**Printing date:** 14.07.2014 **Revision:** 14.07.2014

### 1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- Trade name: POR-15 Rust Preventive Paint BLACK
- 1.2 Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- · Application of the substance / the mixture: Coating compound/ Surface coating/ paint
- 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier: Absolute Coatings Inc. 38 Portman Road New Rochelle, NY 10801 Phone: 1-800-221-8010

• 1.4 Emergency telephone number: ChemTel Inc. (800)255-3924, +1 (813)248-0585 por-15 preventive permanent coating paint Directly over Rust Black/silver

#### 2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Flame

Flam. Liq. 3; H226: Flammable liquid and vapour.



Health hazard

Resp. Sens. 1; H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 1B; H340: May cause genetic defects.

Carc. 1B; H350: May cause cancer.

STOT RE 2; H373: May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4; H332: Harmful if inhaled. Skin Irrit. 2: H315: Causes skin irritation.

Eye Irrit. 2; H319: Causes serious eye irritation.

Skin Sens. 1; H317: May cause an allergic skin reaction. STOT SE 3; H335: May cause respiratory irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R65: Harmful: may cause lung damage if swallowed.

(Contd. on page 2)

Printing date: 14.07.2014 Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 1)

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

Xi,

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

R10: Flammable.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms







GHS02 GHS07 GHS08

- · Signal word: Danger
- · Hazard-determining components of labelling:

Urethane prepolymer with MDI

Solvent naphtha (petroleum), light arom.

4,4'-methylenediphenyl diisocyanate

MDI based prepolymer

Hazard statements

H226: Flammable liquid and vapour.

H332: Harmful if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H340: May cause genetic defects.

H350: May cause cancer.

H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

(Contd. on page 3)

(Contd. of page 2)

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

**Printing date: 14.07.2014** 

Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P285: In case of inadequate ventilation wear respiratory protection.

P281: Use personal protective equipment as required.

P233: Keep container tightly closed.

P303+P361+P353: IF ON SKIN (or hair): Remove/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.

P370+P378: In case of fire: Use foam, powder, or carbon dioxide for extinction.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P403+P235: Store in a well-ventilated place. Keep cool.

· Additional information:

Contains isocyanates. May produce an allergic reaction. Restricted to professional users.

Hazard description:

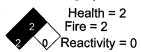
WHMIS-symbols:

B3 - Combustible liquid

D2A - Very toxic material causing other toxic effects



NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



\* - Indicates a long term health hazard from repeated or prolonged exposures.

#### HMIS Long Term Health Hazard Substances

101-68-8 4,4'-methylenediphenyl diisocyanate

26447-40-5 methylenediphenyl diisocyanate

9016-87-9 polymethylene polyphenylene isocyanate

- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 4)

**Printing date: 14.07.2014** 

**Revision:** 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 3)

3.2 Mixtures  Description: Mixture of substances listed below with nonhazardous additions.				
Dangerous components:				
	Urethane prepolymer with MDI  Xn R42/43;  Xi R36/38  ♦ Resp. Sens. 1, H334  ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	30-60		
CAS: 64742-95-6 EINECS: 265-199-0 Index number: 649-356-00-4	Solvent naphtha (petroleum), light arom.	10-309		
	MDI based prepolymer  Xi R36/38; Xi R43  ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	10-309		
CAS: 64742-88-7 EINECS: 265-191-7 Index number: 649-405-00-X	Solvent naphtha (petroleum), medium aliph.  Xn R65  Flam. Liq. 3, H226  Asp. Tox. 1, H304	10-30%		
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9	<ul> <li>Resp. Sens. 1, H334; STOT RE 2, H373</li> <li>Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin</li> </ul>	7-13%		
CAS: 1333-86-4 EINECS: 215-609-9	Sens. 1, H317; STOT SE 3, H335  Carbon black  Xn R40  Oarc. Cat. 3  Carc. 2, H351	3-7%		
CAS: 26447-40-5 EINECS: 247-714-0 Index number: 615-005-00-9	methylenediphenyl diisocyanate  Xn R20: Xn R42/43: Xi R36/37/38	1-5%		
CAS: 9016-87-9	polymethylene polyphenylene isocyanate  Xn R20-40-48/20; Xn R42/43; Xi R36/37/38  Carc. Cat. 3  Resp. Sens. 1, H334; STOT RE 2, H373  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	1-5%		

(Contd. on page 5)

Printing date: 14.07.2014 Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 4)

#### 4 First aid measures

· 4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product. Take affected persons out into the fresh air.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse

thoroughly. If skin irritation continues, consult a doctor.

· After eye contact:

Immediately remove contact lenses if possible.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Asthma attacks

Breathing difficulty

Allergic reactions

Nausea

Cramp

Coughing

Cyanosis

Methaemoglobinaemia

Disorientation

Hazards

Danger of pulmonary oedema.

