SAFETY DATA SHEET

Sodium tripolyphosphate

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

Date of issue : 2023-10-02
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Version : 1

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

1.1 Product identifier

Product name : Sodium tripolyphosphate
Chemical name : Pentasodium triphosphate
EC number : 231-838-7
REACH Registration number : 01-2119430450-54-0006
CAS number : 7758-29-4
Other means of identification : Triphosphoric acid, pentasodium salt; Triphosphoric acid, sodium salt (1:5); Pentasodium tripolyphosphate; Sodium phosphate; STPP

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

Identified uses
1. Manufacture of detergents. 2. Water treatment agent. 3. Manufacture of ceramics and glass. 4. Chemical synthesis. Industrial use of reactive processing aids. 5. Metal finishing. 6. Use of detergents containing STPP.

Uses advised against	Reason
Not determined.	Not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: "NDFZ" LLP
Office 1: 8, Omarova Zh st., 050020 Almaty, Medeu district, Republic of Kazakhstan
Telephone: + 7 727 3305 601; Fax: +7 727 3305 606

Only Representative PCC Rokita SA
ul. Sienkiewicza 4, 56-120 Brzeg Dolny, Poland
Phosphorus Chemistry Business Unit
Telephone: +48 71 794 2131; Fax: +48 71 794 3543

e-mail address of person responsible for this SDS : suinbayev.a@kpp.kz

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : +7 7262 456829 Department of emergency, Taraz city (24 hours, Russian/Kazakh lang.)

Supplier

Telephone number : +7 7262 911028 or to the local Fire Fighting Services

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance

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

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms : Not applicable.

Signal word : No signal word.

Hazard statements : Not applicable.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

PBT	P	B	T	vPvB	vP	vB
Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

Other hazards which do not result in classification : The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration ≥ 0.1% (w/w).

SECTION 3: Composition/information on ingredients

3.1 Substances : Mono-constituent substance

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
pentasodium triphosphate	EC: 231-838-7 CAS: 7758-29-4	≥94	Not classified. **See Section 16 for the full text of the H statements declared above.**	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[1] Constituent

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.Put on appropriate personal protective equipment (see Section 8).

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Irritating if eye not washed after exposure, non-irritating if eye washed.

Inhalation : Dust of the product may cause nose, throat and respiratory track irritation.

Skin contact : Cause skin irritation and itching. If skin washed after exposure no adverse effects are expected. Absorption through skin limited.

Ingestion : Ingestion of large quantities may cause irritation, nausea, vomiting, diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous combustion products : Decomposition products may include the following materials:
phosphorus oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information : Non-explosive.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Avoid dust formation. Avoid breathing dust. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : No additional information.

Industrial sector specific solutions : No additional remark.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Pentasodium triphosphate	DNEL	Long term Inhalation	0,661 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	0,661 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	0,375 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	0,375 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0,661 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	0,66 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0,375 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0,375 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0,75 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0,75 mg/kg bw/day	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Pentasodium triphosphate	Sediment	0,19 mg/kg dwt	Equilibrium Partitioning
	Soil	0,14 mg/kg dwt	Equilibrium Partitioning
	Fresh water	0,005 mg/l	Assessment Factors
	Marine	0,005 mg/l	Assessment Factors

8.2 Exposure controls

Appropriate engineering controls : Ensure that eyewash stations and safety showers are close to the workstation location.Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.Wear suitable gloves tested to EN374.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use suitable protective equipment to avoid breathing in dust.Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid. [Powder.]

Color : White.

Odor : Odorless.

Melting point/freezing point : 622°C

Initial boiling point and boiling range : Not applicable.

Flammability : Non-flammable.

Lower and upper explosion limit : Lack of data.

Flash point : Lack of data.

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not applicable.

pH : Not applicable.

Viscosity : Lack of data.

Solubility(ies) :

Media	Result
cold water	Soluble
hot water	Easily soluble
methanol	Very slightly soluble
diethyl ether	Not soluble

Solubility in water : 148 g/l

Partition coefficient: n-octanol/ water	:	Not applicable.
Vapor pressure	:	Not applicable.
Relative density	:	2,55
Density	:	2,54 g/cm³
Vapor density	:	Lack of data.
Explosive properties	:	Non-explosive.
Oxidizing properties	:	No oxidizing ingredients present.

Particle characteristics

Median particle size : Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : The product hydrolyses in the presence of water.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : None known.

10.5 Incompatible materials : None.

10.6 Hazardous decomposition products : None.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Pentasodium triphosphate	LC50 Inhalation Dusts and mists	Rat	>390 mg/m³	4 hours
	LD50 Dermal	Rabbit	>4640 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary : Not considered to be toxic to humans.

Acute toxicity estimates

N/A

Irritation/Corrosion

Conclusion/Summary

Skin : Non-irritating to the skin.

Eyes : Non-irritating to the eyes.

Respiratory : Lack of data.

