

# **Safety Data Sheet**

29 CFR 1910.1200 App D

# **THPS 75%**

Version number: 1.0

# **SECTION 1: Identification**

#### 1.1 Product identifier

Trade name THPS 75%

CAS number Not relevant (mixture)

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

Relevant identified uses Industrial use

**Uses advised against**Do not use for private purposes (household)

# 1.3 Details of the supplier of the safety data sheet

Valudor Products, LLC
Telephone: +1 (760) 635 8500
179 Calle Magdalena Suite 100
e-mail: info@valudor.com
Encinitas, California CA 92024
Website: www.valudor.com

**United States** 

# 1.4 Emergency telephone number

**Emergency information** 800-535-5053 (Infotrac)

As above or nearest toxicological information centre.

# **SECTION 2: Hazard(s) identification**

# 2.1 Classification of the substance or mixture

# Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Classification							
Section	Hazard class	Category	Hazard class and category	Hazard state- ment			
A.10	acute toxicity (oral)	4	Acute Tox. 4	H302			
A.1I	acute toxicity (inhal.)	3	Acute Tox. 3	H331			
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318			
A.4S	skin sensitization	1	Skin Sens. 1	H317			
A.7	reproductive toxicity	2	Repr. 2	H361d			

For full text of abbreviations: see SECTION 16

## 2.2 Label elements

United States: en Page: 1 / 18

# Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word danger

**Pictograms** 

GHS05, GHS06, GHS07, GHS08









## **Hazard statements**

**H302** Harmful if swallowed.

H317 May cause an allergic skin reaction.H318 Causes serious eye damage.

**H331** Toxic if inhaled.

**H361d** Suspected of damaging the unborn child.

# **Precautionary statements**

**P201** Obtain special instructions before use.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.

**P272** Contaminated work clothing must not be allowed out of the workplace.

**P280** Wear eye protection/face 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.

P310 Immediately call a poison center/doctor.P321 Specific treatment (see on this label).

P330 Rinse mouth.

**P363** Wash contaminated clothing before reuse.

**P403+P233** Store in a well-ventilated place. Keep container tightly closed.

**P405** Store locked up.

**P501** Dispose of contents/container in accordance with local/regional/national/interna-

tional regulations.

Hazardous ingredients for labelling tetrakis(hydroxymethyl)phosphonium

sulphate(2:1)

## 2.3 Other hazards

#### Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq$  0.1%.

United States: en Page: 2 / 18

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture).

#### 3.2 Mixtures

## **Description of the mixture**

Hazardous ir	gredients						
Name of substance	Identifier	Wt%	Classification acc. to GHS	Picto- grams	Notes	Specific Conc. Limits	M-Factors
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	CAS No 55566-30-8	75	Acute Tox. 4 / H302 Acute Tox. 2 / H330 Eye Dam. 1 / H318 Skin Sens. 1A / H317 Repr. 2 / H361d		-	-	-

For full text of H-phrases: see SECTION 16

#### **SECTION 4: First-aid measures**

# 4.1 Description of first-aid measures

#### **General notes**

Self-protection of the first aider.

Remove affected person from the danger area and lay down.

Do not leave affected person unattended.

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**

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

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Get medical advice/attention.

Wash contaminated clothing before reuse.

# Following eye contact

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.

United States: en Page: 3 / 18

# Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Call a physician immediately.

#### Notes for the doctor

None.

# 4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

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

None.

#### **SECTION 5: Fire-fighting measures**

# 5.1 Extinguishing media

#### Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2), coordinate firefighting measures to the fire surroundings

# 5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous decomposition products: Section 10.

If heated: Danger of bursting container.

## **Hazardous combustion products**

carbon monoxide (CO), carbon dioxide (CO2)

## 5.3 Advice for firefighters

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Coordinate 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

chemical protective clothing, Wear self-contained 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.

United States: en Page: 4 / 18

#### For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/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.

Stop leak if safe to do so.

# 6.3 Methods and material for containment and cleaning up

# Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

# **Appropriate containment 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

Hazardous combustion products: see section 5.

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

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid contact with skin and eyes.

Do not breathe vapor/spray.

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

Use local and general ventilation.

Keep away from sources of ignition - No smoking.

## Specific notes/details

None.

# 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.

United States: en Page: 5 / 18

Remove contaminated clothing and protective equipment before entering eating areas.

# 7.2 Conditions for safe storage, including any incompatibilities

# Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

# **Incompatible substances or mixtures**

Incompatible materials: see section 10.

## Protect against external exposure, such as

heat, frost

#### Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

# **Ventilation requirements**

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

Provision of sufficient ventilation.

# Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

# **Packaging compatibilities**

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

#### 7.3 Specific end use(s)

Industrial use.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

The following constituents are the only constituents of the product which have a PEL, a TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Occup	Occupational exposure limit values (Workplace Exposure Limits)								
Coun- try	Name of agent	CAS No	Identi- fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion	Source
US	tetrakis(hydroxy- methyl)phos- phonium sulfate (2:1)	55566- 30-8	TLV®	-	2	-	-	-	ACGIH® 2023

# Notation

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

United States: en Page: 6 / 18

# 8.2 Exposure controls

Avoid contact during pregnancy/while nursing.