Danger of impaired breathing.

Danger of convulsion.

Danger of disturbed cardiac rhythm.

Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

Contains isocyanates. Consult literature for specific antidotes.

If swallowed, gastric irrigation with added, activated carbon.

In cases of irritation to the lungs, initial treatment with cortical steroid

inhalants. If necessary oxygen respiration treatment.

If swallowed or in case of vomiting, danger of entering the lungs.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Medical supervision for at least 48 hours.

Later observation for pneumonia and pulmonary oedema.

(Contd. on page 6)

Printing date: 14.07.2014

**Revision:** 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 5)

## 5 Firefighting measures

· 5.1 Extinguishing media

Suitable extinguishing agents:

Alcohol resistant foam

Foam

Fire-extinguishing powder

Carbon dioxide

Gaseous extinguishing agents

Water haze or fog

For safety reasons unsuitable extinguishing agents:

Water with full jet

Water spray

· 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Eliminate all ignition sources if safe to do so.

Cool endangered receptacles with water fog or haze.

Use large quantities of foam as it is partially destroyed by the

product. No further relevant information available.

### 6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Protect from heat.

· 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 7)

**Printing date: 14.07.2014 Revision:** 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 6)

## 7 Handling and storage

### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

## Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Emergency cooling must be available in case of nearby fire.

# · 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

# Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

Protect from humidity and water.

# Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

Do not store together with acids.

Protect from humidity and water.

## Further information about storage conditions:

Store in cool, dry conditions in well sealed

receptacles. Keep container tightly sealed.

Protect from humidity and water.

Store receptacle in a well ventilated area.

· 7.3 Specific end use(s): No further relevant information available.

# 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:				
101-68-8 4,4'-methylenediphenyl diisocyanate				
PEL (USA)	Short-term value: C 0,2 mg/m³, C 0,02 ppm			
REL (USA)	Short-term value: C 0,2* mg/m³, C 0,02* ppm Long-term value: 0,05 mg/m³, 0,005 ppm *10-min			
TLV (USA)	Long-term value: 0,051 mg/m³, 0,005 ppm			
EL (Canada)	Short-term value: C 0,01 ppm Long-term value: 0,005 ppm Skin; S			
EV (Canada)	Long-term value: 0,005 ppm			

(Contd. on page 8)

Printing date: 14.07.2014 Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

1333-86-4 Ca	arbon black	(Contd. of page 7)
PEL (USA)	Long-term value: 3,5 mg/m³	
TLV (USA)	Long-term value: 3* mg/m³ *inhalable fraction	
EL (Canada)	Long-term value: 3 mg/m³ IARC 2B	
EV (Canada)	Long-term value: 3,5 mg/m³	

- · DNELs: No further relevant information available.
- · PNECs: No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

Respiratory protection:



Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

#### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 9)

**Printing date: 14.07.2014** Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

Eye protection:

(Contd. of page 8)



Safety glasses

· Body protection: Protective work clothing

· Limitation and supervision of exposure into the environment

No further relevant information available.

Risk management measures

See Section 7 for additional information. No further relevant information available.

### 9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

General Information

· Appearance:

Form:

Colour:

· Odour:

· Odour threshold:

· pH-value:

Change in condition

Melting point/Melting range:

Boiling point/Boiling range:

· Flash point:

· Flammability (solid, gaseous): · Auto/Self-ignition temperature:

Decomposition temperature:

· Self-igniting:

· Danger of explosion:

· Explosion limits: Lower:

Upper: · Vapour pressure:

· Density:

· Relative density · Vapour density

· Evaporation rate

Liquid

Black

Product specific Not determined.

Not determined.

Not Determined. >284 °F / >140 °C

>106 °F / >41 °C

Not applicable.

444 °F / 229 °C

Not determined. Product is not self-igniting.

Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.

0,60 Vol %

6,50 Vol %

38 mm Hg

1,04 ± 0,02 g/cm<sup>3</sup> Not determined. Not determined. Not determined.

(Contd. on page 10)

#### Page 10/15

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 9)

· Solubility in / Miscibility with

water:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic at 25 °C:

·C:

200-500 cps Not determined.

Kinematic:
Solvent content:

Organic solvents:

30 % Wt / 36 % Vol (295 g/L)

VOC (US EPA Method 24A)

30 % Wt / 36 % Vol (295 g/L)

Solids content:

71 % Wt / 65 % Vol

9.2 Other information

No further relevant information available.

### 10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Flammable.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

Contact with acids releases toxic gases.

Danger of polymerization.

Reacts with amines.

Reacts with catalysts.

Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.

10.4 Conditions to avoid

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Hydrogen cyanide (prussic acid)

Nitrogen oxides

Isocvanate

Danger of forming toxic pyrolysis products.

(Contd. on page 11)

Printing date: 14.07.2014 Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 10)

## 11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

· LD/LC5	0 values re	levant for classification:	
64742-9	5-6 Solvent	t naphtha (petroleum), light arom.	
Oral	LD50	>6800 mg/kg (rat)	
Dermal	LD50	>3400 mg/kg (rab)	
Inhalativ	e LC50/4 h	>10,2 mg/l (rat)	
101-68-8	3 4,4'-methy	ylenediphenyl diisocyanate	
Oral		2200 mg/kg (mouse)	

- Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · In the eye: Irritating effect.
- Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent. Toxic and/or corrosive effects may be delayed up to 24 hours. Danger through skin adsorption.

- · Sensitisation: Sensitization possible by skin contact.
- · Repeated dose toxicity:

May cause damage to organs through prolonged or repeated exposure.

Repeated exposures may result in skin and/or respiratory sensitivity.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Muta. 1B, Carc. 1B

## 12 Ecological information

- 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- 12.2 Persistence and degradability: The product is partially biodegradable. Significant residuals remain.
- · 12.3 Bioaccumulative potential: Does not accumulate in organisms.
- 12.4 Mobility in soil: No further relevant information available.
- · Ecotoxical effects:
- · Remark:

Due to mechanical actions of the product (e.g. agglutinations) damages may occur.

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.

(Contd. on page 12)

**Printing date: 14.07.2014** Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

· Additional ecological information:

(Contd. of page 11)

General notes:

This statement was deduced from the properties of the single components.

Avoid transfer into the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Solvent naphtha

### 14 Transport information

- · 14.1 UN-Number
- · DOT

· ADR, IMDG, IATA

Not Regulated

· 14.2 UN proper shipping name

- · DOT
- · ADR

· IMDG, IATA

UN1263

PAINT

Not Regulated **1263 PAINT** 

- · 14.3 Transport hazard class(es)
- · DOT
- · Class

Not Regulated

· ADR



Class

3 (F1) Flammable liquids.

· Label

(Contd. on page 13)

**Printing date: 14.07.2014** 

Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 12)

· IMDG, IATA



· Class

· Label

3 Flammable liquids.

· 14.4 Packing group

· DOT

· ADR, IMDG, IATA

Not Regulated

Ш

· 14.5 Environmental hazards:

· Marine pollutant:

No

· 14.6 Special precautions for user

Danger code (Kemler):

Warning: Flammable liquids.

· EMS Number:

F-E,S-E

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

5L

· Transport category · Tunnel restriction code

3 D/E

· UN "Model Regulation":

UN1263, PAINT, 3, III

## 15 Regulatory information

- $\cdot$  15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- · SARA
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

101-68-8 4,4'-methylenediphenyl diisocyanate

9016-87-9 polymethylene polyphenylene isocyanate

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65 (California):
- · Chemicals known to cause cancer:

References to chemical components listed below are based on unbound respirable particles and are not generally applicable to product as supplied.

1333-86-4 Carbon black

(Contd. on page 14)

Printing date: 14.07.2014 Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. o	page 13
-----------	---------

- Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.
- · Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
- · Chemicals known to cause developmental toxicity: None of the ingredients is listed.
- · Carcinogenic Categories

CBD
CBD
3
2B
3
A4

- · Canada
- Canadian Domestic Substances List (DSL)
  All ingredients are listed.
- · Canadian Ingredient Disclosure list (limit 0.1%)

101-68-8 4,4'-methylenediphenyl diisocyanate

· Canadian Ingredient Disclosure list (limit 1%)

1333-86-4 Carbon black

- National regulations:
- Other regulations, limitations and prohibitive regulations

HSNO Numbers: 6.5A, 6.6A, 6.7A, 6.9B, 3.1C, 6.1D, 6.1E, 6.3A, 6.4A, 6.5B

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· 15.2 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.

Relevant phrases

H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

(Contd. on page 15)

**Printing date: 14.07.2014** Revision: 14.07.2014

Trade name: POR-15 Rust Preventive Paint BLACK

(Contd. of page 14)

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H340: May cause genetic defects.

H350: May cause cancer.

H351: Suspected of causing cancer.

H373: May cause damage to organs through prolonged or repeated exposure.

R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system and skin.

R36/38: Irritating to eyes and skin.

R40: Limited evidence of a carcinogenic effect.

R42/43: May cause sensitisation by inhalation and skin contact.

R43: May cause sensitisation by skin contact.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65: Harmful: may cause lung damage if swallowed.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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)

WHMIS: Workplace Hazardous Materials Information System (Canada) DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

Carc. 1B: Carcinogenicity, Hazard Category 1B

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1