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

1.1. Product identifier

Trade name/designation	:	Naphtha (petroleum), heavy catalytic cracked
EC Index	:	649-289-00-0
EC No	:	265-055-7
CAS No.	:	64741-54-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Main use category	:	Industrial use,Professional use

1.3. Details of the supplier of the safety data sheet

Company : Mercuria Energy Trading B.V. supplying for and on behalf of Mercuria Energy Trading S.A
Herculesplein 108
3584AA Utrecht , Netherlands
Telephone +41 22 594 7000
Telefax: +41 22 594 3904
E-mail: emergency@sgs.com

1.4. Emergency telephone number

Emergency telephone : +32 3 575 11 30 (SGS 24/7 Emergency Hotline)

IRELAND (REPUBLIC OF)	
National Poisons Information Centre	
Beaumont Hospital	+353 18 37 99 64/+353 1 809 21 66
UNITED KINGDOM	
National Poisons Information Service (Newcastle Centre)	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
Regional Drugs and Therapeutics Centre, Wolfson Unit	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification : The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Flam. Liq. 1	H224
Skin Irrit. 2	H315
Muta. 1B	H340
Carc. 1B	H350
Repr. 2	H361fd
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411

Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification : This substance is classified as hazardous according to 67/548/EEC.

Carc.Cat.2; R45
Muta.Cat.2; R46

Repr.Cat.3; R62
Repr.Cat.3; R63
F+; R12
Xn; R65
Xi; R38
N; R51/53
R67

Full text of R-phrases: see section 16

2.2. Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

Hazard pictograms :

GHS02 GHS07 GHS08 GHS09

Signal word : Danger

Hazard statements :
H224 - Extremely flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements :
P201 - Obtain special instructions before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/.
P331 - Do NOT induce vomiting.

2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

2.3. Other hazards

Other hazards : Vapours can form explosive mixtures with air.
Results of PBT and vPvB assessment :
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Naphtha (petroleum), heavy catalytic cracked	(CAS No.) 64741-54-4 (EC No) 265-055-7 (EC Index) 649-289-00-0	100	Carc.Cat.2; R45 Muta.Cat.2; R46 Repr.Cat.3; R62 Repr.Cat.3; R63 F+; R12 Xn; R65 Xi; R38 N; R51/53 R67

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Toluene	(CAS No.) 108-88-3 (EC No) 203-625-9 (EC Index) 601-021-00-3	>= 3	Repr.Cat.3; R63 F; R11 Xn; R65 Xn; R48/20 Xi; R38 R67
n-Hexane	(CAS No.) 110-54-3 (EC No) 203-777-6 (EC Index) 601-037-00-0	>= 3	Repr.Cat.3; R62 F; R11 Xn; R65 Xn; R48/20 Xi; R38 N; R51/53 R67
Benzene	(CAS No.) 71-43-2 (EC No) 200-753-7 (EC Index) 601-020-00-8	>= 0,1	F; R11 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65 Xi; R36/38

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Naphtha (petroleum), heavy catalytic cracked	(CAS No.) 64741-54-4 (EC No) 265-055-7 (EC Index) 649-289-00-0	100	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361fd STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Toluene	(CAS No.) 108-88-3 (EC No) 203-625-9 (EC Index) 601-021-00-3	>= 3	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336
n-Hexane	(CAS No.) 110-54-3 (EC No) 203-777-6 (EC Index) 601-037-00-0	>= 3	Flam. Liq. 2, H225 Repr. 2, H361f Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411
Benzene	(CAS No.) 71-43-2 (EC No) 200-753-7 (EC Index) 601-020-00-8	>= 0,1	Flam. Liq. 2, H225 Carc. 1A, H350 Muta. 1B, H340 STOT RE 1, H372 Asp. Tox. 1, H304 Eye Irrit. 2, H319 Skin Irrit. 2, H315

Full text of R- and H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation : Remove person to fresh air and keep comfortable for breathing.
If breathing is irregular or stopped, administer artificial respiration.
Get medical advice/attention.

