



AC 9000 XC Hardener

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

GHS product identifier: AC 9000

Other means of identification: Hardener

Recommended use of the chemical and restrictions on use: N/A

Supplier's details: VANBERG SPECIALIZED COATINGS
10705 COTTONWOOD ST.
LENEXA, KS 66215
INFORMATION PHONE NUMBER: 913-599-5939

Emergency phone number: 1-800-255-3924

SECTION 2 – HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Organic peroxides:

Type D

Eye irritation:

Category 2B

Skin sensitization:

Category 1

Reproductive toxicity:

Category 2

Acute aquatic toxicity:

Category 1

Chronic aquatic toxicity:

Category 1

GHS label elements



Signal Word:

Danger

Hazard Statements:

H242 Heating may cause a fire.

H317 May cause an allergic skin reaction.

H320 Causes eye irritation.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.
 P234 Keep only in original container.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
 P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing must not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.
 P391 Collect spillage.

Storage:

P405 Store locked up.
 P410 Protect from sunlight.
 P411 + P235 Store at temperatures not exceeding < 30 °C/ <86 °F. Keep cool.
 P420 Store away from other materials.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards:

None known.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous Components:		
CAS: 84-61-7	Dicyclohexyl phthalate	>=50-<55%
CAS: 94-36-0	Dibenzoyl peroxide	>-45-<50%

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General information:

Move out of dangerous area.
 Show this material safety data sheet to the doctor in attendance.
 Do not leave the victim unattended.
 Call a physician immediately.

After inhalation:

If unconscious, place in recovery position and seek medical advice.
 If symptoms persist, call a physician.
 If breathed in, move person into fresh air.

After skin contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
 Wash contaminated clothing before re-use.
 If on skin, rinse well with water.
 If on clothes, remove clothes.
 If symptoms persist, call a physician.

After eye contact:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 Remove contact lenses.

Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

After swallowing:

Keep respiratory tract clear.
Call a physician immediately.

Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction.
Causes eye irritation.

Suspected of damaging fertility.

Protection of first-aiders:

First Aid responders should pay attention to self-protection and use the recommended protective clothing

Notes to physician:

Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing media:

Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media:

High volume water jet

Specific hazards during firefighting:

Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.

The product burns violently.

Flash back possible over considerable distance.

Vapors may form explosive mixtures with air.

The product will float on water and can be reignited on surface water.

Cool closed containers exposed to fire with water spray.

Specific extinguishing methods:

Do not use a solid water stream as it may scatter and spread fire.

Remove undamaged containers from fire area if it is safe to do so.

Use water spray to cool unopened containers.

Further information:

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire fighters:

Wear self-contained breathing apparatus for firefighting if necessary.

Use personal protective equipment.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment.

Avoid dust formation.

Avoid breathing dust.

Remove all sources of ignition.

Follow safe handling advice and personal protective equipment recommendations.

Never return spills in original containers for re-use.

Treat recovered material as described in the section "Disposal considerations".

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:

Contact with incompatible substances can cause decomposition at or below SADT.

Clear spills immediately.

Suppress (knock down) gases/vapors/mists with a water spray jet.

To clean the floor and all objects contaminated by this material, use plenty of water.

Soak up with inert absorbent material.

Isolate waste and do not reuse.

Non-sparking tools should be used.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

SECTION 7 – HANDLING AND STORAGE

Technical measures:

See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on protection against fire and explosion:

Avoid dust formation.

Provide appropriate exhaust ventilation at places where dust is formed.

Keep away from heat and

sources of ignition.

Use only explosion-proof equipment.

Keep away from combustible material.

Advice on safe handling:

Do not breathe vapors/dust.

Avoid exposure obtain special instructions before use.

Avoid contact with skin and eyes.

Take precautionary measures against static discharges.

Never return any product to the container from which it was originally removed.

Provide sufficient air exchange and/or exhaust in work rooms.

Avoid confinement.

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

Smoking, eating and drinking should be prohibited in the application area.

Wash thoroughly after handling.

For personal protection see section 8.

Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Protect from contamination.

Conditions for safe storage:

Avoid impurities (e.g. rust, dust, ash), risk of decomposition.

Electrical installations / working materials must comply with the technological safety standards.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store in original container.

Keep containers tightly closed in a cool, well ventilated place.

Store in accordance with the national regulations.

Materials to avoid:

Keep away from strong acids, bases, heavy metal salts and other reducing substances.

Recommended storage temperature:

< 30 °C

< 86 °F

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dibenzoyl peroxide	94-36-0	TW	5 mg/m3	ACGIH
		TWA	5 mg/m3	NIOSH REL
		TWA	5 mg/m3	OSHA Z-1
		TWA	5 mg/m3	OSHA P0

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Dicyclohexyl phthalate	84-61-7

Engineering measures:

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection:

In the case of dust or aerosol formation use respirator with an approved filter.

Filter type:

Filter type P

Hand protection Material:

Butyl rubber

Break through time:

>= 480 min

Glove thickness:

0.5 mm

Remarks:

Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the protective gloves with the glove.

Wash hands before breaks and at the end of workday.

