

SAFETY DATA SHEET



Revision date: 06-Oct-2013

Version: 2.0

Page 1 of 10

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: Kopertox

Trade Name: KOPERTOX
Chemical Family: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Veterinary product
Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.
100 Campus Drive, P.O. Box 651
Florham Park, New Jersey 07932 (USA)
Rocky Mountain Poison Control Center Phone: 1-866-531-8896
Product Support/Technical Services Phone: 1-800-366-5288

Zoetis Belgium S.A.
Mercuriusstraat 20
1930 Zaventem
Belgium

Emergency telephone number:
CHEMTREC (24 hours): 1-800-424-9300
Contact E-Mail: VMIPSrecords@zoetis.com

Emergency telephone number:
International CHEMTREC (24 hours): +1-703-527-3887

2. HAZARDS IDENTIFICATION

Appearance: Green Liquid

Classification of the Substance or Mixture

GHS - Classification

Aspiration Toxicity: Category 1
Germ Cell Mutagenicity: Category 1B
Carcinogenicity: Category 1B
Acute aquatic toxicity: Category 1
Chronic aquatic toxicity: Category 1
Flammable liquids- Category 3

EU Classification:

EU Indication of danger: Carcinogenic: Category 2
Mutagenic: Category 2
N - Dangerous for the environment

EU Symbol: T , N

EU Risk Phrases:

R10 - Flammable.
R22 - Harmful if swallowed.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R65 - Also harmful: may cause lung damage if swallowed
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 2 of 10
Version: 2.0

2. HAZARDS IDENTIFICATION

Label Elements

Signal Word: Danger
Hazard Statements: H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H340 - May cause genetic defects
H350 - May cause cancer
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements: 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
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+ P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
P331 - Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P308 + P313 - IF exposed or concerned: Get medical attention/advice
P370 + P378 - In case of fire: Use dry chemical, CO₂, foam for extinction
P391 - Collect spillage
P403 + P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards

Short Term: Vapors may cause drowsiness and dizziness.
Australian Hazard Classification (NOHSC): Hazardous Substance. Dangerous Goods.

Note: This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 3 of 10
Version: 2.0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
COPPER NAPHTHENATE	1338-02-9	215-657-0	R10 Xn; R22 N; R50-53	Acute Tox. 4 (H302) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Flam. Liq. 3 (H226)	37.5
NAPHTHA	8030-30-6	232-443-2	Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65	Muta. 1B (H340) Carc. 1B (H350) Aspiration 1 (H304)	62.3
N-Butyl alcohol	71-36-3	200-751-6	R10 Xn; R22 Xi; R37/38-41 R67	Acute Tox. 4 (H302) STOT SE 3 (H335) STOT SE 3 (H336) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226) Eye Dam. 1 (H318)	0.12

Additional Information: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures

Eye Contact: Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation: Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of Exposure: For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.
Medical Conditions: None known
Aggravated by Exposure:

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: This product contains petroleum distillate, aspiration into the lungs can result in pulmonary edema.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 4 of 10
Version: 2.0

Hazardous Combustion Products: Formation of toxic gases is possible during heating or fire.

Fire / Explosion Hazards: Flammable liquid and vapor

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure. Eliminate all sources of ignition and ventilate area using explosion-proof equipment.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning / Collecting: Contain the source of the spill if it is safe to do so. Absorb spills with non-combustible absorbent material and transfer into a labeled container for disposal.

Additional Consideration for Large Spills: Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, flame and all other sources of ignition. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Refer to Section 12 - Ecological Information, for information on potential effects on the environment. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store as directed by product packaging. Keep away from heat and sources of ignition. Store away from direct sunlight.

Specific end use(s): No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Refer to available public information for specific member state Occupational Exposure Limits.