Skin contact : Wash with plenty of soap and water.
When in doubt or if symptoms are observed, get medical advice.
Remove contaminated clothing and wash it before reuse.

Eye contact : Rinse immediately carefully and thoroughly with eye-bath or water.
When in doubt or if symptoms are observed, get medical advice.

In case of ingestion	:	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get immediate medical advice/attention.
Additional advice	:	First aider: Pay attention to self-protection! Personal protection equipment: see section 8 Treat symptomatically. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice. Show this safety data sheet to the doctor in attendance.

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

Inhalation	:	May cause drowsiness or dizziness. Vapours may cause drowsiness and dizziness. The following symptoms may occur: Cough, Mental confusion Headache.
Skin contact	:	Causes skin irritation. The following symptoms may occur: erythema (redness).
Eye contact	:	Contact with eyes may cause irritation. The following symptoms may occur: erythema (redness).
Ingestion	:	May be fatal if swallowed and enters airways. The following symptoms may occur: Central nervous system depression.
Other adverse effects	:	Suspected of damaging fertility. Suspected of damaging the unborn child. May cause cancer. May cause genetic defects.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Water spray, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide
Extinguishing media which must not be used for safety reasons	:	Strong water jet

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Extremely flammable liquid and vapour.
Specific hazards	:	Heating causes rise in pressure with risk of bursting. Vapours can form explosive mixtures with air. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. Hazardous decomposition products Carbon oxides (COx) Organic compounds as appropriate : Hydrogen sulfide (H_2S) Sulphur oxides Sulphuric acid Do not allow run-off from fire-fighting to enter drains or water courses. Dispose according to legislation.

5.3. Advice for firefighters

Advice for firefighters	:	Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Evacuate area.

Do not allow run-off from fire-fighting to enter drains or water courses.
Dispose according to legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Evacuate area.
Stay upwind/keep distance from source.
Provide adequate ventilation.
Use personal protective equipment as required.
Personal protection equipment: see section 8
Avoid contact with skin, eyes and clothes.
Do not breathe vapour/spray.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ensure that the equipment is adequately grounded.
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Use only non-sparking tools.
As appropriate :
Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.
Personal protection equipment: see section 8 .

6.2. Environmental precautions

Environmental precautions : Do not allow to enter into ground-water, surface water or drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Use foam on spills to minimise vapours.
Stop leak if safe to do so.
Clean-up methods - small spillage: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents)., Collect in closed and suitable containers for disposal.
Clean-up methods - large spillage: Use foam on spills to minimise vapours., Dam up., Large spills should be collected mechanically (remove by pumping) for disposal., Collect in closed and suitable containers for disposal.
Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.
Dispose of waste product or used containers according to local regulations.

6.4. Reference to other sections

Personal protection equipment: see section 8,
Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Provide adequate ventilation.
Use personal protective equipment as required.
Personal protection equipment: see section 8

Avoid contact with skin, eyes and clothes.
Do not breathe vapour/spray.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharges.
Ensure that the equipment is adequately grounded.
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Use only non-sparking tools.
Take any precaution to avoid mixing with incompatible materials.
See also section 10.
Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time).
Do not allow contact with soil, surface or ground water.
as appropriate
Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

Advices on general occupational hygiene : Keep good industrial hygiene.
Wash hands before breaks and immediately after using the product.
Take off contaminated clothing.
When using do not eat, drink or smoke.
Keep work clothes separately.
Keep away from food, drink and animal feedingstuffs.
Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Storage of flammable liquids
Keep in a dry, cool and well-ventilated place.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Open valve slowly to avoid pressure shock.
Do not store near or with any of the incompatible materials listed in section 10.
Protect from sunlight.
Bund storage facilities to prevent soil and water pollution in the event of spillage.
As appropriate :
Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

Packaging materials : Keep/Store only in original container.
Suitable material: Mild steel, Stainless steel
Unsuitable material: synthetic material