Eye protection:

Tightly fitting safety goggles

Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.

Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection:

Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential

Hygiene measures:

Keep away from food and drink.

When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and immediately after handling the product

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Appearance: powder

Color: white

Odor: aromatic

phenol data available

Melting point/range: Decomposition: Decomposes below the melting point.

Boiling point/boiling range: Not applicable

Flash point: Not applicable

Flammability (solid, gas): Not applicable

Upper explosion limit: No data available

Lower explosion limit: No data available

Vapor pressure: No data available

Density: No data available

Solubility(is)

Water solubility: insoluble

Solubility in other solvents:

Solvent: Phthalates

Description: soluble

Self-Accelerating decomposition temperature (SADT): 60 °C

Method: UN-Test H.4SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.

Viscosity

Viscosity, dynamic: Not applicable

Viscosity, kinematic: No data available

Explosive properties: Not explosive

Oxidizing properties: The substance or mixture is not classified as oxidizing. Organic Peroxide

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:

Stable under recommended storage conditions.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

Dust may form explosive mixture in air.

Conditions to avoid:

Protect from contamination.

Contact with incompatible substances can cause decomposition at or below SADT.

Heat, flames and sparks.

Avoid confinement.

Incompatible materials:

Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents.

Hazardous decomposition products:

Irritant, caustic, flammable, noxious/toxic gases and vapors can develop in the case of fire and decomposition

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity:

Not classified based on available information.

Ingredients:

Cyclohexyl phthalate:

Acute oral toxicity:

LD50 (Rat):

> 2,000 mg/kg

Method: OECD Test Guideline 423

Assessment:

The substance or mixture has no acute oral toxicity

Acute dermal toxicity:

LD50 (Rat):

> 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment:

The substance or mixture has no acute dermal toxicity

Dibenzoyl peroxide:

Acute oral toxicity:

LD50 (Rat):

> 5,000 mg/kg

Method: OECD Test Guideline 401

Assessment:

The substance or mixture has no acute oral toxicity

Acute inhalation toxicity:

LC50 (Rat): > 24.3 mg/l

Exposure time: 4 h

Test atmosphere: vapor

Method: OECD Test Guideline 403

Assessment:

The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity:

Remarks: No data available

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Ingredients:

Dicyclohexyl phthalate:

Result:

No skin irritation

Dibenzoyl peroxide:

Species:

Rabbit

Result:

No skin irritation

Serious eye damage/eye irritation

Causes eye irritation.

Product:

Remarks:

Product dust may be irritating to eyes, skin and respiratory system.

Ingredients:

Dicyclohexyl phthalate:

Result: No eye irritation

Dibenzoyl peroxide:

Species:

Rabbit

Result:

Irritation to eyes, reversing within 7 days

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available

information.

Product:

Remarks:

Causes sensitization.

Ingredients:

Dicyclohexyl phthalate:

Routes of exposure:

Skin contact

Species:

Mouse

Result:

May cause sensitization by skin contact.

Dibenzoyl peroxide:

Routes of exposure:

Skin contact

Species:

Mouse

Method:

Local lymph node assay (LLNA)

Result:

May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Dicyclohexyl phthalate:

Genotoxicity in vitro:

Result:

negative

Remarks:

In vitro tests did not show mutagenic effects

Genotoxicity in vivo:

Remarks:

No data available

Dibenzoyl peroxide:

Genotoxicity in vitro:

Result:

negative

Remarks:

In vitro tests did not show mutagenic effects

Genotoxicity in vivo:

Result:

negative

Remarks:

In vivo tests did not show mutagenic effects

Carcinogenicity:

Not classified based on available information.

Ingredients:

Dicyclohexyl phthalate:

Remarks:

This information is not available.

Dibenzoyl peroxide:

Remarks:

Not classified due to data which are conclusive although insufficient for classification.

IARC

No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

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

Reproductive toxicity:

Suspected of damaging fertility.

Ingredients:

Dicyclohexyl phthalate:

Reproductive toxicity Assessment:

Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Dibenzoyl peroxide:**Effects on fertility:****Species:**

Rat, male

Application Route:

Oral

General Toxicity Parent:**NOAEL:**

1,000 mg/kg body weight

Method:

OECD Test Guideline 422

Species:

Rat, female

Application Route:

Oral

General Toxicity Parent:**NOAEL:**

500 mg/kg body weight

Method:

OECD Test Guideline 422

Reproductive toxicity Assessment:

No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT- single exposure:

Not classified based on available information.

Ingredients:**Dibenzoyl peroxide:****Routes of exposure:**

Ingestion

Assessment:

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT -repeated exposure:

Not classified based on available information.

Ingredients:**Dibenzoyl peroxide:****Routes of exposure:**

Ingestion

Assessment:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity:**Ingredients:****Dicyclohexyl phthalate:****Species:**

Rat

NOAEL:

50 mg/kg

Application Route:

Ingestion

Exposure time:

90 d

Method:

OECD Test Guideline 408

Aspiration toxicity:

Not classified based on available information.

