Safety Data Sheet

acc. to GHS of the United Nations, annex 4

TM DESANACID FP

Version number: GHS 6.0
Replaces version of: 2024-04-10 (GHS 5)

Revision: 2024-06-24

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

1.1 Product identifier

Trade name **TM DESANACID FP**

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

Relevant identified uses
cleaning agent
professional use (SU22)
industrial use (SU3)

Uses advised against
this information is not available

1.3 Details of the supplier of the safety data sheet

AFCO Austria: Thonhauser GmbH
Perlhofgasse 2/1
2372 Giesshübl
Austria

Telephone: +43 (0)2236 320 272
e-mail: QA@thonhauser.net
Website: www.afco.eu

Additional information

Manufacturer

Country	Name	Postal code/city	Telephone	e-Mail	website
Austria	Thonhauser GmbH	2372 Giesshübl	+43 2236 320 272	Cleaning@thon-hauser.net	www.afco.eu

e-mail (competent person)
QA@thonhauser.net

1.4 Emergency telephone number

Manufacturer
+43 (2236) 320 272
Mon - Thu 08:00 - 16:30, Fri 08:00 - 12:30

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
2.14	Oxidising solid	3	Ox. Sol. 3	H272
3.1O	Acute toxicity (oral)	5	Acute Tox. 5	H303
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4R	Respiratory sensitisation	1	Resp. Sens. 1	H334
3.4S	Skin sensitisation	1	Skin Sens. 1	H317
3.8R	Specific target organ toxicity - single exposure (respiratory tract irritation)	3	STOT SE 3	H335
4.1A	Hazardous to the aquatic environment - acute hazard	3	Aquatic Acute 3	H402
4.1C	Hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of H-phrases: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

- Signal word **danger**

- Pictograms

GHS03, GHS07, GHS08

- Hazard statements

H272	May intensify fire; oxidizer.
H303	May be harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

- Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep/store away from clothing/combustible materials.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an authorized waste treatment facility.

- Hazardous ingredients for labelling disodium peroxodisulphate

2.3 Other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Conc.	Classification acc. to GHS	Pictograms	M-Factors
Sulphamidic acid	CAS No 5329-14-6 EC No 226-218-8	35 – < 50 wt%	Acute Tox. 5 / H303 Acute Tox. 5 / H313 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Aquatic Acute 3 / H402 Aquatic Chronic 1 / H410		
Disodium peroxodisulphate	CAS No 7775-27-1 EC No 231-892-1	35 – < 50 wt%	Ox. Sol. 3 / H272 Acute Tox. 4 / H302 Acute Tox. 5 / H313 Acute Tox. 5 / H333 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 STOT SE 3 / H335 Aquatic Acute 3 / H402		
Tripotassium orthophosphate	CAS No 13845-36-8 EC No 237-574-9	5 – < 20 wt%	Acute Tox. 5 / H303		
Potassium permanganate	CAS No 7722-64-7 EC No 231-760-3	< 1 wt%	Ox. Sol. 2 / H272 Acute Tox. 5 / H303 Acute Tox. 5 / H313 Repr. 2 / H361d Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411		

Remarks

for full text of abbreviations: see SECTION 16

Regulation 528/2012/EU concerning the making available on the market and use of biocidal products

Biocidal active substances		
Name of substance	**w/w**	**unit**
Disodium peroxodisulphate	412	g/kg

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Ideally, use the PREVIN® solution as the first rinse. Use all of the content. If the PREVIN® solution is not immediately available, rinse with water first and then as soon as possible with the PREVIN® solution.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

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, foam, alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Oxidising property.

Hazardous combustion products

nitrogen oxides (NOx), phosphorus oxides (PxOy), sulphur oxides (SOx)

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

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

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

Advice on how to contain a spill

covering of drains, take up mechanically

Advice on how to clean up a spill

Take up mechanically. Absorbents and binders, neutralising agents.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area. Avoid mixing with flammable or combustible substances (e.g. sawdust).

6.4 Reference to other sections

Hazardous combustion products: see section 5. Incompatible substances or mixtures: see section 7. 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

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room.

- Handling of incompatible substances or mixtures

- Keep away from

organic absorbing material, pulp/paper, bases (alkalis)

- Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Flammability hazards

Keep valves and fittings free from oil and grease.

- Incompatible substances or mixtures

Prohibition of joint storage (with): bases (alkalis),
Keep/store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles.

- Floors

The materials shall display sufficient resistance to the prevalent chemical conditions (Acids).

- Protect against external exposure, such as

heat, sunlight, direct light irradiation

- Consideration of other advice

Observe technical data sheet.

- Ventilation requirements

Use local and general ventilation.

7.3 Specific end use(s)

These information are not available.