COPPER NAPHTHENATE

ACGIH Threshold Limit Value (TWA)	1 mg/m ³
Finland OEL - TWA	1 mg/m ³

NAPHTHA

Czech Republic OEL - TWA	400 mg/m ³
Estonia OEL - TWA	1 mg/m ³
Latvia OEL - TWA	100 mg/m ³
	10 mg/m ³
Vietnam OEL - TWAs	1570 mg/m ³

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 5 of 10
Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA - Final PELS - TWAs:	100 ppm 400 mg/m ³
Poland OEL - TWA	500 mg/m ³
Portugal OEL - TWA	400 ppm
Romania OEL - TWA	100 mg/m ³
Switzerland OEL -TWAs	500 ppm 2000 mg/m ³
N-Butyl alcohol	
ACGIH Threshold Limit Value (TWA)	20 ppm
Australia PEAK	50 ppm 152 mg/m ³
Austria OEL - MAKs	50 ppm 150 mg/m ³
Belgium OEL - TWA	20 ppm 62 mg/m ³
Bulgaria OEL - TWA	100.0 mg/m ³
Czech Republic OEL - TWA	300 mg/m ³
Estonia OEL - TWA	15 ppm 45 mg/m ³
Finland OEL - TWA	50 ppm 150 mg/m ³
Germany - TRGS 900 - TWAs	100 ppm 310 mg/m ³
Germany (DFG) - MAK	100 ppm 310 mg/m ³
Germany - Biological Exposure Limit:	10 mg/g 2 mg/g
Greece OEL - TWA	100 ppm 300 mg/m ³
Hungary OEL - TWA	45 mg/m ³
Ireland OEL - TWAs	20 ppm
Japan - OELs - Ceilings	50 ppm 150 mg/m ³
Latvia OEL - TWA	10 mg/m ³
Lithuania OEL - TWA	15 ppm 45 mg/m ³
Vietnam O EL - TWAs	150 mg/m ³
OSHA - Final PELS - TWAs:	100 ppm 300 mg/m ³
Poland OEL - TWA	50 mg/m ³
Portugal OEL - TWA	20 ppm
Slovakia OEL - TWA	100 ppm 310 mg/m ³
Slovak Republic - Biological Exposure Limit:	2 mg/g creatinine 10 mg/g creatinine
Slovenia OEL - TWA	100 ppm 310 mg/m ³
Sweden OEL - TWAs	15 ppm 45 mg/m ³
Switzerland OEL -TWAs	50 ppm 150 mg/m ³

Exposure Controls

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 6 of 10
Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
Respiratory protection:	If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Color:	Green
Odor:	No data available.	Odor Threshold:	No data available.
Molecular Formula:	Mixture	Molecular Weight:	Mixture
Solvent Solubility:	No data available		
Water Solubility:	No data available		
pH:	No data available		
Melting/Freezing Point (°C):	No data available		
Boiling Point (°C):	No data available.		
Partition Coefficient: (Method, pH, Endpoint, Value)			
No data available			
Decomposition Temperature (°C):	No data available.		
Evaporation Rate (Gram/s):	No data available		
Vapor Pressure (kPa):	No data available		
Vapor Density (g/ml):	No data available		
Relative Density:	No data available		
Viscosity:	No data available		
Flammability:			
Autoignition Temperature (Solid) (°C):	No data available		
Flammability (Solids):	No data available		
Flash Point (Liquid) (°C):	45		
Upper Explosive Limits (Liquid) (% by Vol.):	5		
Lower Explosive Limits (Liquid) (% by Vol.):	0.8		

10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions of use.
Possibility of Hazardous Reactions	
Oxidizing Properties:	None
Conditions to Avoid:	Keep away from heat, spark, flames and all other sources of ignition.
Incompatible Materials:	As a precautionary measure, keep away from strong oxidizers
Hazardous Decomposition Products:	No data available

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 7 of 10
Version: 2.0

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information: The information included in this section describes the potential hazards of the individual ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

NAPHTHA

Rat Oral LD50 > 5000 mg/kg

COPPER NAPHTHENATE

Rat Oral LD50 2000 mg/kg

N-Butyl alcohol

Rat Oral LD50 790 mg/kg

Acute Toxicity Comments: A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)

NAPHTHA

Eye Irritation Rabbit Mild
Skin Irritation Rabbit Mild

Carcinogen Status: None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Environmental Overview: The environmental characteristics of this mixture have not been fully evaluated. Releases to the environment should be avoided. See aquatic toxicity data for individual components below:

Toxicity:

Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

COPPER NAPHTHENATE

<i>Lepomis macrochirus</i> (Bluegill Sunfish)	LC50	96 Hours	3.1 mg/L
<i>Oncorhynchus mykiss</i> (Rainbow Trout)	LC50	96 Hours	1.1 mg/L
<i>Daphnia Magna</i> (Water Flea)	EC50	48 Hours	0.34 mg/L

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 8 of 10
Version: 2.0

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

N-Butyl alcohol
RCRA - U Series Wastes Listed

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

This material is regulated for transportation as a hazardous material/dangerous good.

