

Safety Data Sheet EPORIP comp.B

Safety Data Sheet dated 17/10/2018, version 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: EPORIP comp.B

1.2. Relevant identified uses of the substance or mixture and uses advised against
Hardener for epoxy products.

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731

Fax: +39-02-37673.214

Competent person responsible for the safety data sheet:

sicurezza@mapei.it

1.4. Emergency telephone number

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.
- ⚠ Warning, Skin Sens. 1B, May cause an allergic skin reaction.
- ⚠ Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard Statements:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

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H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Special Provisions:

None

Contains

Fatty acids C18 unsat, reaction products with tetraethylenepentamine

Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)

2,4,6-tris(dimethylaminomethyl)phenol

3-Aminopropyldimethylamine

bis[(dimethylamino)methyl]phenol: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 75% Fatty acids C18 unsat, reaction products with tetraethylenepentamine

REACH No.: 01-2119487006-38-xxxx, CAS: 1226892-45-0, EC: 629-725-6

⚠ 3.2/1C Skin Corr. 1C H314

⚠ 4.1/A1 Aquatic Acute 1 H400

⚠ 3.4.2/1 Skin Sens. 1 H317

⚠ 4.1/C1 Aquatic Chronic 1 H410

>= 5% - < 10% Amines, polyethylenepoly-, triethylenetetramine fraction (TETA)

REACH No.: 01-2119487919-13-XXXX, Index number: 612-059-00-5, CAS: 90640-67-8, EC: 292-588-2

⚠ 3.1/4/Dermal Acute Tox. 4 H312

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.2/1B Skin Corr. 1B H314

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.4.2/1 Skin Sens. 1 H317

4.1/C3 Aquatic Chronic 3 H412

>= 2.5% - < 5% 2,4,6-tris(dimethylaminomethyl)phenol

REACH No.: 01-2119560597-27-XXXX, CAS: 90-72-2, EC: 202-013-9

⚠ 3.2/1C Skin Corr. 1C H314

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- ⚠ 3.3/1 Eye Dam. 1 H318
- ⚠ 3.4.2/1B Skin Sens. 1B H317

>= 2.5% - < 5% 3-Aminopropyldimethylamine

REACH No.: 01-2119486842-27-xxxx, Index number: 612-061-00-6, CAS: 109-55-7, EC: 203-680-9

- ⚠ 2.6/3 Flam. Liq. 3 H226
- ⚠ 3.1/4/Oral Acute Tox. 4 H302
- ⚠ 3.2/1B Skin Corr. 1B H314
- ⚠ 3.4.2/1 Skin Sens. 1 H317
- ⚠ 3.3/1 Eye Dam. 1 H318

>= 0.25% - < 0.49% bis[(dimethylamino)methyl]phenol

CAS: 71074-89-0, EC: 275-162-0

- ⚠ 3.2/1C Skin Corr. 1C H314
- ⚠ 3.4.2/1B Skin Sens. 1B H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

CONSULT A PHYSICIAN IMMEDIATELY.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

The product is corrosive and, if brought into contact with the skin, causes burning, with the destruction of the entire thickness of skin tissue.

If brought into contact with the skin, the product may cause sensitisation of the skin.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

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Burning produces heavy smoke.

The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus .

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

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Limit leakages with earth or sand.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Rapidly recover the product, wearing protective clothing.

After the product has been recovered, rinse the area and materials involved with water.

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. (see point 10.5)

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

Amines, polyethylenepoly-, triethylenetetramine fraction (TETA) - CAS: 90640-67-8

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Worker Professional: 0.57 mg/kg - Consumer: 0.25 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 0.001 mg/l - Consumer: 0.00029 mg/l - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 8 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Consumer: 0.41 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2,4,6-tris(dimethylaminomethyl)phenol - CAS: 90-72-2

Worker Industry: 4.9 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 0.31 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

3-Aminopropylidimethylamine - CAS: 109-55-7

Worker Industry: 9.8 mg/m³ - Exposure: Human Inhalation

PNEC Exposure Limit Values

Amines, polyethylenepoly-, triethylenetetramine fraction (TETA) - CAS: 90640-67-8

Target: Fresh Water - Value: 0.19 mg/l

Target: Marine water - Value: 0.038 mg/l

Target: Freshwater sediments - Value: 95.5 mg/kg

Target: Marine water sediments - Value: 19.2 mg/kg

Target: Soil (agricultural) - Value: 19.1 mg/kg

2,4,6-tris(dimethylaminomethyl)phenol - CAS: 90-72-2

Target: Fresh Water - Value: 0.084 mg/l

Target: Marine water - Value: 0.0084 mg/l

Target: Microorganisms in sewage treatments - Value: 0.2 mg/l

3-Aminopropylidimethylamine - CAS: 109-55-7

Target: Fresh Water - Value: 0.0535 mg/l

Target: Marine water - Value: 0.00535 mg/l

8.2. Exposure controls

Eye protection:

Safety goggles.

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

nitrile rubber (NBR) - 0.4 mm coating thickness

natural rubber/natural latex (NR) - 0.5 mm coating thickness

chloroprene rubber (CR) - 0.5 mm coating thickness

polyvinylchloride (PVC) - 0.7 mm coating thickness

butyl rubber (butyl) - 0.7 mm coating thickness

fluoroelastomer (FKM) - 0.7 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove

manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Respiratory protection:

Not needed for normal use.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387.).