7.4 Other information

storage temperature of 0 °C and up to 20 °C
recommended storage temperature: 15-25 °C

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

this information is not available

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Sulphamidic acid	5329-14-6	DNEL	70.5 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects
Sulphamidic acid	5329-14-6	DNEL	10 mg/kg bw/day	Human, dermal	Worker (industry)	Chronic - systemic effects
Disodium peroxodisulphate	7775-27-1	DNEL	2.06 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects
Disodium peroxodisulphate	7775-27-1	DNEL	0.824 mg/m³	Human, inhalatory	Worker (industry)	Chronic - local effects
Disodium peroxodisulphate	7775-27-1	DNEL	12.7 mg/kg bw/day	Human, dermal	Worker (industry)	Chronic - systemic effects
Tripotassium orthophosphate	13845-36-8	DNEL	5.88 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects
Potassium permanganate	7722-64-7	DNEL	0.2 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Sulphamidic acid	5329-14-6	PNEC	200 mg/l	Microorganisms	Sewage treatment plant (STP)	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	0.3 mg/kg	Benthic organisms	Sediments	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	0.03 mg/kg	Pelagic organisms	Sediments	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	0.3 mg/l	Aquatic organisms	Water	Intermittent release
Sulphamidic acid	5329-14-6	PNEC	1.8 mg/l	Aquatic organisms	Freshwater	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	0.18 mg/l	Aquatic organisms	Marine water	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	20 mg/l	Aquatic organisms	Sewage treatment plant (STP)	Short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Sulphamidic acid	5329-14-6	PNEC	8.36 mg/kg	Aquatic organisms	Freshwater sediment	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	0.84 mg/kg	Aquatic organisms	Marine sediment	Short-term (single instance)
Sulphamidic acid	5329-14-6	PNEC	5 mg/kg	Terrestrial organisms	Soil	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	3.6 mg/l	Microorganisms	Sewage treatment plant (STP)	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.275 mg/kg	Benthic organisms	Sediments	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.0396 mg/kg	Pelagic organisms	Sediments	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.763 mg/l	Aquatic organisms	Water	Intermittent release
Disodium peroxodisulphate	7775-27-1	PNEC	0.518 mg/l	Aquatic organisms	Freshwater	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.052 mg/l	Aquatic organisms	Marine water	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	3.6 mg/l	Aquatic organisms	Sewage treatment plant (STP)	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	2.03 mg/kg	Aquatic organisms	Freshwater sediment	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.203 mg/kg	Aquatic organisms	Marine sediment	Short-term (single instance)
Disodium peroxodisulphate	7775-27-1	PNEC	0.1 mg/kg	Terrestrial organisms	Soil	Short-term (single instance)
Potassium permanganate	7722-64-7	PNEC	1.64 mg/l	Microorganisms	Sewage treatment plant (STP)	Short-term (single instance)
Potassium permanganate	7722-64-7	PNEC	0.6 µg/l	Aquatic organisms	Water	Intermittent release
Potassium permanganate	7722-64-7	PNEC	0.06 µg/l	Aquatic organisms	Freshwater	Short-term (single instance)
Potassium permanganate	7722-64-7	PNEC	1.64 mg/l	Aquatic organisms	Sewage treatment plant (STP)	Short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Use safety goggle with side protection. Use protective eyewear to guard against splash of liquids. EN 166.

Skin protection

- Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

- Protective gloves - Splash protection

Recommended protective gloves (trademark/manufacturer):

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Acid-resistant, acid-proof overalls or apron. Acid-proof, acid-resistant boots or safety shoes.

Chemical protective clothing

Wear suitable protective clothing.

Respiratory protection

Particulate filter device (EN 143). Adequate particulate filter (EN 143). Type: B (against inorganic gases and vapours, colour code: Grey).

Environmental exposure controls

Avoid release to the environment. Refer to special instructions/safety data sheets. Before discharge of the waste water into a municipal waste water treatment facility the product normally needs to be neutralised.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid
Colour	pink
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not relevant (solid)
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	1.2 – 2.2 (in aqueous solution: 10 $^{g}/_{l}$, 20 °C) * (acid)
Kinematic viscosity	not relevant
Solubility(ies)	not determined

Partition coefficient

n-octanol/water (log KOW)	not relevant (inorganic)

Vapour pressure	not determined

Density and/or relative density

Density	not determined
Relative vapour density	not relevant (solid)

Particle characteristics	no data available

9.2 Other information

Information with regard to physical hazard classes there is no additional information

Other safety characteristics

Solid content 100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Oxidising property.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Exhibits an exothermic reaction (with): Caustic solutions (Alkalis)

Dangerous/dangerous reactions with: base metals (formation of hydrogen), oxidisers

10.4 Conditions to avoid

Keep away from heat. UV-radiation/sunlight.