Ingredients:**Dibenzoyl peroxide:**

No aspiration toxicity classification

Further information

Product:

Remarks:

No data available

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Dicyclohexyl phthalate:

Toxicity to fish:

LC50 (*Oryzias latipes* (Orange-red killifish)): > 2 mg/l

Exposure time:

96 h

Remarks:

No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates:

NOEC (*Daphnia magna* (Water flea)):

> 2 mg/l

Exposure time:

48 h

Remarks:

No toxicity at the limit of solubility.

Toxicity to algae:

ErC50 (*Pseudokirchneriella subcapitata* (green algae)): > 2 mg/l

Exposure time:

72 h

Test Type:

Growth inhibition

Method:

OECD Test Guideline 201

Remarks:

No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC (*Daphnia magna* (Water flea)):

0.181 mg/l

Exposure time:

21 d

Method:

OECD Test Guideline 211

Toxicity to microorganisms:

NOEC:

> 100 mg/l

Exposure time:

3 h

Test Type:

Respiration inhibition

Method:

OECD Test Guideline 209

Ecotoxicology Assessment

Chronic aquatic toxicity:

Harmful to aquatic life with long lasting effects.

Dibenzoyl peroxide:

Toxicity to fish:

EC50 (*Oncorhynchus mykiss* (rainbow trout)): 0.06 mg/l

Exposure time:

96 h

Method:

OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)):

0.11 mg/l

Exposure time:

48 h

Method:

OECD Test Guideline 202

Toxicity to algae:

EC50 (Pseudokirchneriella subcapitata (green algae)): 0.06 mg/l

Exposure time:

72 h

Method:

OECD Test Guideline 201

M-Factor (Acute aquatic toxicity):

10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

EC10 (Daphnia magna (Water flea)):

0.001 mg/l

Exposure time:

21 d

Test Type:

semi-static test

Method:

OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity):

10

Toxicity to microorganisms:

EC50 (Bacteria):

35 mg/l

Ecotoxicology Assessment

Acute aquatic toxicity:

Very toxic to aquatic life.

Chronic aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Ingredients:

Dicyclohexyl phthalate:

Biodegradability:

Result:

Readily biodegradable.

Dibenzoyl peroxide:

Biodegradability:

Result:

Inherently biodegradable.

Bioaccumulative potential

Ingredients:

Dicyclohexyl phthalate:

Partition coefficient noctanol/water:

log Pow: 4.82(25 °C)

Dibenzoyl peroxide:

Partition coefficient: noctanol/water:

log Pow: 3.2(20 °C)

Mobility in soil:

No data available

Other adverse effects**Product:****Ozone-Depletion Potential:****Regulation:**

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone

CAA Section 602 Class I Substances

Remarks:

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 13 – DISPOSAL CONSIDERATIONS**Disposal methods****Waste from residues:**

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.

Dispose of wastes in an approved waste disposal facility.

Contaminated packaging:

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Donor burn, or use a cutting torch on, the empty drum.

Dispose of in accordance with local regulations

SECTION 14 – TRANSPORTATION INFORMATION**International Regulations**

UNRTDG

UN number: UN 3106

Proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE)

Class: 5.2

Packing group: Not assigned by regulation

Labels: 5.2

IATA-DGR

UN/ID No.: UN 3106

Proper shipping name: Organic peroxide type D, solid (Dibenzoyl peroxide)

Class: 5.2

Packing group:

Not assigned by regulation

Labels:

Organic Peroxides, Keep Away from Heat

Packing instruction (cargo aircraft): 570

Packing instruction (passenger aircraft): 570

IMDG-Code

UN number: UN 3106

Proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE)

Class: 5.2

Packing group: Not assigned by regulation

Labels: 5.2

Elms Code: F-J,S-R

Marine pollutant: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number: UN 3106**Proper shipping name:** Organic peroxide type D, solid (Dibenzoyl peroxide, <= 62%)**Class:** 5.2**Packing group:** Not assigned by regulation**Labels:**

ORGANIC PEROXIDE

ERG Code:145**Marine pollutant:**

yes

SECTION 15 – REGULATORY INFORMATION**EPCRA -Emergency Planning and Community Right to Know****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:

Reactivity Hazard

Acute Health Hazard

Chronic Health Hazard

SARA 302:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Dibenzoyl peroxide 94-36-0

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants

(HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop. 65

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

The ingredients of this product are reported in the following inventories:**DSL(CA):**

All components of this product are on the Canadian DSL

AICS(AU):

On the inventory, or in compliance with the inventory

Nico(NZ):

On the inventory, or in compliance with the inventory

ENCS(JP):

On the inventory, or in compliance with the inventory

ISHL(JP):

On the inventory, or in compliance with the inventory

KECI(KR):

On the inventory, or in compliance with the inventory

PICCS(PH):

On the inventory, or in compliance with the inventory

IECSC(CN):

On the inventory, or in compliance with the inventory

TCSI(TW):

On the inventory, or in compliance with the inventory

TSCA(US):

On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16 – OTHER INFORMATION**Date of Preparation:** 11/21/2016

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 Cooperation 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, Evaluation, Authorization 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; pub- Very Persistent and Very Bioaccumulative