SAFETY DATA SHEET

Revision: 3.0 Date: 14 April 2021

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

No. 6 Fuel Oil

SECTION 1: IDENTIFICATION

Product identifier

Product name	No. 6 Fuel Oil
CAS No.	68553-00-4

Other means of identification — Residual Fuel Oil, Resid, Residue, Heavy Fuel Oil

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

Identified Use(s)	Marine fuel, furnace fuel.
Uses advised against	Anything other than the above.

Details of the supplier of the safety data sheet

Supplier	Vitol Inc. 2925 Richmond Ave, 11th Floor Houston, TX 77098
Telephone	(713) 230-1000
Fax	713-230-1185
E-mail (competent person)	SDSHOU@vitol.com

Emergency telephone number

Emergency Phone No.	Chemtrec: US/Canada: 1-800-424-9300 (24h) Mexico: 800 681 9531 (24h)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200

Physical hazards	Flammable Liquid, Category 4
Health hazards	Aspiration hazard, Category 1 Acute toxicity, Category 4 (Inhalation) Carcinogen, Category 1B Reproductive toxicity, Category 2 Specific target organ toxicity — repeated exposure, Category 2
Environmental hazards	Hazardous to the aquatic environment, Acute, Category 1 Hazardous to the aquatic environment, Chronic, Category 1

Label elements

Hazard Pictogram(s)

Signal Word(s): DANGER

Hazard Statement(s):
Combustible liquid
May be fatal if swallowed and enters airways.
Harmful if inhaled.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands and exposed skin thoroughly after handling.
Avoid contact during pregnancy and while nursing.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
In case of fire use foam, carbon dioxide or dry agent - never use water.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Dispose of contents in accordance with local, state or national legislation.

Other hazards

The vapour is heavier than air; beware of pits and confined spaces. May cause irritation to eyes and air passages. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

Percent of the mixture consists of ingredient(s) of unknown acute toxicity:

0% of the mixture consists of ingredients of unknown acute inhalated toxicity.
0% of the mixture consists of ingredients of unknown acute oral toxicity.
0% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Classification: OSHA HCS (29 CFR 1910.1200)

Chemical identity of the substance	%W/W	CAS No.	EC No.
Fuel Oil No. 6	100	68553-00-4	271-384-7

Hazardous constituents

Chemical identity of the substance	%W/W	CAS No.	EC No.
Clarified oils (Petroleum), catalytic cracked	0 - 100	64741-62-4	265-064-6
Clarified oils (petroleum), hydrodesulfurized catalytic cracked	0 - 100	68333-26-6	269-782-0
Distillates (petroleum), heavy catalytic cracked	0 - 100	64741-61-3	265-063-0
Distillates, petroleum residues vacuum	0 - 100	68955-27-1	73-263-4
Residues (petroleum), light vacuum	0 - 100	68512-62-9	270-984-6
Polycyclic Aromatic Hydrocarbons	0 - 10	130498-29-2	-
Asphaltenes (petroleum)	0 - 5	91995-23-2	295-284-8
Naphthalene	0 - 3	91-20-3	202-049-5
Hydrogen sulfide	0 - 1	7783-06-4	231-977-3
Sulfur	0 - 1	7704-34-9	231-722-6

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Self-protection of the first aider

The vapour is heavier than air; beware of pits and confined spaces. If it is suspected that fumes are still present, the responder should wear an appropriate

	mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Avoid all contact. Do not ingest. If swallowed then seek immediate medical assistance.
H2S Warning:	Hydrogen sulphide (H2S) can accumulate in the headspace of storage tanks and reach potentially hazardous concentrations. If there is any suspicion of inhalation: A self contained breathing apparatus should be worn. Remove to fresh air immediately.
Inhalation	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, obtain medical attention.
Skin contact	IF ON SKIN (or hair): Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Ingestion	IF SWALLOWED: Do not induce vomiting because of risk of aspiration into the lungs. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. If unconscious, place in recovery position and get medical attention immediately. Do not give anything by mouth to an unconscious person. Get medical attention immediately. Do not wait for symptoms to appear.
Most important symptoms and effects, both acute and delayed	May be fatal if swallowed and enters airways. Harmful if inhaled. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.
Indication of any immediate medical attention and special treatment needed	If breathing is laboured, oxygen should be administered by qualified personnel. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Notes to a physician:	IF SWALLOWED: Do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Direct water jet may spread the fire.
Special hazards arising from the substance or mixture	Not flammable but will support combustion. The vapour is heavier than air; beware of pits and confined spaces. Will float and can be reignited on surface water. Decomposes in a fire giving off toxic fumes: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. If sulphur compounds are present in appreciable amounts, combustion products may include also H2S and SOx (sulfur oxides) or sulfuric acid
Advice for firefighters	Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid release to the environment. Dike fire control water for later disposal.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Caution - spillages may be slippery. Ensure operatives are trained to minimise exposures. Ensure suitable personal protection during removal of spillages. Eliminate sources of ignition. Shut off leaks if without risk. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid all contact. Do not breathe vapour. Ensure adequate ventilation. Do not ingest. If swallowed then seek immediate medical assistance. Do not use sparking tools. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Avoid exposure during pregnancy.

H2S Warning:	Product may release Hydrogen Sulphide. Exposure controls - These controls may include: Segregation of areas, Access only to authorised persons, Permit to work systems, Confined space working procedures, Area H2S alarms, Personal H2S alarms, Personal escape sets, H2S awareness training. Please see section 8 for appropriate personal protection equipment
Small spillages:	Wear flame-resistant antistatic protective clothing.
Large spillages:	Evacuate the area and keep personnel upwind. Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity. Avoid all contact. Wear chemical protection suit and breathing apparatus. See Also Section: 8.
Methods and material for containment and cleaning up	Provided it is safe to do so, isolate the source of the leak. Use non-sparking equipment when picking up flammable spill. The vapour is heavier than air; beware of pits and confined spaces. Ensure that the equipment is adequately grounded. Allow small spillages to evaporate provided there is adequate ventilation. Wear flame-resistant antistatic protective clothing. Wear chemical protection suit and breathing apparatus.
Spillages onto land:	In case of soil contamination, remove contaminated soil and treat in accordance with local regulations.Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal or recovery. Dispose of this material and its container as hazardous waste **Small spillages:** Allow small spillages to evaporate provided there is adequate ventilation. Wear flame-resistant antistatic protective clothing. **Large spillages:** Cover spillage with foam to reduce evaporation. Do not use water jet.
Spillages on water or at sea:	Collect as much as possible in clean container for reuse or disposal. **Small spillages:** Contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. **Large spillages:** Open waters should be contained with floating barriers or other mechanical means and recovered, only if this is strictly necessary and if fire/explosion risks can be adequately prevented. Otherwise control the spreading of the spillage, and let the substance evaporate naturally.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Obtain special instructions before use. Keep away from sources of ignition - No smoking. Use only outdoors or in a well-ventilated area. Prevent vapour build up by providing adequate ventilation during and after use. Take action to prevent static discharges. Use non-sparking tools. All parts of the plant and equipment should be electrically bonded together and connected to earth. Electrical continuity should be checked at regular intervals. Antistatic clothing and footwear should be used. The vapour is heavier than air; beware of pits and confined spaces. Avoid all contact with substance. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe vapour. See Section: 8. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned.
Conditions for safe storage, including any incompatibilities	Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances. These controls may include: Segregation of areas, Access only to authorised persons, Permit to work systems, Confined space working procedures, Area H2S alarms, Personal H2S alarms, Personal escape sets, H2S awareness training.
Storage temperature	Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep only in original packaging. Keep containers properly sealed when not in use. Protect from sunlight. Containers of this material may be hazardous when empty since they retain product residue. Empty container may contain product residue which may result in flammable or explosive vapours inside the container.
Incompatible materials	Stable at ambient temperatures. Keep away from oxidising agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Clarified oils (Petroleum), catalytic cracked	64741-62-4	-	5	-	-	Inhalable fraction
Distillates (petroleum), heavy catalytic cracked	64741-61-3	-	5	-	-	Inhalable fraction
Fuel Oil No. 6	68553-00-4	-	5	-	-	Inhalable fraction
Naphthalene	91-20-3	10	50	15*	75*	NIOSH
		10	50	-	-	OSHA
		10	-	-	-	ACGIH, Sk, A3
Hydrogen sulfide	7783-06-4	-	-	10*	15*	NIOSH
		-	-	20	-	OSHA
		1	-	5	-	ACGIH

Note: OSHA PELs 1910.1000 TABLE Z-1/2/3 / NIOSH RELs / ACGIH TLVs
*NIOSH 15 minute average values
Sk - Can be absorbed through skin.
A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
The other components listed in Section 3 do not have occupational exposure limits.