# **Appropriate engineering controls**

Use local and general ventilation.

#### Individual protection measures (personal protective equipment)

## **Eye/face protection**

Wear eye/face protection.

# **Hand protection**

Protective gloves						
Material	Material thickness	Breakthrough times of the glove material				
no information available	-	-				

Wear suitable gloves.

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

Check leak-tightness/impermeability prior to use.

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.

# **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

During spraying wear suitable respiratory equipment.

## **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

**Color** colorless

**Odor** characteristic

**Odor threshold** not determined

Other safety parameters

**pH (value)** ~3 – 5

Melting point/freezing point ~-40 °C

Boiling point or initial boiling point and boiling ~109 °C

range

Flash point 96 °C

**Evaporation rate** not determined

Flammability (solid, gas) not relevant

(fluid)

**Explosive limits** 

not determined

**Vapor pressure** 1.7 kPa at 25 °C

Density ~1.38 g/<sub>ml</sub>

Relative density / Relative vapour density >1 (air = 1)

1.4 (water = 1)

Solubility(ies)

Water solubility soluble

**Partition coefficient** 

n-octanol/water (log KOW) not determined

Auto-ignition temperature ~279 °F

**Decomposition temperature** not relevant

**Viscosity** 

**Kinematic viscosity** not determined

**Dynamic viscosity** not determined

**Explosive properties** none

Oxidizing properties none

Information for relevant hazard classes

according to GHS

hazard classes acc. to GHS (physical hazards):

not relevant

9.2 Other information

Temperature class (USA, acc. to NEC 500) T4

(maximum permissible surface temperature on the equip-

ment: 135°C)

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

This material is not reactive under normal ambient conditions.

# 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

See below "Conditions to avoid".

# 10.3 Possibility of hazardous reactions

Dangerous/dangerous reactions with Oxidizers, Base.

# 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. UV-radiation/sunlight.

# 10.5 Incompatible materials

acids, bases, strong oxidizer

# 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

# **Classification procedure**

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

# Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

## **Acute toxicity**

Test data are not available for the complete mixture.

Harmful if swallowed.

Toxic if inhaled.

## Acute toxicity of components of the mixture

Name of substance	CAS No	Expos- ure route	End- point	Value	Species	Method	Source
tetrakis(hydroxymethyl)p hosphonium sulphate(2:1)	55566-30-8	oral	LD50	431 <sup>mg</sup> /	rat	OECD Guideline 401	ECHA
tetrakis(hydroxymethyl)p hosphonium sulphate(2:1)	55566-30-8	inhala- tion: dust/ mist	LC50	0.443 <sup>mg</sup> / <sub>l</sub> /4h	rat	OECD Guideline 403	ECHA

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Causes serious eye damage.

United States: en Page: 9 / 18

# Respiratory or skin sensitization Skin sensitization

May cause an allergic skin reaction.

## **Respiratory sensitization**

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

#### **IARC Monographs**

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans						
Name of substance	CAS No	Classification	Number			
tetrakis(hydroxymethyl)phosphonium sulphate(2:1)		3	-			

#### Legend

3 Not classifiable as to carcinogenicity in humans

# **National Toxicology Program (United States)**

None of the ingredients are listed.

## **OSHA Carcinogens**

None of the ingredients are listed.

## Reproductive toxicity

Suspected of damaging the unborn child.

# 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.

## 11.2 Other information

There is no additional information.

United States: en Page: 10 / 18

# **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 sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	LC50	48 h	0.45 <sup>mg</sup> / <sub>I</sub>	Acartia tonsa, marine cope- pod	-	ECHA
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	LC50	96 h	71 <sup>mg</sup> / <sub>l</sub>	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	EC50	48 h	11.3 <sup>mg</sup> / <sub>l</sub>	daphnia magna	OECD Guideline 202	ECHA
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	ErC50	72 h	0.12 <sup>mg</sup> / <sub>l</sub>	algae (Scelet- onema cost- atum)	DIN EN ISO 10253	ECHA

# Aquatic toxicity (chronic)

No data available.

# Other information

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	EC50	3 h	18 <sup>mg</sup> / <sub>l</sub>	activated sludge of a pre- dominantly do- mestic sewage	OECD Guideline 209	ECHA
tetrakis(hy- droxymethyl)p hosphonium sulphate(2:1)	55566-30-8	NOEC	3 h	2.4 <sup>mg</sup> / <sub>l</sub>	activated sludge of a pre- dominantly do- mestic sewage	OECD Guideline 209	ECHA

# 12.2 Persistence and degradability

# **Biodegradation**

No data available.

United States: en Page: 11 / 18

#### **Persistence**

No data available.

# 12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

## Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW
tetrakis(hydroxymethyl)pho sphonium sulphate(2:1)	55566-30-8	-	-9.8

# 12.4 Mobility in soil

No data available.

# 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

# 12.6 Endocrine disrupting properties Other adverse effects

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq$  0.1%.