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Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	liquid
Colour:	white
Odour:	ammonia
Odour threshold:	N.A.
pH:	10
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	Not determined
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	Not determined
Flash point:	>100 °C
Evaporation rate:	Not determined
Vapour pressure:	<0.01 kPa (23°C)
Relative density:	1.02 g/cm ³ (23°C)
Vapour density (air=1):	Not determined
Solubility in water:	partly soluble
Solubility in oil:	soluble
Viscosity:	1500 mPa.s (23°C)
Auto-ignition temperature:	== °C - No explosive or spontaneous ignition in contact with air at room temperature
Explosion limits(by volume):	==
Decomposition temperature:	N.A.
Partition coefficient (n-octanol/water):	N.A. - This product is a mixture
Explosive properties:	== - No components with explosive properties
Oxidizing properties:	N.A. - No component with oxidizing properties

9.2. Other information

No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate toxic gases on contact with oxidising mineral acids, halogenated organic substances, organic peroxides and hydroperoxides, and powerful oxidising agents.

10.4. Conditions to avoid

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- Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Route(s) of entry:

- Ingestion: Yes
Inhalation: Yes
Contact: Yes

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

The following tests refer to a mixture with a similar composition

Toxicological information on main components of the mixture:

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

Fatty acids C18 unsat, reaction products with tetraethylenepentamine - CAS: 1226892-45-0

a) acute toxicity:

Test: LD50 - Route: Oral > 2000 mg/kg

Amines, polyethylenepoly-, triethylenetetramine fraction (TETA) - CAS: 90640-67-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1760 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 1465 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant : Positive

2,4,6-tris(dimethylaminomethyl)phenol - CAS: 90-72-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2169 mg/kg

3-Aminopropyldimethylamine - CAS: 109-55-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 410 mg/kg

Test: LD50 - Route: Skin - Species: Rat = 1200 mg/kg

Test: LD50 - Route: Skin - Species: Rat = 2139 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 24.8 mg/l - Duration: 4h

Corrosive/Irritating Properties:

Skin:

Corrosive. The product can cause burns by contact.

Eye:

The product can cause damage to eyes by contact

Carcinogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

Additional Information:

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

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- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Adopt good industrial practices, so that the product is not released into the environment.

Biodegradability: no data available on the preparation.

Amines, polyethylenepoly-, triethylenetetramine fraction (TETA) - CAS: 90640-67-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 330 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 31.1 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 20 mg/l - Duration h: 72

2,4,6-tris(dimethylaminomethyl)phenol - CAS: 90-72-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 222 mg/l - Duration h: 24

Endpoint: LC50 - Species: Fish = 249 mg/l - Duration h: 24

Endpoint: LC50 - Species: Fish = 175 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 718 mg/l - Duration h: 96

Endpoint: EC50 - Species: Algae = 84 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Algae = 6.25 mg/l

3-Aminopropyldimethylamine - CAS: 109-55-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Algae = 53.5 mg/l - Duration h: 72

Endpoint: EC50 - Species: 19126 > 1000 mg/l - Duration h: 0.5

Endpoint: EC50 - Species: 19126 = 95 mg/l - Duration h: 17

Endpoint: EC50 - Species: Daphnia = 59.5 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 122 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Not available data on the mixture

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.
 Disposal of not hardened product (EC waste code) : 08 04 09
 The suggested European waste code is just based on the composition of the product.
 According to the specific process or application field a different waste code may be necessary.

SECTION 14: Transport information

- 14.1. UN number
 Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
 ADR-Shipping Name: UN 2735 POLYAMINES, LIQUID, CORROSIVE N.O.S.
 N.A.
- 14.3. Transport hazard class(es)
 Rail/Road(RID/ADR): 8, III
 ADR-Upper number: NA
 Air (ICAO/IATA): 8, III
 Sea (IMO/IMDG): 8
 N.A.
- 14.4. Packing group
 Packing Group: III
 ADR-Packing Group: III
 IMDG-Packing group: III
 N.A.
- 14.5. Environmental hazards
 Marine pollutant: Yes
 N.A.
- 14.6. Special precautions for user
 N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
 No

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 Dir. 98/24/EC (Risks related to chemical agents at work)
 Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
 Restrictions related to the product:
 Restriction 3
 Restriction 40
 Restrictions related to the substances contained:
 No restriction.
- Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"
 Directive 2000/39/CE and s.m.i. (Professional threshold limit)
 Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)
 Directive 105/2003/CE (Seveso III): N.A.

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ADR Agreement – IMDG Code – IATA Regulation
VOC (2004/42/EC) : N.A. g/l

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: E1

15.2. Chemical safety assessment
No

SECTION 16: Other information

Text of phrases referred to under heading 3:

- H314 Causes severe skin burns and eye damage.
- H400 Very toxic to aquatic life.
- H317 May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long lasting effects.
- H312 Harmful in contact with skin.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.
- H412 Harmful to aquatic life with long lasting effects.
- H226 Flammable liquid and vapour.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 10: Stability and reactivity
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

- NIOSH - Registry of toxic effects of chemical substances
- ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

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CAS:	Dangerous Goods by Road. Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	Substance with a Union workplace exposure limit.
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List
N.A.:	Not available