7.3 Specific end use(s)

see attached exposure scenario.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values : Not applicable

8.2. Exposure controls

Personal protection equipment	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment. Filter type: ABEK (EN 141) Half-face mask (DIN EN 140) Full face mask (EN 136) Self-contained open-circuit compressed air breathing apparatus (EN 137) The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection	:	Wear chemically resistant gloves (tested to EN374) ,NBR (Nitrile rubber) > 0,3 mm, BTT: >480 min,The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Eye protection	:	Use suitable eye protection. (EN 166) Goggles
Body protection	:	Wear suitable coveralls to prevent exposure to the skin. Chemical protection clothing Antistatic clothing In case of large spillages: Wear full chemical protective clothing.
Thermal hazard protection	:	Not required under normal use. Use dedicated equipment.
Engineering control measures	:	Provide adequate ventilation. Safe handling: see section 7 Use only outdoors or in a well-ventilated area. Store locked up. Transfer and handle product only in closed systems. Take precautionary measures against static discharges. Ensure that the equipment is adequately grounded. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Environmental exposure controls	:	Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation. Do not allow contact with soil, surface or ground water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	petroleum hydrocarbon odour
Odour threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable, liquid
Vapour pressure	:	< 6 - 96 hPa (at 37.8 °C)

Vapour density	:	No data available
Density	:	0,68 - 0,78 g/cm³ (at 15 °C)
Relative density	:	No data available
Water solubility	:	No data available
Solubility in different media	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Explosive properties	:	Not applicable The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	:	Not applicable The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : Extremely flammable liquid and vapour.
Reference to other sections: 10.4 & 10.5

10.2. Chemical stability

Stability : The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions : Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Safe handling: see section 7

10.5. Incompatible materials

Incompatible materials : Oxidising substances, Safe handling: see section 7

10.6. Hazardous decomposition products

Hazardous decomposition products : Burning produces noxious and toxic fumes. Reference to other sections: 5.2

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met.)

Naphtha (petroleum), heavy catalytic cracked (64741-54-4)	
LD50/oral/rat	5000 mg/kg
LD50/dermal/rat	> 2000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5,25 mg/l/4h

Skin corrosion/irritation	:	Causes skin irritation. pH: No data available
Serious eye damage/eye irritation	:	Not classified (Based on available data, the classification criteria are not met.) pH: No data available
Respiratory or skin sensitisation	:	Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	:	May cause genetic defects. Benzene
Carcinogenicity	:	May cause cancer. Benzene
Reproductive toxicity	:	Suspected of damaging fertility. Suspected of damaging the unborn child. n-Hexane Toluene
STOT-single exposure	:	May cause drowsiness or dizziness.
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met.)
Aspiration hazard	:	May be fatal if swallowed and enters airways.

Other information

Symptoms related to the physical, chemical and toxicological characteristics,For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Toxicity : Toxic to aquatic life with long lasting effects.

Naphtha (petroleum), heavy catalytic cracked (64741-54-4)	
LC50 fish 1	10 mg/l (96h)
EC50 Daphnia 1	4,5 mg/l (48h)
LC50 fish 2	8,2 mg/l (96h)
ErC50 (algae)	3,1 mg/l (72h)
EC50 72h Algae [mg/l] (1)	880 mg/l (Species: Pseudokirchneriella subcapitata)
Additional information	LL50, fish, acute, freshwater, Pimephales promelas (fathead minnow): 8.2 mg/l (96 hours, equivalent or similar to EPA 66013-75-009) NOELR, fish, Chronic, freshwater, Pimephales promelas (fathead minnow): 2.6 mg/l (14 days, OECD 204) EL50, daphnia, acute, freshwater, daphnia: 4.5 mg/l (48 hours, OECD Test Guideline 202) NOELR, daphnia, Chronic, freshwater, daphnia: 2.6 mg/l (21 days, OECD 211) EL50, algae, freshwater, Pseudokirchneriella subcapitata: 3.1 mg/l (72 hours, OECD Test Guideline 201) LL50, microorganisms, freshwater, Tetrahymena pyrifomis: 15.41 mg/l (72 hours, Quantitative structure-acivity relationship (QSAR))

12.2. Persistence and degradability

Persistence and degradability : Not applicable
Substance is complex UVCB.

12.3. Bioaccumulative potential

Bioaccumulation : Not applicable
Substance is complex UVCB.

Partition coefficient n-octanol/water : No data available

12.4. Mobility in soil

Mobility : No data available
Substance is complex UVCB

12.5. Results of PBT and vPvB assessment

PBT/vPvB data : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Other information : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product waste: : Handle with care.
Safe handling: see section 7
Handling and storage
Refer to manufacturer/supplier for information on recovery/recycling.
Collect and dispose of waste product at an authorised disposal facility.
Do not allow contact with soil, surface or ground water.
Dispose of empty containers and wastes safely.
Recycling is preferred to disposal or incineration
If recycling is not possible, eliminate in accordance with local valid waste disposal regulations

Contaminated packaging : Do not burn, or use a cutting torch on, the empty drum.
Do not puncture or incinerate.
Delivery to an approved waste disposal company.
Handle contaminated packages in the same way as the substance itself.
Dispose according to legislation.

List of proposed waste codes/waste designations in accordance with EWC : This material and its container must be disposed of as hazardous waste.
Waste codes should be assigned by the user based on the application for which the product was used.
The following Waste Codes are only suggestions:
13 07 02*
150110* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1. UN number

UN number : 1268

14.2. UN proper shipping name

Proper Shipping Name : PETROLEUM DISTILLATES, N.O.S.
Proper Shipping Name (IATA) : Petroleum distillates, n.o.s.
Proper Shipping Name (IMDG) : PETROLEUM DISTILLATES, N.O.S.
Proper Shipping Name (ADN) : PETROLEUM DISTILLATES, N.O.S.

14.3. Transport hazard class(es)

14.3.1. Overland transport

Class(es) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code : F1
ADR/RID-Labels : 3 - Flammable liquid

14.3.2. Inland waterway transport (ADN)

ADN : Hazards :3+N2
Class (UN) : 3

14.3.3. Transport by sea

Class or Division : 3 - flammable liquids

14.3.4. Air transport

Class or Division : 3 - flammable liquids

14.4. Packing group

Packing group : I

14.5. Environmental hazards

Environmental hazards : p

Other information : ADN : N2.

14.6 Special precautions for user

Special precautions for user : No data available.

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

Code: IBC : No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006 :

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 : Naphtha (petroleum), heavy catalytic cracked

5. Benzene : Benzene

28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2	:	Naphtha (petroleum), heavy catalytic cracked
29. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Germ cell Mutagen category 1A or 1B (Table 3.1) or Mutagen category 1 or 2 (Table 3.2) and listed as follows: Mutagen category 1A (Table 3.1)/Mutagen category 1 (Table 3.2) listed in Appendix 3 Mutagen category 1B (Table 3.1)/Mutagen category 2 (Table 3.2) listed in Appendix 4	:	Naphtha (petroleum), heavy catalytic cracked
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	:	Naphtha (petroleum), heavy catalytic cracked
48. Toluene	:	Toluene
This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC.	:	none
Authorisations	:	Not applicable

Take note of Directive 92/85/EEC on the safety and health at work of pregnant workers.
Take note of Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

DE :	WGK	:	3
DE :	German storage class (LGK)	:	LGK 3 - Flammable liquid materials (Flashpoint < 55 °C)
DE :	TA-Luft	:	Organic Substances,Carcinogenic substances,Mutagenic
DE :	Technische Regeln für Gefahrstoffe (TRGS)	:	applicable
DE :	Risk classification according to VbF	:	A I - Liquids with a flashpoint below 21°C
FR :	Installations classées	:	143X; ;113X; 117X
NL :	ABM	:	2 - May cause heritable genetic damage. (A)
NL :	NeR (Nederlandse emissie Richtlijn)	:	Organic substances in vapour or gaseous form

15.2. Chemical safety assessment

Chemical Safety Assessment	:	For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Aquatic Chronic 2	:	Hazardous to the aquatic environment - chronic hazard category 2
Asp. Tox. 1	:	Aspiration hazard, Category 1
Carc. 1A	:	Carcinogenicity, Category 1A
Carc. 1B	:	Carcinogenicity, Category 1B
Eye Irrit. 2	:	Serious eye damage/eye irritation Category 2

Flam. Liq. 1	:	Flammable liquids, Category 1
Flam. Liq. 2	:	Flammable liquids, Category 2
Muta. 1B	:	Germ cell mutagenicity, hazard categories 1B
Repr. 2	:	Reproductive toxicity, Hazard Category 2
Repr. 2	:	Reproductive toxicity, Hazard Category 2
Repr. 2	:	Reproductive toxicity, Hazard Category 2
Skin Irrit. 2	:	Skin corrosion/irritation, Category 2
STOT RE 1	:	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	:	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	:	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224	:	Extremely flammable liquid and vapour.
H225	:	Highly flammable liquid and vapour.
H304	:	May be fatal if swallowed and enters airways.
H315	:	Causes skin irritation.
H319	:	Causes serious eye irritation.
H336	:	May cause drowsiness or dizziness.
H340	:	May cause genetic defects.
H350	:	May cause cancer.
H361d	:	Suspected of damaging the unborn child.
H361f	:	Suspected of damaging fertility.
H361fd	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H411	:	Toxic to aquatic life with long lasting effects.
R11	:	Highly flammable.
R12	:	Extremely flammable.
R36/38	:	Irritating to eyes and skin.
R38	:	Irritating to skin.
R45	:	May cause cancer.
R46	:	May cause heritable genetic damage.
R48/20	:	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23/24/25	:	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R51/53	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62	:	Possible risk of impaired fertility.
R63	:	Possible risk of harm to the unborn child.
R65	:	Harmful: may cause lung damage if swallowed.
R67	:	Vapours may cause drowsiness and dizziness.
F	:	Highly flammable
F+	:	Extremely flammable
N	:	Dangerous for the environment
T	:	Toxic
Xi	:	Irritant
Xn	:	Harmful

Key literature references and sources for data : European Chemicals Agency
CSR

Abbreviations and acronyms : ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods Code
LEL = Lower Explosive Limit/Lower Explosion Limit
UEL = Upper Explosion Limit/Upper Explosive Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
N = Dangerous for the environment

TWA = time weighted average
PBT = persistent, bioaccumulating and toxic (PBT).
vPvB = very persistent and very bioaccumulating
WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)
T = Toxic
TLV = Threshold limits
STEL = Short term exposure limit
DNEL = Derived No Effect Level
CSR = Chemical Safety Report
EC50 = Median Effective Concentration
UVCB = Substance of unknown or variable composition, complex reaction products or biological material (UVCB)
DMEL = Derived minimal effect level
PNEC = Predicted No Effect Concentration
OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = Median lethal level
EL50 = Median effective level
ErC50 = EC50 in terms of reduction of growth rate
ErL50 = EL50 in terms of reduction of growth rate
NOEL = No-observed-effect level
NOEC = No observed effect concentration
NOELR = No observed effect loading rate
NOAEC = No observed adverse effect concentration
NOAEL = No observed adverse effect level
EWC = European Waste Catalogue
NA = Not applicable
N.O.S. = Not Otherwise Specified
VOC = Volatile organic compounds
Quantitative structure-acivity relationship (QSAR)
ABM = Algemene beoordelingsmethodiek
STOT = Specific Target Organ Toxicity
BTT = Breakthrough time (maximum wearing time)

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.