Safety Data Sheet

1,1,2,2-Tetrachlorethan-d2

Classification acc. to 29 CFR 1910.1200

Version number: GHS 3.2
Replaces version of: 2023-02-01 (GHS 2)

Revision: 2025-06-11

SECTION 1: Identification

1.1 Product identifier

Identification of the substance	**1,1,2,2-Tetrachlorethan-d2**
CAS number	33685-54-0
Alternative name(s)	TCE-d2

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

Relevant identified uses	laboratory and analytical use laboratory chemical
HS code	2845.90.

1.3 Details of the supplier of the safety data sheet

Zeochem AG
Joweid 5, CH-8630 Rüti
Switzerland

Telephone: +41 44 922 93 93
e-Mail: info@zeochem.com
Website: https://www.zeochem.com

1.4 Emergency telephone number

Poison center

Country	Name	Telephone
Switzerland	Toxzentrum Zürich / Tox. Info Suisse	+41 44 251 51 51 / CH: 145 - 24h/7d
United States	CHEMTREC USA	+1 800 424 9300 - 24h/7d

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.1D	acute toxicity (dermal)	1	Acute Tox. 1	H310
A.1I	acute toxicity (inhal.)	2	Acute Tox. 2	H330
A.6	carcinogenicity	2	Carc. 2	H351

For full text of abbreviations: see SECTION 16.

2.2 Label elements

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

- Signal word danger

2.2.1.2 Pictograms

GHS06, GHS08	

Hazard statements	
H310+H330	fatal in contact with skin or if inhaled
H351	suspected of causing cancer

Precautionary statements	
P201	obtain special instructions before use
P260	do not breathe dust/fume/gas/mist/vapors/spray
P262	do not get in eyes, on skin, or on clothing
P270	do not eat, drink or smoke when using this product
P271	use only outdoors or in a well-ventilated area
P280	wear protective gloves/protective clothing
P284	in case of inadequate ventilation wear respiratory protection
P304+P340	if inhaled: Remove person to fresh air and keep comfortable for breathing
P310	immediately call a poison center/doctor
P320	specific treatment is urgent (see on this label)
P321	specific treatment (see on this label)
P352	wash with plenty of water
P362	take off contaminated clothing and wash 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/international regulations

2.3 Other hazards

Hazards not otherwise classified

May be harmful if swallowed (GHS category 5: acutely toxic - oral).
Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

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

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	1,1,2,2-Tetrachlorethan-d2
Identifiers	
CAS No	33685-54-0
Purity	≥99 %

Impurities and additives, classification acc. to GHS

Name of substance	CAS No	Wt%	Classification acc. to GHS
Deuterium oxide	7789-20-0	0.03	

Molecular formula	C2D2Cl4
Molar mass	170 $^{g}/_{mol}$

Remarks

For full text of abbreviations: see SECTION 16

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. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

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.

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: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride (HCl)

5.3 Advice for firefighters

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.

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 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.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

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

Recommendations

Store in a dry place.

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

Use local and general ventilation. Use only in well-ventilated areas.

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

- Ventilation requirements

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

- Specific designs for storage rooms or vessels

- Storage temperature — Recommended storage temperature: 4 °C
2 °C

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	1,1,2,2-tetrachloroethane	79-34-5	TLV®	1						H	ACGIH® 2023
US	1,1,2,2-tetrachloroethane	79-34-5	PEL	5	35					H	29 CFR 1910.1000
US	1,1,2,2-tetrachloroethane	79-34-5	REL	1 (10 h)	7 (10 h)					H, appx-A, appx-C	NIOSH REL
US	1,1,2,2-tetrachloroethane (acetylene tetrachloride)	79-34-5	PEL (CA)	1	7					H	Cal/OSHA PEL

Notation

appx-A	NIOSH Potential Occupational Carcinogen (Appendix A)
appx-C	Appendix C - Supplementary Exposure Limits
Ceiling-C	ceiling value is a limit value above which exposure should not occur
H	absorbed through the skin
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

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

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.

