metals (due to the release of hydrogen in an acid/alkaline medium).

Keep away from

caustic solutions, organic absorbing material, metals (including their alloys)

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas. Wash hands after use. Preventive skin protection (barrier creams/ointments) is recommended. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10. Observe hints for combined storage.

Protect against external exposure, such as

frost

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.

Provision of sufficient ventilation.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occup	Occupational exposure limit values (Workplace Exposure Limits)								
Coun- try	Name of agent	CAS No	Nota- tion	Identi- fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
EU	hydrogen fluoride	7664-39-3		IOELV	1.8	1.5	3	2.5	2000/39/EC
EU	nitric acid	7697-37-2		IOELV			1	2.6	2006/15/EC
GB	hydrogen fluoride	7664-39-3	F	WEL	1.8	1.5	3	2.5	EH40/2005
GB	nitric acid	7697-37-2		WEL			1	2.6	EH40/2005

Notation

F calculated as F (fluorine)

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period unless otherwise specified

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

Relevant DNELs of components of the mixture							
Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time	
Hydrofluoric acid	7664-39-3	DNEL	1.5 mg/m ³	human, inhalatory	worker (in- dustry)	chronic - sys- temic effects	

Relevant DNELs of components of the mixture								
Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time		
Hydrofluoric acid	7664-39-3	DNEL	2.5 mg/m ³	human, inhalatory	worker (in- dustry)	acute - systemic effects		
Hydrofluoric acid	7664-39-3	DNEL	1.5 µg/m³	human, inhalatory	worker (in- dustry)	chronic - local effects		
Hydrofluoric acid	7664-39-3	DNEL	2.5 mg/m ³	human, inhalatory	worker (in- dustry)	acute - local ef- fects		

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment
Hydrofluoric acid	7664-39-3	PNEC	0.9 ^{mg} / _l	freshwater
Hydrofluoric acid	7664-39-3	PNEC	0.9 ^{mg} / _l	marine water
Hydrofluoric acid	7664-39-3	PNEC	51 ^{mg} / _l	sewage treatment plant (STP)
Hydrofluoric acid	7664-39-3	PNEC	11 ^{mg} / _{kg}	soil

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Hand protection

Material	Material thickness	Breakthrough times of the glove material
PVC: polyvinyl chloride	≥ 1,2 mm	>480 minutes (permeation: level 6)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

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Respiratory protection

ABEK-P3.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	liquid
Form	viscous
Colour	colourless
Odour	pungent
Odour threshold	these information are not available
Other safety parameters	
pH (value)	<1
Melting point/freezing point	these information are not available
Initial boiling point and boiling range	106 °C
Flash point	not applicable
Evaporation rate	these information are not available
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	
Lower explosion limit (LEL)	these information are not available
Upper explosion limit (UEL)	these information are not available
Vapour pressure	these information are not available
Density	1.2 ^g / _{cm³}
Vapour density	these information are not available
Relative density	these information are not available
Solubility(ies)	
Water solubility	miscible in any proportion

Partition coefficient

n-octanol/water (log KOW)	these information are not available
Auto-ignition temperature	these information are not available
Relative self-ignition temperature for solids	not relevant (Fluid)
Decomposition temperature	these information are not available
Viscosity	
Kinematic viscosity	these information are not available
Dynamic viscosity	these information are not available
Explosive properties	not explosive
Oxidising properties	shall not be classified as oxidising

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Substance or mixture corrosive to metals.

10.2 Chemical stability

See below "Conditions to avoid".

10.3Possibility of hazardous reactionsNo known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

bases

Release of flammable materials with:

light metals (due to the release of hydrogen in an acid/alkaline medium), glass

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Nitrogen oxides (NOx). Hydrogen fluoride (HF).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification procedure

If not otherwise specified the classification is based on: Ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Toxic if swallowed. Fatal in contact with skin. Toxic if inhaled

Acute toxicity of components	s of the mixture		
Name of substance	CAS No	Exposure route	Endpoint

7697-37-2

inhalation:

vapour

LC50

Skin corrosion/irritation

nitric acid

Causes severe skin burns and eye damage.

Classification procedure

The classification is based on an extreme pH value.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Value

>2.65 ^{mg}/_l/4h

Species

rat

Reproductive toxicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - single exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Test data are not available for the complete mixture.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
nitric acid	7697-37-2	LC50	1.25 – 2.5 ^{mg} / _l	Ceriodaphnia dubia (water flea)	48 h
Hydrofluoric acid	7664-39-3	EC50	48 ^{mg} / _l	aquatic invertebrates	96 h

Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

Aquatic toxicity (chronic) of components of the mixture

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hydrofluoric acid	7664-39-3	NOEC	4 ^{mg} / _l	rainbow trout (Onco- rhynchus mykiss)	21 d

12.2 Persistence and degradability

Biodegradation

Anorganic product, is not eliminable from water by means of biological cleaning processes.

