



10/27/2020

KIT COMPONENTS

Product name: **OPACITY CONTROL KIT**

Product code: **56499**

Article number	Description	Quantity	Symbols
5655R	1.5 Mac Farland, 3 ml	1	GHS08
6780C	1 Mac Farland, 1 x 3 ml	1	GHS08

Safety Data Sheet

according to HPR, Schedule 1

Printing date 10/27/2020

Reviewed on 08/11/2015

1 Identification

- **Product identifier**

- **Trade name:** 1.5 Mac Farland, 3 ml
 - **Article number:** 5655R
 - **Application of the substance / the mixture**
Laboratory reagent or component.
In vitro diagnostic medical device or component.

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Bio-Rad
3 boulevard Raymond-Poincaré
92430 Marnes-la-Coquette
Phone: +33 (0)1 47 95 60 00
Fax: +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd.
2403 Guénette Montreal,
Montréal (Québec) H4R 2E9
Phone: (800) 361-1808
Fax: (514) 334-0872

- **Information department:** Customer support.
- **Emergency telephone number:** See item 16

2 Hazard identification

- **Classification of the substance or mixture**



Health hazard

Carcinogenicity - Category 1A H350 May cause cancer.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS08
- **Signal word** Danger

- **Hazard-determining components of labeling:**

sulphuric acid

- **Hazard statements**

May cause cancer.

- **Precautionary statements**

Obtain special instructions before use.

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

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

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Trade name: 1.5 Mac Farland, 3 ml

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Store locked up.

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

· Classification system:
· NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = *0



Fire = 0

Reactivity = 0

3 Composition/Information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture containing components at a non hazardous concentration.

· Dangerous components:

7664-93-9	sulphuric acid  Carcinogenicity - Category 1A, H350  Corrosive to Metals - Category 1, H290; Skin Corrosion - Category 1A, H314	1-5% w/w *
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* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

· Description of first aid measures
· General information: No special measures required.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing: Consult a doctor, if necessary.

· Information for doctor:
· Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

· Special hazards arising from the substance or mixture No further relevant information available.

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Trade name: 1.5 Mac Farland, 3 ml

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- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear disposable gloves.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.
- **Reference to other sections** No dangerous substances are released.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.
 - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
7664-93-9 sulphuric acid	
EL	0.2 mg/m ³ ACGIH A2; IARC 1

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Suitable respiratory protective device recommended.
 - **Protection of hands:** Protective gloves

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according to HPR, Schedule 1

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Reviewed on 08/11/2015

Trade name: 1.5 Mac Farland, 3 ml

· **Eye protection:** Safety glasses

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:** Fluid

· **Color:** According to product specification

· **Odor:** Characteristic

· **Change in condition**

· **Melting point/Melting range:** Undetermined.

· **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **Solvent content:**

· **Organic solvents:** 0.0 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

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Trade name: 1.5 Mac Farland, 3 ml

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When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
7664-93-9	sulphuric acid	1
· NTP (National Toxicology Program)		
None of the ingredients is listed.		

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:** Not hazardous for water.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· ADR, IMDG, IATA	Void
· UN proper shipping name	
· ADR, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	Void

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Trade name: 1.5 Mac Farland, 3 ml

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· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

7664-93-9	sulphuric acid
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· **Section 313 (Specific toxic chemical listings):**

7664-93-9	sulphuric acid
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· **TSCA (Toxic Substances Control Act):**

7732-18-5	water, distilled, conductivity or of similar purity
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7664-93-9	sulphuric acid
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· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

7732-18-5	water, distilled, conductivity or of similar purity
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7664-93-9	sulphuric acid
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· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

7664-93-9	sulphuric acid
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· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Safety Data Sheet
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Reviewed on 08/11/2015

Trade name: 1.5 Mac Farland, 3 ml

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· Department issuing SDS:

MSDS / FDS Administr.
Bio-Rad
Marnes-la-Coquette, France

· Contact:

Customer Support
Phone : +33 (0)1 47 95 62 77
Customer Support
Phone : +33 (0)1 47 95 60 91

CANADA

Bio-Rad laboratories (Canada) Ltd.,
2403 Guénette Montreal,
Montreal (Québec) H4R 2E9

Phone : (800) 361-1808

Fax : (514) 334-0872

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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Safety Data Sheet
according to HPR, Schedule 1

Printing date 10/27/2020

Reviewed on 08/11/2015

1 Identification· **Product identifier**

- **Trade name:** 1 Mac Farland, 1 x 3 ml
 - **Article number:** 6780C
 - **Application of the substance / the mixture**
Laboratory reagent or component.
In vitro diagnostic medical device or component.