- Type of material

Nitrile
IIR: isobutene-isoprene (butyl) rubber

- Breakthrough times of the glove material

>30 minutes (permeation: level 2)

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

Particle	not relevant (liquid)

Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	-43 °C
Initial boiling point and boiling range	146 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	2.5 kPa at 25 °C
Density	1.62 $^{g}/_{cm^3}$ at 25 °C
Vapor density	this information is not available

Solubility(ies)

- Water solubility	150 $^{mg}/_{l}$ at 25 °C

Partition coefficient

- n-octanol/water (log KOW)	2.53 (pH value: ~7, 23 °C) (ECHA)
Auto-ignition temperature	>650 °C at 1 atm (ECHA)

Viscosity

- Dynamic viscosity	1.11 mPa s at 0 °C
Explosive properties	none
Oxidizing properties	none

9.2 Other information

Refractive index	1.49 (20 °C)
Temperature class (USA, acc. to NEC 500)	T1 (maximum permissible surface temperature on the equipment: 450°C)

SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability
See below "Conditions to avoid".

10.3 Possibility of hazardous reactions
No known hazardous reactions.

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

10.5 Incompatible materials
Oxidizers

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

Acute toxicity

Fatal in contact with skin. Fatal if inhaled.
GHS of the United Nations, annex 4: May be harmful if swallowed.

- Acute toxicity estimate (ATE)

Dermal	5 $^{mg}/_{kg}$
Inhalation: vapor	>0.5 $^{mg}/_{l}$/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization
Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	**CAS No**	**Classification**	**Number**
1,1,2,2-Tetrachlorethan-d2	79-34-5	2B	

Legend

2B Possibly carcinogenic to humans

Reproductive toxicity
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

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.

SECTION 12: Ecological information

12.1 Toxicity
Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)			
Endpoint	**Value**	**Species**	**Exposure time**
LC50	5 $^{mg}/_{l}$	fish	96 h
EC50	8.5 $^{mg}/_{l}$	aquatic invertebrates	48 h
ErC50	3.64 $^{mg}/_{l}$	algae	72 h

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

n-octanol/water (log KOW)	2.53 (pH value: ~7, 23 °C) (ECHA)
BCF	49 (ECHA)

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) in a concentration of ≥ 0.1%.

12.7 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages
Only packagings which are approved (e.g. acc. to DOT) may be used. 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

DOT	UN 1702
IMDG-Code	UN 1702
ICAO-TI	UN 1702

14.2 UN proper shipping name

DOT	1,1,2,2-Tetrachloroethane
IMDG-Code	1,1,2,2-TETRACHLOROETHANE
ICAO-TI	1,1,2,2-Tetrachloroethane

14.3 Transport hazard class(es)

DOT	6.1
IMDG-Code	6.1
ICAO-TI	6.1

14.4 Packing group

DOT	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards
hazardous to the aquatic environment

14.6 Special precautions for user

There is no additional information.

14.7 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 of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN1702, 1,1,2,2-Tetrachloroethane, 6.1, II, environmentally hazardous
Reportable quantity (RQ)	100 lbs (45.4 kg) (1,1,2,2-Tetrachlorethan-d2)
Danger label(s)	6.1, fish and tree

Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	IB2, N36, T7, TP2
ERG No	151

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (P) (hazardous to the aquatic environment)
Danger label(s)	6.1, fish and tree

Special provisions (SP)	-
Excepted quantities (EQ)	E4
Limited quantities (LQ)	100 mL
EmS	F-A, S-A
Stowage category	A
Segregation group	10 - Liquid halogenated hydrocarbons

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

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	6.1

Excepted quantities (EQ)	E4
Limited quantities (LQ)	1 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) substance is 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)

not listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings			
Name of substance	**CAS No**	**Remarks**	**Effective date**
1,1,2,2-Tetrachlorethan-d2	79-34-5		1987-01-01

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

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

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
1,1,2,2-Tetrachlorethan-d2	79-34-5		2 3 4	100 (45,4)

Legend

2	"2" indicates that the source is section 307(a) of the Clean Water Act
3	"3" indicates that the source is section 112 of the Clean Air Act
4	"4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

Clean Air Act

not listed

Right to Know Hazardous Substance List

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

Name of substance	CAS No	Functionality	Authoritative Lists
1,1,2,2-Tetrachlorethan-d2	79-34-5		ATSDR Neurotoxicants CA MCLs CA TACs CWA 303(c) IARC Carcinogens - 2B IRIS Carcinogens - Likely Carcin. Prop 65