Biological exposure indicies

SUBSTANCE	CAS No.	Determinant	Biological Exposure Indices	Sampling Time	Note
Naphthalene	91-20-3	1-Naphthol* + 2-Naphthol*	-	End of shift	Nq, Ns

Source: ACGIH: American Conference of Governmental Industrial Hygienists **-** Biological Exposure Index (BEI) 2019

Note:
Nq: Nonquantitative
Ns: The determinant is nonspecific, since it is also observed after exposure to other chemicals.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction if dusts, fumes or vapours are likely to be evolved. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Guarantee that the eye flushing systems and safety showers are located close to the working place.

Individual protection measures, such as personal protective equipment

Fuels are typically used, transferred and transported in closed systems. If exposure is likely (i.e. during sampling) the following advice may be appropriate. Keep good industrial hygiene. Always wash hands before smoking, eating and drinking. Do not eat, drink or smoke at the work place. Avoid all contact. Do not breathe vapour. Avoid exposure during pregnancy.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection

Use eye protection according to EN 166, designed to protect against liquid splashes.

Skin protection

Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
Recommended: Nitrile rubber.

Body protection: Wear anti-static clothing and shoes.
Small scale: Wear suitable coveralls to prevent exposure to the skin.
Large scale: Chemical protection suit

Respiratory protection

When the product is heated / In case of inadequate ventilation wear respiratory protection. The use of a high efficiency filter (recommended: EN143) is recommended. Filter type A1.

Closed system(s): Not normally required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Thick, black, oily liquid
Odour	Petroleum
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	350 - 1200 °F (176.69 - 648.89 °C)
Flash point	120 > °F (49 > °C) [Closed cup]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Lower: 7% Upper: 0.9%
Vapour pressure	< 0.7 kPa (20°C)
Vapour density	> 5 (Air = 1)
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	> 600.1 °F (> 315.59 °C)
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Specific Gravity	0.88 - 1.02 (Water = 1)

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions Reacts with - Strong oxidising agents
Chemical stability	Stable under normal conditions Hazardous polymerisation will not occur. Product may release Hydrogen Sulphide.
Possibility of hazardous reactions	Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Product may release Hydrogen Sulphide.
Conditions to avoid	Elevated temperature: > 50 °C Keep away from heat, sources of ignition and direct sunlight.
Incompatible materials	Keep away from oxidising agents. Strong Acids and Alkalis.
Hazardous decomposition products	A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. Decomposes in a fire giving off toxic fumes: COx, H2S, SOx,

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg.
Acute toxicity - Inhalation	Acute toxicity, Category 4 (Inhalation): Harmful if inhaled. LC50 (inhalation,rat) mg/l/4h: 4,1000mg/m^3
Acute toxicity - Skin contact	Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg.
Skin corrosion/irritation	Based upon the available data, the classification criteria are not met.

Serious eye damage/irritation	Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Carcinogen, Category 1B: May cause cancer. ECHA Registration Endpoint summary: Positive (Mouse)
Reproductive toxicity	Reproductive toxicity, Category 2: Suspected of damaging fertility or the unborn child. NOAEL: 0.05 mg/kg bw/day
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Specific target organ toxicity — repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure. Oral: No data Inhalation: No data Dermal: NOAEL 1.06 mg/kg bw/day (rat) (OECD 410)
Aspiration hazard	Aspiration hazard, Category 1: May be fatal if swallowed and enters airways. Viscosity: 7 – 20.5 mm^2/s @ 40 °C (<60 mm^2/s @ 100 °C)

Information on likely routes of exposure

Inhalation	Possible – accidental exposure
Ingestion	Possible – accidental exposure
Skin contact	Possible – accidental exposure
Eye contact	Unlikely – accidental exposure

