EUNISELL INTERNATIONAL LTD
IAIN FRASER
201-205 SSNIT TOWER
ACCRA
GHANA

Subject: Material Safety Data Sheets (mail du 09.07)

Date: 07/19/2012

Dear Sirs and Madams,

Please find enclosed the MSDS's sent to you in accordance to the regulations of the sending country relative to the products(s).

LUBRIZOL® 5731

This information is provided to you for the following reason:

This is the first time your company has ordered this product or new regulatory information has been identified.

Thanking you in advance for your cooperation, please accept our best regards,

LUBRIZOL FRANCE
25 QUAI DE FRANCE
76100 ROUEN
FRANCE
PHONE: (33) 02.35.58.14.00
0016 0001647488

Log on to www.mylubrizol.com to get the most up to date MSDS. You can also view the MSDS Change Report online that lists MSDS with changes in the last 30 days.

Prepared according to Commission Regulation (EU) No 453/2010.

Section 1	Identification of substance/mixture and of the company/undertaking

1.1 Product Identifier

LUBRIZOL® 5731

Synonyms None.

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

Relevant identified uses (see section 7.3 for information on REACH registered uses)

Antiwear hydraulic oil additive.

1.3 Details of the supplier of the safety data sheet

LUBRIZOL FRANCE
25 QUAI DE FRANCE
76100 ROUEN
FRANCE
PHONE: (33) 02.35.58.14.00

E-mail contact EUSDS@lubrizol.com

1.4 Emergency Telephone number

FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)

Section 2	Hazards Identification

2.1 Classification of the substance or mixture

(EC) No 1272/2008

Eye Dam. 1; H318
Aquatic Chronic 2; H411

67/548/EC or 1999/45/EC

N
Xi
R41
R51/53

For a full text of R- and H- phrases: See section 16

2.2 Label elements

(EC) No 1272/2008

Danger.

Causes serious eye damage.
Toxic to aquatic life with long lasting effects.

Wear eye protection / face protection. Avoid release to the environment.

If skin irritation occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

IF SWALLOWED: Call a poison center or doctor if exposed or you feel unwell.

All disposal practices must be in accordance with local, national and international regulations.

Supplemental label information

Contains (Substituted triazole). May produce an allergic reaction.

2.3 Other hazards

None identified.

Section 3	Composition/Information on Ingredients

3.2 Mixtures

(EC) No 1272/2008

EC No.	Registration Number	Percentage (by wt.)	Name	Classification
224-235-5	01-2119493635-27	From 40 to 49.9 percent	Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)-	Aquatic Chronic 2; H411 Eye Dam. 1; H318
204-884-0	01-2119490822-33	From 5 to 9.9 percent	2,6-Di-tert-butylphenol	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Skin Irrit. 2; H315
253-249-4	01-2119488911-28	From 5 to 9.9 percent	Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	Aquatic Chronic 4; H413
298-637-4	Not Available	From 1 to 4.9 percent	Benzenesulfonic acids, di(C10-18) alkyl derivative calcium salts	Eye Irrit. 2; H319
202-908-4	Not Available	From 1 to 4.9 percent	Triphenyl phosphite	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319 Skin Irrit. 2; H315
265-198-5	Not Available	From 0.1 to 0.9 percent	Naphtha (petroleum), heavy aromatic	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 Eye Irrit. 2; H319 Flam. Liq. 3; H226
310-154-3	01-2119513207-49	From 0.1 to 0.9 percent	Dodecylphenol, mixed isomers (branched)	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319 Repr. 2; H361 Skin Irrit. 2; H315
204-539-4	Not Available	From 0.1 to 0.9 percent	Diphenylamine	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 STOT RE 2; H373
279-503-4	Not Available	From 0.1 to 0.9 percent	1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-	Aquatic Chronic 2; H411 Skin Irrit. 2; H315 Skin Sens. 1; H317
279-514-4	Not Available	From 0.1 to 0.9 percent	1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-	Aquatic Chronic 2; H411 Skin Irrit. 2; H315 Skin Sens. 1; H317
203-632-7	Not Available	From 0.1 to 0.9 percent	Phenol	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Eye Dam. 1; H318 Muta. 2; H341 Skin Corr. 1B; H314 STOT RE 2; H373
201-807-2	Not Available	< 0.1%	Phenol, 2-(1,1-dimethylethyl)-	Acute Tox. 3; H311 Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319 Skin Irrit. 2; H315
211-989-5	Not Available	< 0.1%	2,4,6-Triisopropylphenol	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319

