Printing date 31.07.2015 Revision: 31.07.2015

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

· 1.1 Product identifier

· Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

· Article number: 40-1200-20 · Registration number

Mixture:

Phenol: 01-2119471329-32Chloroform: 01-2119486657-20Isoamyl alcohol: 01-2119493725-26

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 Laboratory reagent

 \cdot 1.3 Details of the supplier of the safety data sheet

Severn Biotech Ltd.

Unit 2,

Park Lane.

Kidderminster.

Worcestershire.

DY11 6TJ

UK

Tel: 0044 1562 825286 Fax: 0044 1562 825284 email: info@severnbiotech.com

- · Further information obtainable from: Product safety department.
- 1.4 Emergency telephone number: Tel: 0044 1562 825286 (not 24 hours)

SECTION 2: Hazards identification

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



GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

(Contd. on page 2)

Revision: 31.07.2015 Printing date 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 1)

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



Toxic by inhalation, in contact with skin and if swallowed.



C; Corrosive

R34: Causes burns.



Xn; Harmful

R40-48/20/21/22-68: Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to

health by prolonged exposure through inhalation, in contact with skin and if

swallowed. Possible risk of irreversible effects.



F; Highly flammable

Highly 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.

· 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 GHS05, GHS06, GHS08
- · Signal word Danger

· Hazard-determining components of labelling:

phenol

Chloroform

Iso amyl alcohol

· Hazard statements

H302+H312 Harmful if swallowed or in contact with skin.

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

Suspected of causing genetic defects. H341

H351 Suspected of causing cancer.

Suspected of damaging the unborn child. H361d

Causes damage to organs through prolonged or repeated exposure. H372

· Precautionary statements

P260 Do not breathe mist/vapours/spray.

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

P270 Do not eat, drink or smoke when using this product.

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.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

· Additional information:

For use in industrial installations only.

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

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 108-95-2	phenol	10-60%
EINECS: 203-632-7	Q T R23/24/25; Д C R34; X Xn R48/20/21/22-68	
	Muta. Cat. 3	
	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; & Muta. 2, H341; STOT RE 2, H373; & Skin Corr. 1B, H314	
CAS: 67-66-3	Chloroform	10-60%
EINECS: 200-663-8	X Xn R20/22-40-48/20-63; X Xi R36/38	
	Carc. Cat. 3, Repr. Cat. 3	
	♦ Acute Tox. 3, H331; ♦ Carc. 2, H351; Repr. 2, H361d; STOT RE 1,	1
	H372; ♠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 123-51-3	Iso amyl alcohol	≤ 5%
EINECS: 204-633-5	★ Xn R22	
	R10	
	♦ Flam. Liq. 3, H226; ♦ Acute Tox. 4, H332; STOT SE 3, H335	

· Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

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

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Keep polyethylene glycol (Lutrol) available for first aider use.

In all cases of significant exposure the patient should be transferred to a hospital as soon as possible.

· After inhalation:

DO NOT DELAY!

Supply fresh air or oxygen; call for doctor.

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

Call a doctor immediately.

· After skin contact:

DO NOT DELAY!

Immediately remove wetted clothing, shoes and stockings. Continuously rinse the affected parts of the body with polyethylene glycol (e.g. Lutrol) or with plenty of water, followed by washing with olive oil or edible oil (to remove the phenol component). If large areas of the skin have been wetted, IMMEDIATELY call a doctor to the site of the accident, otherwise in every case immediately take the patient to the nearest accident and emergency unit and provide a copy of this safety data sheet.

· After eve contact:

DO NOT DELAY!

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

DO NOT DELAY!

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

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

No further relevant information available.

(Contd. on page 4)

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 3)

· Information for doctor:

Contains PHENOL:

No specific antidote therapy for phenol poisoning is known. Therefore it is important to remove the phenol completely from the body surface and out of the body as quickly as possible, and in the case of inhalation prophylactic treatment to prevent pulmonal oedema is of great importance.

Phenol causes strong caustic burns of the skin and mucous membranes due to its protein degenerating action. The skin initially discolours white, later red. After initial pain, local anaesthesia appears. Absorptive poisoning by large amounts of phenol is possible also through small affected skin regions and quickly leads to paralysis of the central nervous system as well as strong depression of the body temperature.