Early onset symptoms related to exposure	May be fatal if swallowed and enters airways.
Delayed health effects from exposure	May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.
Exposure levels and health effects	See Section: 8
Interactive effects	None known

Other information

OSHA Designated Carcinogen	Not listed
NIOSH Occupational Carcinogen List	Not listed
NTP Report on Carcinogens	Not listed
IARC Monographs	Not listed

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Hazardous to the aquatic environment, Acute, Category 1: Very toxic to aquatic life. LL50: 48hr (Daphnia magna) 79 mg/l (OECD 202) Hazardous to the aquatic environment, Chronic, Category 1: Very toxic to aquatic life with long lasting effects. NOEL: 0.1 mg/L (Fish) (Redman et al. 2010)
Persistence and degradability	Substance is complex UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance
Bioaccumulative potential	Substance is complex UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance
Mobility in soil	Substance is complex UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Dispose of this material and its container as hazardous waste. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or

national legislation. Containers of this material may be hazardous when empty since they retain product residue.

SECTION 14: TRANSPORT INFORMATION

	Road/rail (ADR/RID)	Sea transport (IMDG)	Air (ICAO/IATA)
UN number	UN 3256	UN 3256	UN 3256
UN proper shipping name	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant.	Environmentally hazardous substance
Special precautions for user	See Section: 2		
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable		

SECTION 15: REGULATORY INFORMATION

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

US Federal Regulations	
TSCA Chemical Data Reporting (CDR) Rule	Listed
NIOSH Occupational Carcinogen List	Not listed
EPCRA Section 313	Not listed
CWA 307- Toxic	Not listed
CERCLA - Hazardous Substances	Not listed
CWA Section 311 List of Hazardous Substances	Not listed
US State Regulations	
Proposition 65 (California)	Not listed
Massachusetts, New Jersey, Pennsylvania, Rhode Island- State Right to Know Lists	Not listed
New York -State Right to Know Lists	Not listed
Minnesota - State Right to Know Lists	Not listed
Massachusetts – Toxic Use reduction act	Not listed
Non-Regional	
IARC Monographs	Not listed

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / mixture classification. Updated version and date. New format has been issued, all sections have been updated to include new information. Review SDS with care.

Version	3.0
Revision Date	14 April 2021
Date of First Issue	Not available. 2ND ISSUE RELEASED JUNE, 15 2015

This Safety Data Sheet was prepared in accordance with US Regulation OSHA HCS (29 CFR 1910.1200)

References:
Existing Safety Data Sheet (SDS),
EU Harmonised Classification and Existing ECHA registration for Fuel oil, no. 6 (CAS No.: 68553-00-4_.

Literature Sources:

1. Redman, et al. 2010. Aquatic Toxicity Predictions Obtained Using the PETROTOX Model for petroleum substances. CONCAWE, Brussels, Belgium

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200	Classification procedure
Flammable Liquid, Category 4	Flash point
Aspiration hazard, Category 1	High percentage inclusion of components with aspiration hazard
Acute toxicity, Category 4 (Inhalation)	ATE Calculation
Carcinogen, Category 1B	Threshold Calculation
Reproductive toxicity, Category 2	Threshold Calculation
Specific target organ toxicity — repeated exposure, Category 2	Threshold Calculation
Hazardous to the aquatic environment, Acute, Category 1	Summation Calculation
Hazardous to the aquatic environment, Chronic, Category 1	Summation Calculation

Legend

ADR/RID	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road / RID: Regulations concerning the international railway transport of dangerous goods
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor (BCF)
CAS	CAS: Chemical Abstracts Service
EC	European Community
EN	European Standard
EU	European Union
IATA	International Air Transport Association
ICAO/IATA	ICAO: International Civil Aviation Organization / IATA: International Air Transport Association
IMDG	International Maritime Dangerous Goods
Koc	Soil Adsorption Coefficient
Kow	Partition coefficient: n-octanol/water
LC50	Lethal concentration 50
LD50	Lethal dose 50
LOAEL	Lowest dose adverse effect level
LTEL	Long Term Exposure Limit
NOAEC	No Observed Averse Effect concentration
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
(Q)SAR	Quantitative structure-activity relationship (QSAR)
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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