10.5 Incompatible materials

combustible materials

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

May be harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral >1,605 $^{mg}/_{kg}$.
Dermal >4,841 $^{mg}/_{kg}$.
Inhalation: dust/mist >12.38 $^{mg}/_{l}$/4h.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
Sulphamidic acid	5329-14-6	Oral	2,140 $^{mg}/_{kg}$
Sulphamidic acid	5329-14-6	Dermal	>2,000 $^{mg}/_{kg}$
Disodium peroxodisulphate	7775-27-1	Oral	1,200 $^{mg}/_{kg}$
Disodium peroxodisulphate	7775-27-1	Dermal	>2,000 $^{mg}/_{kg}$
Disodium peroxodisulphate	7775-27-1	Inhalation: dust/mist	>5.1 $^{mg}/_{l}$/4h
Tripotassium orthophosphate	13845-36-8	Oral	>2,000 $^{mg}/_{kg}$
Potassium permanganate	7722-64-7	Oral	>2,000 $^{mg}/_{kg}$
Potassium permanganate	7722-64-7	Dermal	>2,000 $^{mg}/_{kg}$

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sulphamidic acid	5329-14-6	LC50	70.3 mg/l	Fish	96 h
Sulphamidic acid	5329-14-6	EC50	71.6 mg/l	Aquatic invertebrates	24 h
Sulphamidic acid	5329-14-6	ErC50	48 mg/l	Algae	72 h
Disodium peroxodi-sulphate	7775-27-1	LC50	76.3 mg/l	Fish	96 h
Disodium peroxodi-sulphate	7775-27-1	EC50	120 mg/l	Aquatic invertebrates	48 h
Tripotassium orthophos-phate	13845-36-8	LC50	1,850 mg/l	Fish	24 h
Tripotassium orthophos-phate	13845-36-8	EC50	>100 mg/l	Aquatic invertebrates	48 h
Potassium permangan-ate	7722-64-7	LC50	1.51 mg/l	Fish	24 h
Potassium permangan-ate	7722-64-7	EC50	0.15 mg/l	Aquatic invertebrates	24 h
Potassium permangan-ate	7722-64-7	EbC50	0.43 mg/l	Algae	72 h
Potassium permangan-ate	7722-64-7	ErC50	0.8 mg/l	Algae	72 h

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sulphamidic acid	5329-14-6	EC50	>60 mg/l	Aquatic invertebrates	21 d
Disodium peroxodi-sulphate	7775-27-1	EC50	11 mg/l	Aquatic invertebrates	5 d
Tripotassium orthophos-phate	13845-36-8	ErC50	>900 mg/l	Algae	7 d
Tripotassium orthophos-phate	13845-36-8	EC50	>1,000 mg/l	Microorganisms	3 h
Potassium permangan-ate	7722-64-7	LC50	1.51 mg/l	Fish	24 h
Potassium permangan-ate	7722-64-7	EC50	164 mg/l	Microorganisms	3 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Sulphamidic acid	5329-14-6		-4.34 (pH value: <2, 20 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Recycling/reclamation of other inorganic materials.

Sewage disposal-relevant information

The application solution can be disposed in the sewage system, taking into account technical and national regulations.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number**	not subject to transport regulations
14.2	**UN proper shipping name**	not relevant
14.3	**Transport hazard class(es)**	none
14.4	**Packing group**	not assigned
14.5	**Environmental hazards**	non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)

Not subject to transport regulations: UN RTDG.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

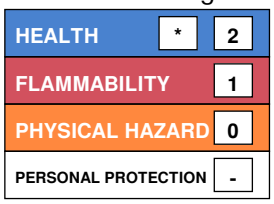
SECTION 15: Regulatory information

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

Industry or sector specific available guidance(s)

NPCA-HMIS® III

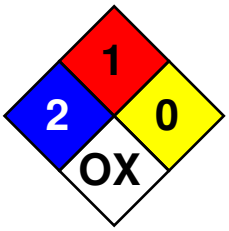
Hazardous Materials Identification System. American Coatings Association.



Category	Rating	Description
Chronic	*	Chronic (long-term) health effects may result from repeated overexposure
Health	2	Temporary or minor injury may occur
Flammability	1	Material that must be preheated before ignition can occur
Physical hazard	0	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).



Category	Degree of hazard	Description
Flammability	1	Material that must be preheated before ignition can occur
Health	2	Material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	Material that is normally stable, even under fire conditions

Category	Degree of hazard	Description
Special hazard	OX	Oxidizer that causes a moderate increase in the burning rate of combustible materials with which it comes into contact

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
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)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
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
IATA	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
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval

Abbr.	Descriptions of used abbreviations
Log KOW	n-Octanol/water
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
Ox. Sol.	Oxidising solid
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
Repr.	Reproductive toxicity
Resp. Sens.	Respiratory sensitisation
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STOT SE	Specific target organ toxicity - single exposure
UN RTDG	UN Recommendations on the Transport of Dangerous Good
VPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
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 section 2 and 3)

Code	Text
H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.

Code	Text
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

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