#### **Remarks**

Keep away from drains, surface and ground water.

# **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

## Sewage disposal-relevant information

Do not empty into drains.

## Waste treatment of containers/packages

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.

## **SECTION 14: Transport information**

## 14.1 UN number

DOT UN2810

IMDG-Code UN2810

ICAO-TI UN2810

# 14.2 UN proper shipping name

**DOT** Toxic liquid, organic, n.o.s.

United States: en Page: 12 / 18

IMDG-Code TOXIC LIQUID, ORGANIC, N.O.S.

**ICAO-TI** Toxic liquid, organic, n.o.s.

**Technical name (hazardous ingredients)** tetrakis(hydroxymethyl)phosphonium

sulphate(2:1)

14.3 Transport hazard class(es)

**DOT** 6.1

IMDG-Code 6.1

**ICAO-TI** 6.1

14.4 Packing group

DOT

IMDG-Code III

ICAO-TI III

**14.5 Environmental hazards** hazardous to the aquatic environment

**Environmentally hazardous substance (aquatic** t

environment)

tetrakis(hydroxymethyl)phosphonium

sulphate(2:1)

14.6 Special precautions for user

14.7 Transport in bulk according to IMO

instruments

# 14.8 Information for each of the UN Model Regulations

# Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information

Particulars in the shipper's declaration UN2810, Toxic liquid, organic, n.o.s., (tetrakis(hy-

droxymethyl)phosphonium sulphate(2:1)), 6.1, III,

environmentally hazardous

Danger label(s) 6.1, fish and tree



Environmental hazards yes

(hazardous to the aquatic environment)

Special provisions (SP) IB3, T7, TP1, TP28

ERG No 153

## International Maritime Dangerous Goods Code (IMDG) Additional information

Marine pollutant yes

(hazardous to the aquatic environment)

(Tetrakis(hydroxymethyl)phosphoniumsulfat (2:1))

United States: en Page: 13 / 18

Danger label(s) 6.1, fish and tree

(\*\*) (\*\*<u>Y</u>2)

Special provisions (SP) 223, 274

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-A, S-A

Stowage category A

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

Environmental hazards yes

(hazardous to the aquatic environment)

Danger label(s) 6.1

Special provisions (SP) A3, A4, A137

Excepted quantities (EQ) E1

Limited quantities (LQ) 2 L

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations specific for the product in question

**National regulations (United States)** 

Toxic Substance Control Act (TSCA)

All ingredients are listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III )

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

None of the ingredients are listed

**Specific Toxic Chemical Listings (EPCRA Section 313)** 

None of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

None of the ingredients are listed

**Clean Air Act** 

None of the ingredients are listed

United States: en Page: 14 / 18

# **Right to Know Hazardous Substance List**

# **Cleaning Product Right to Know Act Substance List (CA-RTK)**

None of the ingredients are listed

# **Toxic or Hazardous Substance List (MA-TURA)**

None of the ingredients are listed

## **Hazardous Substances List (MN-ERTK)**

None of the ingredients are listed

## **Hazardous Substance List (NJ-RTK)**

Name of substance	Name acc. to inventory	CAS No	Remarks	Classifica- tions	Lis- ted in	Sub- stanc e num- ber	DOT num- ber
tetrakis(hydroxy- methyl)phosphonium sulphate(2:1)	TETRAKIS (HYDROXY-METHYL) PHOS-PHONIUM SULFATE see Fact Sheet on # 4201TETRAKIS (HY-DROXYMETHYL) PHOSPHONIUM CHLORIDE (PHOS-PHONIUM, TETRAKIS (HYDROXY-METHYL)-, SULFATE (2:1))	55566- 30-8	-		2	4202	-

## Legend

2 "2009 TLVs® and BEIs®, Threshold Limit Values and Biological Exposure Indices," American Conference of Governmental Industrial Hygienists (ACGIH), 2009.

# **Hazardous Substance List (Chapter 323) (PA-RTK)**

None of the ingredients are listed

# **Hazardous Substance List (RI-RTK)**

None of the ingredients are listed

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

None of the ingredients are listed

# Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

None of the ingredients are listed

# 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

United States: en Page: 15 / 18

# SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2023-06-02

# **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2023	From ACGIH®, 2023 TLVs® and BEIs® Book. Copyright 2023. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)
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
EmS	Emergency Schedule
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
ERG No	Emergency Response Guidebook - Number
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
IARC	International Agency for Research on Cancer
IARC Mono- graphs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	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

United States: en Page: 16 / 18

Abbr.	Descriptions of used abbreviations
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
NOEC	No Observed Effect Concentration
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Repr.	Reproductive toxicity
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
TLV®	Threshold Limit Values
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

# Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

# **Classification procedure**

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 section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H361d	Suspected of damaging the unborn child.

United States: en Page: 17 / 18

# Responsible for the safety data sheet

Chemical Regulatory Compliance Company

Jasper, GA

Telephone: +1 (630) 410-1660
e-Mail: GHS@crc-us.com
Website: www.crc-us.com

USA

# **Disclaimer**

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

United States: en Page: 18 / 18