Persistence

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Bioaccumulative potential of components of the mixture			
Name of substance	CAS No	BCF	Log KOW
Hydrofluoric acid	7664-39-3	53 - 58	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

Endocrine disrupting potential

None of the ingredients are listed.

Remarks

Water hazard class - WHC (Wassergefährdungsklasse): 2 (Hazardous to water)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECT	ION 14: Transport information	
14.1	UN number	2922
14.2	UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S.
	Technical name (hazardous ingredients)	Hydrofluoric acid, NITRIC ACID
14.3	Transport hazard class(es)	
	Class	8
	Subsidiary risk(s)	6.1 (acute toxicity)
14.4	Packing group	II
14.5	Environmental hazards	non-environmentally hazardous acc. to the dan- gerous goods regulations
14.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should	
14.7	Transport in bulk according to Annex II	
	The cargo is not intended to be carried in bul	К.
14.8	Information for each of the UN Model R	egulations
	Transport of dangerous goods by road,	rail and inland waterway (ADR/RID/ADN)
	UN number	2922
	Proper shipping name	UN2922, CORROSIVE LIQUID, TOXIC, N.O.S., (con- tains: Hydrofluoric acid, NITRIC ACID), 8 (6.1), II, (E)
	Class	8
	Classification code	CT1
	Packing group	II
	Danger label(s)	8+6.1
	Special provisions (SP)	274, 802(ADN)
	Excepted quantities (EQ)	E2
	Limited quantities (LQ)	1 L
	Transport category (TC)	2.
	Tunnel restriction code (TRC)	E

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Hazard identification No

Emergency Action Code	2X			
International Maritime Dangerous Goods Code (IMDG)				
UN number	2922			
Proper shipping name	UN2922, CORROSIVE LIQUID, TOXIC, N.O.S., (con- tains: Hydrofluoric acid, NITRIC ACID), 8 (6.1), II			
Class	8			
Subsidiary risk(s)	6.1			
Packing group	II			
Danger label(s)	8+6.1			
Special provisions (SP)	274			
Excepted quantities (EQ)	E2			
Limited quantities (LQ)	1 L			
EmS	F-A, S-B			
Stowage category	В			
International Civil Aviation Organization (IC	AO-IATA/DGR)			
UN number	2922			
Proper shipping name	UN2922, Corrosive liquid, toxic, n.o.s., (contains: Hydrofluoric acid, NITRIC ACID), 8 (6.1), II			
Class	8			
Subsidiary risk(s)	6.1			
Packing group	II			
Danger label(s)	8+6.1			
Special provisions (SP)	A3, 274			
Excepted quantities (EQ)	E2			
Limited quantities (LQ)	0,5 L			

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

none of the ingredients are listed

Dangerous substances with restrictions (REACH, Annex XVII)					
Name of substance	Name acc. to inventory	CAS No	Type of registra- tion	Condi- tions of restric- tion	No
PS24	this product meets the criter- ia for classification in accord- ance with Regulation No 1272/2008/EC		1907/2006/EC an- nex XVII	R3	3

Legend

R3 1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market.

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:

- can be used as fuel in decorative oil lamps for supply to the general public, and,

- present an aspiration hazard and are labelled with R65 or H304,

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).

5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

(a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
(b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';

(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

List of substances subject to authorisation (REACH, Annex XIV)

none of the ingredients are listed

Seveso Directive

2012/	2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	plication of lower	y (tonnes) for the ap- r and upper-tier re- ements	Notes
H2	acute toxic (cat. 2 + cat. 3, inhal.)	50	200	41)

Notation

41) - category 2, all exposure routes - category 3, inhalation exposure route

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

none of the ingredients are listed

Regulation 98/2013/EU on the marketing and use of explosives precursors

Explosives precursors which are subject to restrictions			
Name of substance	CAS No	Type of registration	Limit value
nitric acid	7697-37-2	Annex I	3 % w/w

Legend

annex I Substances which shall not be made available to members of the general public on their own, or in mixtures or substances including them, except if the concentration is equal to or lower than the limit values set out below

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
2.2		Hazardous ingredients for labelling: Hydrofluoric acid, nitric acid
3.2		Hazardous ingredients acc. to GHS: change in the listing (table)
8.1		Relevant DNELs of components of the mixture: change in the listing (table)
8.1		Relevant PNECs of components of the mixture: change in the listing (table)
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Comission Directive establishing a first list of indicative occupational exposure limit values in imple- mentation of Council Directive 98/24/EC
2006/15/EC	Comission Directive establishing a second list of indicative occupational exposure limit values in im- plementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de nav- igation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical sub- stances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances

Abbr.	Descriptions of used abbreviations
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
ΙΑΤΑ	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regula- tion (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
Ox. Liq.	Oxidising liquid
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

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Physical and chemical properties. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

List of relevant phrases (code and full text as stated in chapter 2 and 3)	
Code	Text
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.