Sensitization

Conclusion/Summary

Skin : Non-sensitizer to skin.

Respiratory : Lack of data.

Mutagenicity

Conclusion/Summary : No evidence of genetic toxicity in vivo or in vitro.

Carcinogenicity

Conclusion/Summary : No carcinogenic effect. No increase in tumours and no evidence of carcinogenic effect at highest dose = 0.5% in diet = 225 mg/kg/day in 2 year chronic oral toxicity study on rat.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Pentasodium triphosphate	Negative	Negative	Negative	Rat	Oral: 225 mg/kg	2 years

Conclusion/Summary : No adverse effects on fertility, reproductive performance, offspring viability, offspring survival and offspring body weight at 0.5% in diet = 225 mg/kg/day in 2 year chronic oral toxicity study on rat.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Pentasodium triphosphate	Negative - Oral Negative - Oral Negative - Oral	Mouse Rabbit Rat	238 mg/kg 250 mg/kg 170 mg/kg	- - -

Conclusion/Summary : No teratogenic effect.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure : Routes of entry anticipated: Inhalation, Eyes.
Routes of entry not anticipated: Oral, Dermal.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Irritating if eye not washed after exposure, non-irritating if eye washed.

Inhalation : Dust of the product may cause nose, throat and respiratory track irritation.

Skin contact : Cause skin irritation and itching. If skin washed after exposure no adverse effects are expected. Absorption through skin limited.

Ingestion : Ingestion of large quantities may cause irritation, nausea, vomiting, diarrhea.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Inhalation: dust of the product may cause nose, throat and respiratory track irritation.

Eye contact: irritating if eye not washed after exposure, non-irritating if eye washed.
Skin contact/Absorption: Cause skin irritation and itching. If skin washed after exposure no adverse effects are expected. Absorption through skin limited.
Ingestion: STPP is used as a food additive and is “generally recognised as safe” by the US food and drugs agency. Although , ingestion of large quantities may cause

irritation, nausea, vomiting, diarrhea.

Potential delayed effects : No adverese effects expected.

Long term exposure

Potential immediate effects : Inhalation: long exposure to dust of the product may cause respiratory track irritation.

Eye contact: irritating to eye.
Skin contact/Absorption: cause skin irritation and itching. Absorption through skin limited.
Ingestion: STPP is used as a food additive and is “generally recognised as safe” by the US food and drugs agency.

Potential delayed effects : Lack of data.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Pentasodium triphosphate	Sub-chronic NOAEL Oral Chronic NOEL Oral	Dog Rat	100 mg/kg 225 mg/kg	1 months 2 years

Conclusion/Summary : Data on animals:
Repated dose toxicity - oral: the no-observed adverse effect level is 0.5% in the diet or 225 mg/kg/day (2-yar studies in rats).
Repated dose toxicity - dermal: no data.
Repated dose toxicity - inhalation: no data.

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration ≥ 0.1% (w/w).

11.2.2 Other information

No additional information.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Pentasodium triphosphate	EC50 >900 mg/l EC50 160 mg/l EC50 >100 mg/l Fresh water Acute LC50 >1850 mg/l	Aquatic plants Aquatic plants Daphnia - *Daphnia magna* Fish	7 days 90 hours 48 hours 24 hours

Conclusion/Summary : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Conclusion/Summary : Not applicable.

12.3 Bioaccumulative potential

Lack of data.

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : 142,44

Mobility : Lack of data.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Pentasodium triphosphate	Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

12.6 Endocrine disrupting properties

The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration ≥ 0.1% (w/w).

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

European waste catalogue (EWC)

Waste code	Waste designation
16 03 04	inorganic wastes other than those mentioned in 16 03 03

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
Bag	15 01 02	plastic packaging

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-

14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not regulated.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Other EU regulations

DIRECTIVE 2008/68/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 September 2008 on the inland transport of dangerous goods (ADR, ADN, RID)
IATA /International Air Transport Association/ Dangerous Goods Regulations (ICAO/IATA DGR)
International Maritime Dangerous Goods Code (IMDG CODE)

Explosives precursors (1148/2019/EU) : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants (1021/2019/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

15.2 Chemical Safety Assessment : Not applicable.

SECTION 16: Other information

Changes to the Safety Data Sheet : Not applicable.

Abbreviations and acronyms :
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
AOX = Adsorbable Organically Bound Halogens
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CMR = Carcinogen, Mutagen or Reproductive toxicant
CSA = Chemical Safety Assessment
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC number = EINECS or ELINCS number
EC50 = Half maximal effective concentration
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
H statement = CLP/GHS Hazard statement
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC50 = Half maximal inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
R phrase = DSD/DPD Risk phrase
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
STOT = Specific Target Organ Toxicity
SVHC = Substances of Very High Concern
UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP]

Not applicable.

Training advice : Ensure operatives are trained to minimise exposures.

Notice to reader

The information contained herein is accurate to the latest knowledge and describes the product from the point of view of help and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"