Inhaling phenol vapours can lead to damage of the bronchial system and pulmonal oedema. Systemic damage to kidneys, liver and heart as well as neuropsychiatric disturbances are produced.

TREATMENT: Thoroughly clean the wetted skin areas, if possible with polyethylene glycol (e.g. Lutrol). In the case of eye contact, rinse copiously with water, in the case of burns rinse continuously with water as far as possible and take to an eye specialist or eye clinic. In the case of inhalation, to prevent pulmonal oedemia, initiate inhalative cortisone therapy as early as possible (e.g. every 10 minutes 5 strokes of a cortisone containing aerosol dosing spray such as Auxiloson, Thomae); administer codeine against dry coughing. In the case of commencing or manifested pulmonary oedemia, systemic administration of cortisone (e.g. Solu Decortin 1000 or Fortecortin 100). Caution: A low symptom or symptom-free interval is possible.

If swallowed, gastric lavage after intubation, activated charcoal, saline laxative.

Contains CHLOROFORM:

Do not administer catecholamines (because of the cardiac effect caused by the product).

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

· Additional information

Heating leads to pressure increase entailing danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep ignition sources away - no smoking.

Particular danger of slipping on leaked/spilled product.

Keep away from ignition sources.

• 6.2 Environmental precautions:

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

Do not allow to penetrate the ground/soil.

Inform respective authorities in case of seepage into water course or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

(Contd. on page 5)

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 4)

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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Restrict the quantity stored at the work place.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product.

The product must only be handled by authorised, trained and experienced professionals under strictly controlled conditions.

Risk of phosgene generation:

- Keep ignition sources away, do NOT smoke in the work area.
- Welding operations must only permitted only under supervision.
- No naked flames or uv light sources allowed in the work area.

A trained first-aider must be availble whilst this product is being handled.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

\cdot Requirements to be met by storerooms and receptacles:

Store in a cool location.

Prevent any seepage into the ground.

Store only in the original receptacle.

· Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from foodstuffs.

Store away from metals.

Do not store together with textiles.

· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Store in a bunded area.

Store in the dark.

Store locked up with keys available only to trained and authorised persons.

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

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

108-95-2 phenol

WEL Short-term value: 16 mg/m³, 4 ppm Long-term value: 7.8 mg/m³, 2 ppm

Sk

(Contd. on page 6)

Revision: 31.07.2015 Printing date 31.07.2015

Trade name: Phenol:Chloroform:Isoamvl Alcohol (25:24:1)

(Contd. of page 5)

67-66-3 Chloroform WEL Long-term value: 9.9 mg/m³, 2 ppm 123-51-3 Iso amyl alcohol WEL Short-term value: 458 mg/m³, 125 ppm Long-term value: 366 mg/m³, 100 ppm

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

Select PPE appropriate for the operations taking place taking into account the product properties.

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Pregnant women should strictly avoid inhalation or skin contact.

Do not eat, drink, smoke or sniff while working.

Storing food in the working area is prohibited.

Ensure that washing facilities are available at the work place.

A safe system of work must be formulated and followed to ensure that workers who may be pregnant or breastfeeding do not come into direct contact with the product.

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

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

Take note of assigned Workplace Exposure Limits.

Depending on the degree of exposure, periodic medical examination is suggested.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

Not required if used in a fume cupboard.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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.

· Eye protection:



Tightly sealed goggles

Face protection

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 6)

· Body protection:

Impervious protective clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

9.1 Information on basic physical a General Information	and chemical properties
Appearance:	
Form:	Fluid
Colour:	Pink
Odour:	Chloroform like
Odour threshold:	Not determined.
pH-value at 20 °C:	5.5
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	>60 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive a vapour mixtures are possible.
Explosion limits:	
Lower:	1.3 Vol %
Upper:	9.5 Vol %
Vapour pressure at 20 °C:	210 hPa
Density at 20 °C:	1.25 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	ter): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability

· 9.2 Other information

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Protect from frost.

