

**SAFETY DATA SHEET**

Revision Date: 02/24/2018

Print Date: 4/9/2018

SDS Number: R0711626

Version: 1.4

Ceraphyl™ 55 ester
™ Trademark, Ashland or its subsidiaries, registered
in various countries
826803

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**Product identifier**

Trade name : Ceraphyl™ 55 ester
™ Trademark, Ashland or its subsidiaries, registered in
various countries

Registration number 01-0000019433-72-0001

Substance name Ceraphyl 55

Substance No.

EC-No. 458-930-1

CAS-No. 106436-39-9

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

Recommended use : Personal care

Details of the supplier of the safety data sheet

Ashland
P.O. Box 2219
Columbus, OH 43216
United States of America (USA)
+1-614-790-3333

EHSProductSafety@ashland.com

Emergency telephone number

1-800-ASHLAND (1-800-274-5263)

Regulatory Information Number

1-800-325-3751

Product Information

+1-614-790-3333

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Eye irritation : Category 2A

Skin sensitization : Category 1

GHS label elements

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Hazard pictograms

:



Signal Word

: Warning

Hazard Statements

: May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary Statements

Prevention:
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Wash skin thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/ eye protection/ face protection.

Response:
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Wash contaminated clothing before reuse.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched	106436-39-9	Eye Irrit. 2A; H319 Skin Sens. 1; H317	100.00

SECTION 4. FIRST AID MEASURES



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- General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.
- If inhaled : If breathed in, move person into fresh air.
 If unconscious, place in recovery position and seek medical advice.
 If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
 If on skin, rinse well with water.
 First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
 Wash contaminated clothing before re-use.
- In case of eye contact : Flush eyes with water as a precaution.
 Remove contact lenses.
 Protect unharmed eye.
 If eye irritation persists, consult a specialist.
- If swallowed : Do not give milk or alcoholic beverages.
 Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : No symptoms known or expected.
 May cause an allergic skin reaction.
 Causes serious eye irritation.
- Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Carbon dioxide (CO2)
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during : Do not allow run-off from fire fighting to enter drains or water



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- firefighting : courses.
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods :
 Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
 Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.
 Do not smoke.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.

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Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Components	CAS-No.
Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched	106436-39-9

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : Respiratory protection is not required under normal conditions of use.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

: Wear as appropriate:
Impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment)

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supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid (20 °C)
Colour	: colourless
Odour	: No data available
Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: < -94 °F / < -70 °C GLP: yes
Boiling point/boiling range	: No data available
Flash point	: > 115 °C Method: closed cup GLP: yes
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.137 Pa (25 °C)
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.86 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: 0.0046 mg/l

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Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : log Pow: 6.285 (25 °C)

Thermal decomposition : No data available

Viscosity
Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : Not explosive
GLP: yes

Oxidizing properties : No data available

Surface tension : 73.05 mN/m, 2.17, 20 °C
57.73 mN/m, 5.01, 20 °C

Molecular weight : 284.48 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

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Acute toxicity

Not classified based on available information.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes
Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute inhalation toxicity : Remarks: It was demonstrated that during intended and foreseen applications, no respirable aerosol is formed.

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Species: Rabbit

Result: No skin irritation

GLP: yes

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Species: Rabbit

Result: Slight, transient irritation

Method: OECD Test Guideline 405

GLP: yes

Remarks: The liquid splashed in the eyes may cause irritation and reversible damage.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.