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concen-tration Threshold
1,1,2,2-Tetrachlorethan-d2	79-34-5				0.1 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
1,1,2,2-Tetrachlorethan-d2	79-34-5	A, N, O, *	skin

Legend

*	Substances which are regulated by OSHA as carcinogens; have been categorized by the ACGIH as either "human carcinogens" or "suspect of carcinogenic potential for man"; have been evaluated by the International Agency for Research on Cancer (IARC) and found to be carcinogens or potential carcinogens; or have been listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP).
A	American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
N	National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
O	Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division
skin	If a potential for absorption from skin contact merits special consideration, the word "skin" follows the substance name.

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
1,1,2,2-Tetrachlorethan-d2	79-34-5		CA

Legend

CA	Carcinogenic

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

Name acc. to inventory	CAS No	Classification
ETHANE, 1,1,2,2-TETRACHLORO-	79-34-5	E

Legend

E	Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
1,1,2,2-Tetrachlorethan-d2	79-34-5	T

Legend

T	Toxicity (ACGIH®)

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

Proposition 65 List of chemicals

Name acc. to inventory	CAS No	Remarks	Type of the toxicity
1,1,2,2-tetrachloroethane	79-34-5		cancer

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	4	life-threatening; major or permanent damage may result from single or repeated overexposures
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	4	material that, under emergency conditions, can be lethal
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
EU	REACH Reg.	substance is listed
US	TSCA	substance is listed (ACTIVE)

Legend

REACH Reg.	REACH registered substances
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

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

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Identification of the substance: 1,1,2,2-Tetrachlorethane-d2	Identification of the substance: 1,1,2,2-Tetrachlorethan-d2	yes
1.1		Alternative name(s):	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
		TCE-d2	
1.3	Details of the supplier of the safety data sheet: Zeochem AG Joweid 5, CH-8630 Rüti Switzerland Telephone: +41 44 922 93 93 e-Mail: info@zeochem.com / info@zeochem.ch Website: https://www.zeochem.com	Details of the supplier of the safety data sheet: Zeochem AG Joweid 5, CH-8630 Rüti Switzerland Telephone: +41 44 922 93 93 e-Mail: info@zeochem.com Website: https://www.zeochem.com	yes
2.2.1.2		Precautionary statements: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.	yes
3.1	Name of substance: 1,1,2,2-Tetrachlorethane-d2	Name of substance: 1,1,2,2-Tetrachlorethan-d2	yes
3.1	Molar mass: 170 $^{g}/_{mol}$For full text of abbreviations: see SECTION 16.	Molar mass: 170 $^{g}/_{mol}$	yes
3.1		Remarks: For full text of abbreviations: see SECTION 16	yes
7.2		- Specific designs for storage rooms or vessels	yes
7.2		Storage temperature: Recommended storage temperature: 4 °C 2 °C	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
11.1		- Acute toxicity estimate (ATE): change in the listing (table)	yes
11.1		IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: change in the listing (table)	yes
12.5	Results of PBT and vPvB assessment: Data are not available.	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes
12.6	Endocrine disrupting properties: Not listed.	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.	yes
14.7	Reportable quantity (RQ): 100 lbs (45.4 kg) (1,1,2,2-Tetrachlorethane-d2)	Reportable quantity (RQ): 100 lbs (45.4 kg) (1,1,2,2-Tetrachlorethan-d2)	yes
15.1	Toxic Substance Control Act (TSCA): substance is listed as "ACTIVE"	Toxic Substance Control Act (TSCA): substance is listed (ACTIVE)	yes
15.1		Toxics Release Inventory: Specific Toxic Chemical Listings: change in the listing (table)	yes
15.1		List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4): change in the listing (table)	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		Toxic or Hazardous Substance List (MA-TURA): change in the listing (table)	yes
15.1		Hazardous Substances List (MN-ERTK): change in the listing (table)	yes
15.1		Hazardous Substance List (NJ-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (RI-RTK): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

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).

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

Code	Text
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.

Disclaimer

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