· **Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**

Bio-Rad
3 boulevard Raymond-Poincaré
92430 Marnes-la-Coquette
Phone: +33 (0)1 47 95 60 00
Fax: +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd.
2403 Guénette Montreal,
Montréal (Québec) H4R 2E9
Phone: (800) 361-1808
Fax: (514) 334-0872

- **Information department:** Customer support.
- **Emergency telephone number:** See item 16

2 Hazard identification· **Classification of the substance or mixture**

Health hazard

Carcinogenicity - Category 1A H350 May cause cancer.

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS08
- **Signal word** Danger

· **Hazard-determining components of labeling:**

sulphuric acid

· **Hazard statements**

May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.

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

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 10/27/2020

Reviewed on 08/11/2015

Trade name: 1 Mac Farland, 1 x 3 ml

(Contd. of page 1)

Store locked up.

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

· Classification system:
· NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = *0



Fire = 0

Reactivity = 0

3 Composition/Information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture containing components at a non hazardous concentration.

· Dangerous components:

7664-93-9	sulphuric acid  Carcinogenicity - Category 1A, H350  Corrosive to Metals - Category 1, H290; Skin Corrosion - Category 1A, H314	1-5% w/w *
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* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

· Description of first aid measures
· General information: No special measures required.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing: Consult a doctor, if necessary.

· Information for doctor:
· Most important symptoms and effects, both acute and delayed

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

· Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 10/27/2020

Reviewed on 08/11/2015

Trade name: 1 Mac Farland, 1 x 3 ml

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear disposable gloves.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.
- **Reference to other sections** No dangerous substances are released.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.
 - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
7664-93-9 sulphuric acid	
EL	0.2 mg/m ³ ACGIH A2; IARC 1

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Suitable respiratory protective device recommended.
 - **Protection of hands:** Protective gloves

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Safety Data Sheet

according to HPR, Schedule 1

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Reviewed on 08/11/2015

Trade name: 1 Mac Farland, 1 x 3 ml

· **Eye protection:** Safety glasses

(Contd. of page 3)

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· **Form:** Fluid

· **Color:** According to product specification

· **Odor:** Characteristic

· **Change in condition**

· **Melting point/Melting range:** Undetermined.

· **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **Solvent content:**

· **Organic solvents:** 0.0 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 5)

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Safety Data Sheet

according to HPR, Schedule 1

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Reviewed on 08/11/2015

Trade name: 1 Mac Farland, 1 x 3 ml

(Contd. of page 4)

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7664-93-9 sulphuric acid	1
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· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· Behavior in environmental systems:

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· Additional ecological information:

· **General notes:** Not hazardous for water.

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· **Recommendation:** Must be specially treated adhering to official regulations.

· Uncleaned packagings:

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· DOT/TDG, ADR, ADN, IMDG, IATA	Void
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· UN proper shipping name

· DOT/TDG, ADR, ADN, IMDG, IATA	Void
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· Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA	
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· Class

Void

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Trade name: 1 Mac Farland, 1 x 3 ml

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· Packing group	
· DOT/TDG, ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

7664-93-9	sulphuric acid
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· Section 313 (Specific toxic chemical listings):

7664-93-9	sulphuric acid
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· TSCA (Toxic Substances Control Act):

7732-18-5	water, distilled, conductivity or of similar purity
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7664-93-9	sulphuric acid
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· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

7732-18-5	water, distilled, conductivity or of similar purity
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7664-93-9	sulphuric acid
-----------	----------------

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

7664-93-9	sulphuric acid
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· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

CDN

(Contd. on page 7)

Safety Data Sheet
according to HPR, Schedule 1

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Reviewed on 08/11/2015

Trade name: 1 Mac Farland, 1 x 3 ml

(Contd. of page 6)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS:

MSDS / FDS Administr.
Bio-Rad
Marnes-la-Coquette, France

· Contact:

Customer Support
Phone : +33 (0)1 47 95 62 77
Customer Support
Phone : +33 (0)1 47 95 60 91

CANADA

Bio-Rad laboratories (Canada) Ltd.,
2403 Guénette Montreal,
Montreal (Québec) H4R 2E9

Phone : (800) 361-1808

Fax : (514) 334-0872

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

CDN