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Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Test Type: Local lymph node assay

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 429

GLP: yes

Germ cell mutagenicity

Not classified based on available information.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

: Test Type: in vitro assay

Test species: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

: Test Type: Chromosome aberration test in vitro

Test species: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Effects on fertility : Remarks: Not applicable

Effects on foetal development : Remarks: Not applicable

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

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Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Species: Rat, male and female

No observed adverse effect level: 1000 mg/kg

Application Route: Oral

Method: OECD Test Guideline 407

GLP: yes

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks: No data available

Carcinogenicity:**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.022 mg/l
 Exposure time: 96 h
 Test Type: static test
 Analytical monitoring: yes
 Method: OECD Test Guideline 203
 GLP: yes

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.012 mg/l

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aquatic invertebrates

Exposure time: 48 h
 Test Type: static test
 Analytical monitoring: yes
 Method: OECD Test Guideline 202
 GLP: yes

Toxicity to algae

: ErC50 (Pseudokirchneriella subcapitata (green algae)): >
 0.036 mg/l
 Test Type: Growth inhibition
 Analytical monitoring: yes
 Method: OECD Test Guideline 201
 GLP: yes

Toxicity to daphnia and other
 aquatic invertebrates
 (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 0.047 mg/l
 Exposure time: 21 d
 Test Type: flow-through test
 Analytical monitoring: yes
 Method: OECD Test Guideline 211
 GLP: yes

Toxicity to bacteria

: EC50 (activated sludge): > 1,000 mg/l
 Exposure time: 3 h
 Test Type: Respiration inhibition
 Method: OECD Test Guideline 209
 GLP: yes

Persistence and degradability**Components:**

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Biodegradability : aerobic
 Inoculum: activated sludge
 Biodegradation: 66 %
 Exposure time: 60 d
 Method: OECD Test Guideline 301B
 Remarks: Inherently biodegradable.

No data available

Bioaccumulative potential**Components:**

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Bioaccumulation : Bioconcentration factor (BCF): 1,658
 Remarks: Does not significantly accumulate in organisms.

Partition coefficient: n-
 octanol/water

: log Pow: 6.285 (25 °C)

No data available



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Mobility in soil

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Distribution among : log Koc: 4.08

environmental compartments Method: OECD Test Guideline 121

No data available

Other adverse effects

Product:

Additional ecological : An environmental hazard cannot be excluded in the event of
 information unprofessional handling or disposal., Very toxic to aquatic life
 with long lasting effects.

Components:

Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched:

Results of PBT and vPvB : This substance is not considered to be persistent,
 assessment bioaccumulating and toxic (PBT). This substance is not
 considered to be very persistent and very bioaccumulating
 (vPvB).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water
 courses or the soil.
 Do not contaminate ponds, waterways or ditches with
 chemical or used container.
 Send to a licensed waste management company.
 Dispose of in accordance with all applicable local, state and
 federal regulations.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Empty containers should be taken to an approved waste
 handling site for recycling or disposal.
 Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations REGULATION

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ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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MX_DG

UN 3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9		III	
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN 3082	Environmentally hazardous substance, liquid, n.o.s. (Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched)	9		III	
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN 3082	Environmentally hazardous substance, liquid, n.o.s. (Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched)	9		III	
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INTERNATIONAL MARITIME DANGEROUS GOODS

UN 3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched)	9		III	MARINE POLLUTANT:(Propanoic acid, 2,2-dimethyl-, tridecyl ester, branched)
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TDG_INWT_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

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U.S. DOT - INLAND WATERWAYS

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - ROAD

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant

yes

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Serious eye damage or eye irritation
 Respiratory or skin sensitisation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : This product is regulated under the United States Food and Drug Act (FDA).



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- DSL : This product contains one or several components that are not on the Canadian DSL and have annual quantity limits.
- AICS : On the inventory, or in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECI : Not in compliance with the inventory
- PICCS : Not in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

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NFPA:	HMIS III:						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table> <tr> <td>HEALTH</td><td>2</td></tr> <tr> <td>FLAMMABILITY</td><td>1</td></tr> <tr> <td>PHYSICAL HAZARD</td><td>0</td></tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	2	FLAMMABILITY	1	PHYSICAL HAZARD	0
HEALTH	2						
FLAMMABILITY	1						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements

H317 May cause an allergic skin reaction.

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H319

Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet


Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration,

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Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative