

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 /

Rules and Regulations

Date of issue: 16/12/2016 Revision date: : Version: 1.0

EDF-5574

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

1.1. Product identifier

Product form : Mixture

Product name : DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN

NONANE

Product code : EDF-5574

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226
Acute Tox. 4 (Inhalation) H332
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 3 H336
Asp. Tox. 1 H304

Full text of H-statements: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11 Xn; R65 Xi; R38 R67

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 3 H226
Acute Tox. 4 (Inhalation:vapour) H332
Skin Irrit. 2 H315
Eye Irrit. 2A H319
STOT SE 3 H336
Asp. Tox. 1 H304

16/12/2016 EN (English) 1/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Adverse physicochemical, human health and environmental effects

Central Nervous System.

Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







Signal word (CLP)

: Danger

Hazard statements (CLP)

: H226 - Flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P261 - Avoid breathing fume, mist, spray, vapours P264 - Wash Both hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

GHS-US labelling

Hazard pictograms (GHS-US)







GHS02

GHS07

Signal word (GHS-US)

: Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation H319 - Causes serious eye irritation H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US)

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

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing fume, mist, spray, vapours P264 - Wash Both hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable

for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P331 - Do NOT induce vomiting

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention

16/12/2016 EN (English) 2/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P362 - Take off contaminated clothing and wash before reuse

P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide., Dry chemical, Water spray for extinction

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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

P405 - Store locked up

P501 - Dispose of contents/container to Comply with applicable regulations

Other hazards 2.3.

No additional information available

SECTION 3: Composition/information on ingredients

Substance 3.1.

Not applicable

3.2. **Mixture**

| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
|--|--|------------|--|
| N-NONANE UNLABELED | (CAS No) 111-84-2 (EC no) 203-913-4 | 99.999997 | R10 Xn; R20 Xn; R65 R67 Xi; R38 |
| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) | (CAS No) 116865-58-8 | 0.0000279 | Muta.Cat.3; R68 T+; R27 Xn; R65 R53 |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| N-NONANE UNLABELED | (CAS No) 111-84-2 (EC no) 203-913-4 | 99.999997 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304 |
| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) | (CAS No) 116865-58-8 | 0.00000279 | Acute Tox. 1 (Dermal), H310 Muta. 2, H341 STOT SE 2, H371 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 |
| Name | Product identifier | % | GHS-US classification |
| NI NIONANE LINI ARELED | (CAS No.) 111 94 2 | 00 000007 | Flam Lig 2 H226 |

| Name | Product identifier | % | GHS-US classification |
|--|----------------------|------------|---|
| N-NONANE UNLABELED | (CAS No) 111-84-2 | 99.999997 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304 |
| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) | (CAS No) 116865-58-8 | 0.00000279 | Acute Tox. 1 (Dermal), H310 Muta. 2, H341 STOT SE 2, H371 Asp. Tox. 1, H304 |

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

SECTION 4: First aid measures

| First-aid measures general : | | : | Move out | of d | |
|------------------------------|--|---|----------|------|--|
| | | 6 | | _ | |

Description of first aid measures

- dangerous area. Consult a physician and show this safety data sheet.
- First-aid measures after inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash First-aid measures after skin contact with plenty of soap and water. Wash contaminated clothing before reuse.
- Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical First-aid measures after eye contact

: Immediately call a POISON CENTER or doctor/physician. First-aid measures after ingestion

16/12/2016 EN (English) 3/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

inhaled. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : For small fires, use media :

For small fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with

flooding quantities of water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Reactivity : Vapors may form explosive mixture with air.

5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours

accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For containment : Contain spillage, then collect with non-combustible absorbent material. Disposal should be in

accordance with applicable Federal, State and local regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No open flames. No smoking. Take precautionary measures against static discharge. Use only

non-sparking tools. Use only outdoors or in a well-ventilated area.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before

breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment.

Storage conditions : Store at room temperature away from light and moisture.

Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

16/12/2016 EN (English) 4/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE

N-NONANE UNLABELED (111-84-2)

Italy - Portugal - USA ACGIH ACGIH TWA (ppm)

200.0000000000 ppm Central Nervous System

8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before

breaks and at the end of workday.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection : protective gloves.

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance

at the work place.

: 151 °C (304 °F) - lit

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

Environmental exposure controls : Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture. Physical state : Liquid Appearance : Liquid. Molecular mass 128.3 g/mol Colour Colourless. Odour No data available : No data available Odour threshold No data available pΗ Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available : -53 °C (- 63 °F) - lit Freezing point

Flash point : 31.0 °C (87.8 °F) - closed cup

Auto-ignition temperature : 205 °C (401 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapour

Vapour pressure : 12.4 hPa (9.3 mmHg) at 37.7 °C (99.9 °F)

Relative vapour density at 20 °C : No data available Relative density : No data available

Density : 0.718 g/ml at 25 °C (77 °F)

Solubility : Water: 0 % Log Pow : 5.65

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 0.87 - 2.9 % (V)

9.2. Other information

Boiling point

No additional information available

16/12/2016 EN (English) 5/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| SECTION 10: Stability and | l reactivity |
|---------------------------|--------------|
|---------------------------|--------------|

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

| DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE | |
|--|------------------------|
| LC50 inhalation rat (mg/l) | 23760 mg/m³ male - 4 h |
| LC50 inhalation rat (ppm) | 3200 ppm/4h |
| ATE CLP (gases) | 3200.000 ppmv/4h |
| ATE CLP (vapours) | 11.000 mg/l/4h |
| ATE CLP (dust.mist) | 1.500 mg/l/4h |

| N-NONANE UNLABELED (111-84-2) | |
|-------------------------------|------------------------|
| LC50 inhalation rat (mg/l) | 23760 mg/m³ male - 4 h |
| LC50 inhalation rat (ppm) | 3200 ppm/4h |
| ATE CLP (gases) | 3200.000 ppmv/4h |
| ATE CLP (vapours) | 11.000 mg/l/4h |
| ATE CLP (dust,mist) | 23.760 mg/l/4h |

| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (116865-58-8) | |
|--|------------------------|
| LD50 oral | 0.013 mg/kg |
| LD50 dermal | 0.275 mg/kg |
| ATE CLP (dermal) | 5.000 mg/kg bodyweight |

Skin corrosion/irritation : Causes skin irritation.

Skin - rat - Skin irritation - Draize test

Serious eye damage/irritation : Causes serious eye irritation.

No data available

Respiratory or skin sensitisation : Not available

No data available

Germ cell mutagenicity : Not available
Carcinogenicity : Not classified
Reproductive toxicity : Not available

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

May cause drowsiness or dizziness.

Specific target organ toxicity (repeated

exposure)

: Not classified No data available

: May be fatal if swallowed and enters airways.

Aspiration hazard : May be fatal if swallowed and en

Potential adverse human health effects and

symptoms

: Harmful if inhaled.

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

inhaled. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

16/12/2016 EN (English) 6/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (116865-58-8) | |
|--|---|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

12.3. Bioaccumulative potential

| DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE | |
|--|--------------------------------|
| Log Pow | 5.65 |
| Bioaccumulative potential | Indication of bioaccumulation. |

| N-NONANE UNLABELED (111-84-2) | |
|-------------------------------|--------------------------------|
| Log Pow | 5.65 |
| Bioaccumulative potential | Indication of bioaccumulation. |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local

environmental control regulations.

Waste disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1920 DOT NA no. UN1920

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Nonanes

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid

3

Packing group (DOT) : III - Minor Danger

16/12/2016 EN (English) 7/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. **Additional information**

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : 111

Class (ADR) : 3 - Flammable liquids

Hazard identification number (Kemler No.) : 30 Classification code (ADR) : F1

: 3 - Flammable liquids Danger labels (ADR)



Orange plates

Tunnel restriction code : D/E Limited quantities (ADR) 51 EAC code : 3Y Excepted quantities (ADR) : E1

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

MFAG-No : 128

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement

Regulations)

14.4. **Environmental hazards**

Other information : No supplementary information available.

14.5. Special precautions for user

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

Not applicable

16/12/2016 EN (English) 8/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| according to regulation (20) from 100,2010 and according | isostanig to regulation (25) real to and according to regulation regulation 25, march 25, 25 (27) the regulation | | |
|--|--|--|--|
| SECTION 15: Regulatory information | on | | |
| 15.1. US Federal regulations | | | |
| DIOXIN&FURAN FOOD/FEED/QQQ CLEAN | DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE | | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard | | |
| N-NONANE UNLABELED (111-84-2) | | | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard | | |
| 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (116865-58-8) | | | |

15.2. International regulations

CANADA

DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2.1. National regulations

No additional information available

15.3. US State regulations

| DIOXIN&FURAN FOOD/FEED/QQQ CLEANUP STANDARD SOLN MIXTURE (13C6, 99%) IN NONANE() | |
|--|---|
| State or local regulations | U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. |

N-NONANE UNLABELED (111-84-2)

- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (116865-58-8)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

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

| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), Category 1 |
|----------------------------------|---|
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Inhalation:vapour) | Acute toxicity (inhalation:vapour) Category 4 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment — Chronic Hazard, Category 4 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Muta. 2 | Germ cell mutagenicity, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

16/12/2016 EN (English) 9/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| STOT SE 2 | Specific target organ toxicity — Single exposure, Category 2 |
|-----------|--|
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| H226 | Flammable liquid and vapour |
| H304 | May be fatal if swallowed and enters airways |
| H310 | Fatal in contact with skin |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H336 | May cause drowsiness or dizziness |
| H341 | Suspected of causing genetic defects |
| H371 | May cause damage to organs |
| H413 | May cause long lasting harmful effects to aquatic life |
| R10 | Flammable |
| R11 | Highly flammable |
| R20 | Harmful by inhalation |
| R27 | Very toxic in contact with skin |
| R38 | Irritating to skin |
| R53 | May cause long-term adverse effects in the aquatic environment |
| R65 | Harmful: may cause lung damage if swallowed |
| R67 | Vapours may cause drowsiness and dizziness |
| R68 | Possible risk of irreversible effects |
| F | Highly flammable |
| T+ | Very toxic |
| Xi | Irritant |
| Xn | Harmful |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

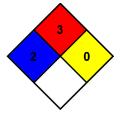
temporary incapacitation or residual injury.

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient

temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS III Rating

NFPA fire hazard

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard Physical : 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

16/12/2016 EN (English) 10/10