UN number: UN 1993
UN proper shipping name: Flammable Liquid, n.o.s. (Naphtha, Copper Naphthenate) RQ (n-Butyl Alcohol)
Transport hazard class(es): 3
Packing group: III
Flash Point (°C): 45 (open cup)

For small quantities, limited to inner packaging less than or equal to 5.0L (1.3 gal) and outer packaging less than or equal to 30 kg (66 lb.) gross weight, the following may be used: If your commodity meets the definition of a limited quantity and is packaged for retail sale, it may be considered a consumer commodity and excepted from additional requirements as applicable.

IATA / ICAO

IATA UN / ID No: ID 8000
IATA Proper shipping name: Consumer Commodity
IATA Hazard Class: 9

IMDG IMDG

IMDG UN / ID No: UN 1993
IMDG Proper shipping name: Flammable Liquid, n.o.s. (Naphtha, Copper Naphthenate) Ltd. Qty.
IMDG Hazard Class: 3
IMDG Packing Group: III
Flash Point (°C): 45 (open cup)

ADR/RID

ADR / RID UN / ID No: UN 1993
ADR/RID Proper shipping name: Flammable Liquid, n.o.s. (Naphtha, Copper Naphthenate) Ltd. Qty.
ADR / RID Hazard Class: 3
ADR / RID Packing Group: III

DOT

DOT Proper shipping name: Consumer Commodity
DOT Hazard Class: ORM-D

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture
Contains: NAPHTHA, COPPER NAPHTHENATE

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 9 of 10
Version: 2.0

15. REGULATORY INFORMATION

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision A

B2 flammable liquids



COPPER NAPHTHENATE

CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	215-657-0

NAPHTHA

CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
REACH - Annex XVII - Restrictions on Certain Dangerous Substances:	Use restricted. See item 28.
REACH - Carcinogens Category 2:	Present
REACH - Mutagens Category 2:	Present
EU EINECS/ELINCS List	232-443-2

N-Butyl alcohol

CERCLA/SARA 313 Emission reporting	1.0 %
CERCLA/SARA Hazardous Substances and their Reportable Quantities:	5000 lb 2270 kg
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	200-751-6

16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

SAFETY DATA SHEET

Material Name: Kopertox
Revision date: 06-Oct-2013

Page 10 of 10
Version: 2.0

Flammable liquids-Cat.3; H226 - Flammable liquid and vapor
Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed
Skin corrosion/irritation-Cat.2; H315 - Causes skin irritation
Serious eye damage/eye irritation-Cat.1; H318 - Causes serious eye damage
Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation
Specific target organ toxicity, single exposure; Narcotic effects-Cat.3; H336 - May cause drowsiness and dizziness
Aspiration hazard-Cat.1; H304 - May be fatal if swallowed and enters airways
Germ cell mutagenicity-Cat.1B; H340 - May cause genetic defects
Carcinogenicity-Cat.1B; H350 - May cause cancer
Hazardous to the aquatic environment, acute toxicity-Cat.1; H400 - Very toxic to aquatic life
Hazardous to the aquatic environment, chronic toxicity-Cat.1; H410 - Very toxic to aquatic life with long lasting effects

Carcinogenic: Category 2
Mutagenic: Category 2
N - Dangerous for the environment
T - Toxic
Xi - Irritant
Xn - Harmful

R10 - Flammable.
R22 - Harmful if swallowed.
R41 - Risk of serious damage to eyes.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R65 - Harmful: may cause lung damage if swallowed.
R67 - Vapors may cause drowsiness and dizziness.
R37/38 - Irritating to respiratory system and skin.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Data Sources: The data contained in this MSDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.

Reasons for Revision: Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 2 - Hazard Identification. Updated Section 4 - First Aid Measures. Updated Section 5 - Fire Fighting Measures. Updated Section 6 - Accidental Release Measures. Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 15 - Regulatory Information.

Prepared by: Toxicology and Hazard Communication
Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet