

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by
Regulation (EU) No 830/2015

Revision 4, Replaces Rev. 3

Revised: March 2019

CLOR-D-TECT 1000 CHLORINE/HALOGEN TEST KIT

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

1.1. Product identifier

Product Description: The CLOR-D-TECT 1000 product line is a field Test Kit for determining total halogen content in used oils.

This product is a mixture. For identification of the individual components, see section 3.

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

This product contains prepackaged reagents for the analysis of used oil samples for chlorine contamination.

1.3. Details of the supplier of the safety data sheet

Manufacturer: Dexsil Corporation
One Hamden Park Drive
Hamden, CT 06517

Telephone Number: (203) 288-3509
Email: info@dexsil.com

Importer: ETI Umwelttechnik AG
Kalchbuhlstrasse 18
7007 Chur, Switzerland

Telephone Number: (081) 253 54 54
Email: info@eti-swiss.com

1.4. Emergency telephone number

USA (800) 424-9300 (CHEMTREC) SWITZERLAND (435) 08 20 11

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

Ampule 1 (gray color yellow dot): Alkali metal dispersion			
Combustible Liquid 4;H227	Combustible Liquid.	Skin Corrosion 1B;H314	Causes severe skin burns and eye damage.
Water-reactive 1;H260	In contact with water releases flammable gases which may ignite spontaneously.	Eye Damage 1;H318	Causes serious eye damage.

Ampule 2 (Large, colorless): Ethyl diglyme / naphthalene			
Combustible Liquid;H227	Combustible Liquid.	Aquatic toxicity 2;H410	Very toxic to aquatic life with long lasting effects.
Acute Toxicity 4;H302	Harmful if swallowed.	Carcinogenicity 2;H351	Suspected of causing cancer.
Eye Irritation 2;H319	Causes serious eye irritation.		

Ampule 3: Mercuric nitrate solution			
Acute tox. (oral) 4; Acute tox. (inh.) 4; Skin corr./irr. 2; Ser. eye dam./eye irr. 2A;	H302 Harmful if swallowed H332 Harmful if inhaled H315 Causes skin irritation H319 Causes serious eye irritation	Spec. tar. Org. tox. (rep. exp.) 2; Aquatic-Acute Haz. 2; Aquatic-Chronic Haz. 2;	H373 May cause damage to organs (nervous system, kidneys, blood) through prolonged or repeated exposure H401 Toxic to aquatic life H411 Toxic to aquatic life with long lasting effects

Ampule 4 (red-green color): Ethanol			
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Flammable Liquid 2;H225	Highly Flammable liquid and vapor.	Eye Irritation 2;H319	Causes serious eye irritation.
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Ampule 5 (colorless): Sodium dimethyldithiocarbamate			
Eye Irritation 2;H319	Causes serious eye irritation.	Aquatic toxicity 1;H400	Very toxic to aquatic life.

Aqueous Solution: Sulfuric acid solution			
Corrosive 1;H290	May be corrosive to metals.	Eye Damage 1;H318	Causes serious eye damage.
Skin Irritation 2;H315	Causes skin irritation.		

2.2. Label elements

Ampule 1 (gray color): Alkali metal dispersion



Danger

H227 Combustible liquid.

H260 In contact with water releases flammable gases which may ignite spontaneously.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

[Prevention]:

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

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231+232 Handle under inert gas. Protect from moisture.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or

doctor / physician.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P331 Do NOT induce vomiting.

P335+334 Brush off loose particles from skin. Immerse in cool water / wrap in wet bandages.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P402+404 Store in a dry place. Store in a closed container.

P403+235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

Ampule 2 (large, colorless): Ethyl diglyme / naphthalene



Danger

H227 Combustible liquid.

H302 Harmful if swallowed

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P311 Call a POISON CENTER or doctor / physician.

P337+313 If eye irritation persists: Get medical advice / attention.

P391 Collect spillage.

[Storage]:

P403+235 Store in a well ventilated place. Keep cool.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

Ampule 3 (colored-dot): Mercuric Nitrate Solution



Danger

H302+H332 - Harmful if swallowed or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H373 - May cause damage to organs (nervous system, kidneys, blood) through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects

[Prevention]:

P260 - Do not breathe mist, vapors, spray
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P264 - Wash exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment

P280 - Wear protective gloves, eye protection, face protection

[Response]:

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.
P314 - Get medical advice and attention if you feel unwell
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:

P501 - Dispose of contents/container to comply with local, state and federal regulations
If inhaled: Remove person to fresh air and keep comfortable for breathing

Ampule 4 (red-green color): Ethanol



Danger

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

Ampule 5 (colorless): Sodium dimethyldithiocarbamate



Warning

H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

[Prevention]:

P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

[Response]:

P391 Collect spillage.

[Storage]:

No GHS storage statements

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

Aqueous Solution: Sulfuric acid solution



Danger

H290 May be corrosive to metals.
H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue

rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P321 Specific treatment (see information on this label).

P362 Take off contaminated clothing and wash before reuse.

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

For additional information on toxicity, please refer to Section 11.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1% or higher.

Section 3: Composition/information on ingredients

3.2. Mixtures

The CLOR-D-TECT 1000 Chlorine/Halogen Test Kit consists of one test tube containing two ampules, one test tube containing two ampules plus an aqueous solution, and a separate ampule.

Component	Contents	CAS#	EC#	% liquid
Ampule 1 (gray color)	Sodium ¹	7440-23-5	231-132-9	0.60%
	Distillates (petroleum), ¹ hydrotreated middle	64742-46-7	265-148-2	2.38%
Ampule 2 (large, colorless)	Naphthalene ¹	91-20-3	202-049-5	1.06%
	Ethyl Diglyme ¹ Solution	112-36-7	203-963-7	10.74%
Ampule 3 (yellow-dot)	Mercuric Nitrate ¹	10045-94-0	233-152-3	0.01%
	water	7732-18-5	231-791-2	6.52%
Ampule 4 (red-green color)	Ethanol ¹	64-17-5	200-578-6	3.40%
Ampule 5 (colorless)	Sodium dimethyldithiocarbamate ¹	128-04-1	204-876-7	5.19%
Aqueous Solution	Sulfuric Acid ¹	7664-93-9	231-639-5	2.04%
	water	7732-18-5	231-791-2	68.06%
				100.00%

¹A REACH registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Section 4: First aid measures

4.1. Description of first aid measures

First Aid: In case of contact with reagents, rinse well with water.

Eye Contact: For all kit components, flush eyes with large amounts of water for 15 minutes. Seek medical attention.

Skin contact: Flush with large amounts of water. Use soap and water to wash away organic components.

Inhalation: In case of inhalation, remove to fresh air.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Clor-D-Tect – ETI (EU)

No data available.

Section 5: Firefighting measures

5.1. Extinguishing media

Extinguishing Media DO NOT USE WATER ON A SODIUM FIRE. Use Dry chemical, foam, CO₂.

Special Fire Fighting Procedures Do not use water. Wear SCBA. Avoid breathing sodium oxide fumes that will form on combustion.

5.2. Special hazards arising from the substance or mixture

Ampule 1 (grey, yellow dot) – Sodium oxides

Ampule 2 (blue dot) – No data available

Ampule 3 (colored dot) – No data available

Ampule 4 (red green solution) – No data available

Ampule 5 (colorless) – No data available

Aqueous Solution – No data available

5.3. Advice for firefighters

Do not use water on sodium. Wear SCBA. Avoid breathing sodium oxide fumes that will form on combustion.

5.4. Further information

No data available

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment incl., chemical safety glasses and rubber gloves. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations.

6.2. Environmental precautions

Keep out of drains and surface water.

6.3. Methods for material containment and cleaning up

Ampule 1 - Sodium Ampule

Cover with dry soda ash or salt. Store in a well ventilated area away from moisture.

Ampule 2 - Naphthalene/Ethyl Diglyme Ampule

Absorb completely and dispose of as organic waste.

Ampule 3 - Mercuric Nitrate Ampule

Absorb completely and flush area with water.

Ampule 4 - Ethanol Ampule

Solvent absorbent recommended for spills. Flush area with water.

Ampule 5 - Disposal Ampule

Absorb completely and flush area with water.

Aqueous Solution

Absorb completely and flush area with water.

6.4 Reference to other sections

For disposal see section 13

Section 7: Handling and storage

7.1. Precautions for safe handling

Wear appropriate safety equipment when performing the test on site.

7.2. Conditions for safe storage, including any incompatibilities

Store test kits in a cool, dry place. Check expiration date prior to performing test.

7.3. Specific end use(s)

Clor-D-Tect – ETI (EU)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Components with work place control parameters

Ampule 1 (grey, yellow dot) – petroleum naphtha

Components	Control parameters	Basis
RCP Dearom. Mineral spirits 175 – 220	600 mg/m ³	DE TRGS 900

Ampule 3 (mercuric nitrate)

Exposure route	Threshold limits	Basis
TWA	0,02 mg/m ³	EU Directive 2009/161 of the commission for the establishment of a third list of workplace limits pre derective98/24/EU as amended 2000/39/EU

Ampule 4 (ethanol)

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	1.900 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
DNEL	343 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
DNEL	950 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects

8.2. Exposure controls

Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the work day.

Personal Protective Equipment (PPE)

Respiratory protection	None required during normal use.
Ventilation	Perform test only in a well-ventilated area. Avoid breathing in Florisil material.
Protective gloves	Always wear rubber gloves when performing the test.
Eye protection	Wear safety glasses.
General Hygiene Measures	Avoid contact with skin, eyes and clothing. Wash after running tests.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	<u>Ampule 1</u>	<u>Ampule 2</u>	<u>Ampule 3</u>	<u>Ampule 4</u>	<u>Ampule 5</u>	<u>Aq. Sol'n</u>
Boiling Pt. °C	N/A	185	100	78	100	>100
Vapor Pressure mm Hg@ 21°C	N/A	0.5	18	44	18	16
Solubility in Water	reacts	91%	complete	miscible	miscible	complete
Specific Gravity	0.86	0.91	1.02	0.79	1.17	1.09
Percent Volatile	40	100	none	99	none	none
Evaporation Rate Butyl Acetate=1	N/A	0.04	N/A	2.7	N/A	N/A
Appearance	gray	colorless	colorless	red-green	colorless	colorless
Odor	none	ether-like	none	pleasant	sulfur-like	none

N/A = not available

Section 10: Stability and reactivity

Clor-D-Tect – ETI (EU)

10.1. Reactivity

No data available

10.2. Chemical stability

All components are stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Sodium reacts violently with water.

10.4. Conditions to avoid

Do not expose broken sodium ampule to moisture. Keep from strong oxidizers.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

Sodium will form hydrogen and sodium oxide when moisture is present. Ethyl diglyme may form peroxides on exposure to air. Other solutions are stable.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Ampule 2 (Naphthalene) - LD50 Oral - Rat - 490,0 mg/kg
LC50 Inhalation - Rat - male and female - 4 h - > 0,4 mg/l (OECD Test Guideline 403)
LD50 Dermal - Rabbit - 20.000 mg/kg

Aqueous solution (cadmium sulfate) – LD50 Oral – Rat – 280 mg/kg
LD50 Intraperitoneal – Mouse – 6,9 mg/kg

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

Aqueous solution (cadmium sulfate) – May alter genetic material. In vivo tests showed mutagenic effects
Rat liver DNA damage
Mouse lymphocyte Mutation in mammalian somatic cells
Mouse micronucleus test

Carcinogenicity

Ampule 2 (Naphthalene) – Rat – male and female – inhalation (vapor); Tumorigenic: Tumors at site of application.
Limited evidence of carcinogenicity in animal studies, IARC: 2B – Group 2B: Possibly carcinogenic to humans

Aqueous solution (cadmium sulfate) – This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Chronic exposure to cadmium may cause lung and prostate cancer.
Possible human carcinogen
IARC: 1 - Group 1: Carcinogenic to humans (Cadmium sulphate)

Reproductive toxicity

Ampule 2 (Diglyme) - Laboratory experiments have shown teratogenic effects.
Presumed human reproductive toxicant
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Aqueous solution (cadmium sulfate) – May cause congenital malformation in the fetus. Presumed human reproductive toxicant
Reproductive toxicity - Rat - Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

May cause reproductive disorders.

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Cardiovascular (circulatory) system. Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

Ampule 3 (mercuric nitrate) - Can damage organs with repeated exposure.

Aspiration hazard

No data available.

Additional information

Aqueous solution (Sulfuric Acid) – RETCS: WS5600000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Aqueous solution (Cadmium sulphate) - RTECS: EV2700000

Acute inhalation exposure to cadmium fumes may cause "metal fume fever" with flu-like symptoms of weakness, fever, headache, chills, nausea, vomiting, dizziness, sweating, muscular pain, cough and difficulty breathing. Acute pulmonary edema may develop within 24 hours and reaches a maximum by three days. The first chronic effect of exposure to cadmium is generally kidney damage, manifested by excretion of excessive protein in the urine, followed by anemia, teeth discoloration and loss of smell. Cadmium also is believed to cause pulmonary emphysema and bone disease.

Ampule 2 (Naphthalene) – Repeated dose toxicity: Rat - male and female - Oral - NOAEL : 100 mg/kg - LOAEL : 400 mg/kg – OECD Test Guideline 408

RTECS: QJ0525000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in: cataracts, optic neuritis, corneal injury, Eye irritation, Ingestion may provoke the following symptoms: hemolytic anemia, hemoglobinuria, Nausea, Headache, Vomiting, Gastrointestinal disturbance, Convulsions, anemia, Kidney injury may occur., Seizures., Coma.

Ampule 3 (mercuric nitrate)

RTECS: OW8225000

Extremely damaging effect on the tissue of the mucous membranes and upper respiratory tract, as well as on eyes and skin., cough, shortness of breath, headache, nausea

Section 12: Ecological information

12.1. Toxicity

Ampule 2 (Naphthalene)

Toxicity to fish

flow-through test LC50 - Pimephales promelas (fathead minnow) - 7,9 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 2,16 mg/l - 48 h

Ampule 3 (mercuric nitrate)

Ampule 4 (Ethanol)

Clor-D-Tect – ETI (EU)

Toxicity to fish Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°C
Rainbow trout: LC50 = 11200 mg/L; 24 Hr;
Fingerling (Unspecified)

Toxicity to bacteria Phytobacterium phosphoreum: EC50 = 34900 mg/L; 5-30 min;

When spilled on land it is apt to volatilize, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

Ampule 5 (Sodium dimethyldithiocarbamate)

Toxicity to Fish Rainbow trout: LC50 = 2.6 mg/L; 96 Hr.; Unspecified

Toxicity to bacteria Phytobacterium phosphoreum: EC50 = 0.508 mg/L; 15 minutes; Microtox test.

Aqueous solution (cadmium sulphate)

Toxicity to fish mortality LC50 - Pimephales promelas (fathead minnow) - 0,2 mg/l - 90,0 h

Toxicity to daphnia and other aquatic invertebrates Immobilization EC50 - Daphnia magna (Water flea) - 0,15 mg/l - 48 h

12.2. Persistence and degradability

Ampule 2 (Naphthalene)

Biodegradability aerobic - Exposure time 28 d Result: 2 % - Not readily biodegradable.

12.3. Bioaccumulative potential

Ampule 2 (Naphthalene)

Bioaccumulation Fish - Bioconcentration factor (BCF): 427 - 1.158

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1% or higher.

12.6. Other adverse effects

Ampule 2 (Naphthalene) – Very toxic to aquatic life with long lasting effects.

Ampule 3 (Mercuric nitrate) – Very toxic to aquatic life with long lasting effects.

Aqueous solution (cadmium sulfate) - Very toxic to aquatic life with long lasting effects.

Section 13: Disposal considerations

13.1. Waste treatment methods

Sampling Syringe: Dispose of in accordance with all applicable federal, state and local environmental regulations.

Test Tube 1: Contains reacted oil sample. Dispose of as an organic waste in accordance with all applicable federal, state and local environmental regulations.

Test Tube 2: Upon completion of test including the addition of ampule 5, contents will pass US EPA TCLP test. Dispose of in accordance with all applicable federal, state and local environmental regulations.

Section 14: Transportation information

14.1. UN number

Ampule 1 (sodium dispersion)

ADR/RID: 1391 IMDG: 1391 IATA: 1391

Ampule 4 (ethanol)

ADR/RID: 1170 IMDG: 1170 IATA: 1170

14.2. UN proper shipping name

ADR/RID: Alkali Metal Dispersion IMDG: Alkali Metal Dispersion IATA: Alkali Metal Dispersion
Passenger Aircraft: Not permitted for transport

14.3. Transport hazard class(es)

Ampule 1 (reaction tube)

ADR/RID: 4.3 IMDG: 4.3 IATA: 4.3

Ampule 4 (ethanol)

ADR/RID: de minimis IMDG: de minimis IATA: de minimis

14.4. Packing group

ADR/RID: I IMDG: I IATA: I

14.5. Environmental hazards

ADR/RID: No IMDG: Marine Pollutant: Yes IATA: No

14.6. Special precautions for user

NOTE: UN1170 materials are present in de minimis quantities.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The cargo is not intended to be carried in bulk.

Section 15: Regulatory information

This SDS complies with the requirements of Regulation (EC) No. 1907/2006

Authorisations and/or restrictions on use

Ampule 3 (mercuric nitrate)

REACH - Regulation (EU) No 1907/2006 Annex XVII, entry 18 - Mercury compounds: This use is not restricted.

EU Regulation No. 649/2012 of the European Parliament – Not regulated per Article 2 paragraph 3.

Minamata Convention on Mercury – Excluded mercury added product per article 4, para. 1, sub (b) and (c) and article 3, para. 2, sub (a) and (c).

Aqueous solution (cadmium sulphate)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Carcinogenic (article 57a) ED/108/2014

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

Carcinogens: category 1B

Restricted to professional users.

See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals ANNEX I, PART 1: List of chemicals subject to export notification procedure

EINECS: Components of this product are on the European Inventory of Existing Commercial Chemical Substances.

Swiss Regulatory Information:

Federal Act on Protection against Dangerous Substances and Preparations (Chemicals Act, ChemA) of 15 December 2000 (Status as of 13 June 2006) SR 813.1

Ordinance on Protection against Dangerous Substances and Preparations (Chemicals Ordinance, ChemO) of 18 May 2005 (Status as of 15 July 2014) 813.11

Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005 (Status as of 1 January 2014) SR 814.81

Federal Act on the Protection of the Environment (Environmental Protection Act, EPA) of 7 October 1983 (Status as of 1 July 2014) 814.01

Fifth Ordinance on the federal Act about Work (Occupational Safety For The Youth) ArGV 5 of 28 September 2007 (Status as of 1 August 2014) SR 822.115.2

Ordinance from the department of Economy, Education and Research on dangerous and difficult chores during pregnancy and maternity (Maternity Protection Ordinance) of 20 March 2001 (Status as of 1 January 2013) SR 822.111.52

Ordinance from the department of Environment, Traffic, Energy and Communications about Lists on the traffic of waste of 18 October 2005 (Status as of 1 January 2010) SR 814.610.1

Federal Act on Work in Industry, Trade and Commerce (Federal Act on Work) of 13 March 1964 (Status as of 1 December 2013)

Section 16: Other information

The information in this Safety Data Sheet meets the requirements of Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No 830/2015. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and danger of these chemicals for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. These chemicals may interact with other substances. Since the potential uses are so varied, Dexsil cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Dexsil warrants that the chemicals meet the specifications set forth on the label.

DEXSIL DISCLAIMS ANY OTHER WARRANTIES; EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, IT'S MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. **READ ALL PRECAUTIONARY INFORMATION.** As new documented general safety information becomes available, Dexsil will periodically revise this Safety Data Sheet.

CHEMTREC emergency telephone number is to be used **ONLY** in the event of **CHEMICAL EMERGENCIES** involving a spill, leak, fire, exposure, or accident involving chemicals.

For additional information, contact Dexsil.