To avoid thermal decomposition do not overheat.

(Contd. on page 8)

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 7)

· 10.3 Possibility of hazardous reactions

Phenol is sensitive to oxidizing agents.

Reacts with aldehydes, isocyanates, nitrites, nitrides, aluminium chloride, nitrobenzene; aluminium chloridenitromethane; butadine; calcium hypochlorite; peroxomonosulphuric acid; peroxodisulphuric acid; sodium nitrate; sodium nitrate-trifluoroacetic acid and Friedel-Craft catalysts (sometimes violently or explosively).

It may react to form catechol, hydroquinone, etc. as a result of radical formation.

Chloroform is sensitive to light and moisture (formation of : hydrogen chloride gas).

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong acids and oxidising agents

Strong bases.

Finely divided metals, Aluminium, Magnesium, Zinc, Titanium (risk of explosion in contact with chloroform).

· 10.6 Hazardous decomposition products:

Hydrogen chloride (HCl)

Carbon monoxide and carbon dioxide

Phosgene

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

ricate t	Tieute tollieny		
· LD/LC	· LD/LC50 values relevant for classification:		
108-95-	108-95-2 phenol		
		317 mg/kg (rat)	
Dermal	LD50	850 mg/kg (rabbit)	
	67-66-3 Chloroform		
Oral	LD50	908 mg/kg (rat)	
Dermal	LD50	75 mg/kg (rat)	

- Primary irritant effect:
- · Skin corrosion/irritation Caustic effect on skin and mucous membranes.
- · Serious eye damage/irritation Strong caustic effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · 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:

Toxic

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

ROUTES OF ENTRY:

Chloroform: The main route of exposure is inhalation but in some cases poisoning is due to ingestion; skin absorption is limited.

Phenol: Phenol exerts a marked corrosive action on any tissue of contact when ingested, inhaled or after skin exposure. Its cellular uptake is both rapid and passive due to its lipophilic character, and signs of systemic toxicity develop soon after exposure. Phenol's main target organs are the liver and kidney. It may also effect the respiratory and cardiovascular systems.

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

Muta. 2, Carc. 2, Repr. 2

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.

(Contd. on page 9)

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

(Contd. of page 8)

- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even extremely 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.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· European waste catalogue

Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Container remains hazardous when empty. Continue to observe all precuations.

Containers, even those that are "empty," may contain residues that can develop flammable vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

Do not mix with other waste streams.

UN2810
UN2010
2810 TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL CHLOROFORM)
TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL CHLOROFORM)
7

GB

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

	(Contd. of page
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
9	
· Class	6.1 Toxic substances.
· Label	6.1
· 14.4 Packing group	
· ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Toxic substances.
· Danger code (Kemler):	60
· EMS Number:	F-A,S-A
· Segregation groups	Liquid halogenated hydrocarbons
· 14.7 Transport in bulk according to Ann	ex II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	100 ml
· Transport category	2
· Tunnel restriction code	D/E
· UN "Model Regulation":	UN2810, TOXIC LIQUID, ORGANIC, N.O.S (PHENOL, CHLOROFORM), 6.1, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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

rece, and pin	uses
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

(Contd. on page 11)

Printing date 31.07.2015 Revision: 31.07.2015

Trade name: Phenol:Chloroform:Isoamyl Alcohol (25:24:1)

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

(Contd. of page 10) H373 May cause damage to organs through prolonged or repeated exposure. R10 R20/22 Harmful by inhalation and if swallowed. R22 Harmful if swallowed. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R34 Causes burns. Irritating to eyes and skin. R36/38 Limited evidence of a carcinogenic effect. R40 R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Possible risk of harm to the unborn child. R63 R68 Possible risk of irreversible effects. · 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 IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Flam. Liq. 3: Flammable liquids, Hazard Category 3 Acute Tox. 3: Acute toxicity, Hazard Category 3 Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Eve Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Muta. 2: Germ cell mutagenicity, Hazard Category 2 Carc. 2: Carcinogenicity, Hazard Category 2 Repr. 2: Reproductive toxicity, Hazard Category 2 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

CD