67/548/EC or 1999/45/EC

EC No.	Registration Number	Percentage (by wt.)	Name	Classification 67/548/EC
224-235-5	01-2119493635-27	From 40 to 49.9 percent	Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)-	N Xi R41 R51/53
204-884-0	01-2119490822-33	From 5 to 9.9 percent	2,6-Di-tert-butylphenol	N Xi R38 R50/53
253-249-4	01-2119488911-28	From 5 to 9.9 percent	Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	None. R53
298-637-4	Not Available	From 1 to 4.9 percent	Benzenesulfonic acids, di(C10-18) alkyl derivative calcium salts	Xi R38
202-908-4	Not Available	From 1 to 4.9 percent	Triphenyl phosphite	N Xn R22 R36/38 R50/53
Polymer	Not Available	0.5 to 1.5 percent	Polyether	Xi R38
265-198-5	Not Available	From 0.1 to 0.9 percent	Naphtha (petroleum), heavy aromatic	N Xn R36/38 R51/53 R65

310-154-3	01-2119513207-49	From 0.1 to 0.9 percent	Dodecylphenol, mixed isomers (branched)	N Xn R36/38 R50/53 R62
204-539-4	Not Available	From 0.1 to 0.9 percent	Diphenylamine	N T R23/24/25 R33 R50/53
279-503-4	Not Available	From 0.1 to 0.9 percent	1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-4-methyl-	N Xi R38 R43 R51/53
279-514-4	Not Available	From 0.1 to 0.9 percent	1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-5-methyl-	N Xi R38 R43 R51/53
203-632-7	Not Available	From 0.1 to 0.9 percent	Phenol	T R23/24/25 R34 R48/20/21/22 R68
201-807-2	Not Available	From 0.01 to 0.1 percent.	Phenol, 2-(1,1-dimethylethyl)-	N Xn R21 R36/38 R50/53
211-989-5	Not Available	From 0.00001 to 0.0001 percent.	2,4,6-Triisopropylphenol	N Xi R38 R50/53

600, 700 and 900 ECHA List Numbers do not have any legal significance; rather they are purely technical identifiers and are displayed for informational purposes only.

Section 4 First Aid Measures

4.1 Description of first aid measures

Skin

Wash with plenty of soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Inhaled

Remove exposed person to fresh air if adverse effects are observed. Call a poison center or doctor if exposed or you feel unwell.

Swallowed

DO NOT INDUCE VOMITING. Get immediate medical attention. Call a poison center or doctor if exposed or you feel unwell.

Advice for first-aid providers

When providing first aid always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. After providing first aid wash your exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed

See section 11.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned: Get medical attention.

Section 5 Fire Fighting Measures

5.1 Extinguishing Media

CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.

5.2 Special hazards arising from substance or mixture

Elevated temperatures can lead to the formation of irritating fumes and vapors. See section 10 for additional information.

5.3 Advice for firefighters

Recommend wearing self-contained breathing apparatus. Water may cause splattering.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Ventilate area if spilled in a confined space or other poorly ventilated area.

6.2 Environmental precautions

Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

6.3 Methods and material for containment and cleaning up

Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

6.4 Reference to other sections

See sections 8 and 13 for additional information.

Section 7 Handling and Storage

7.1 Precautions for safe handling

Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid breathing vapor. Avoid contact with eyes, skin and clothing Avoid breathing dust, fume, gas, mist, vapors or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

Pumping Temperature

15 °C, 59 °F

Maximum Handling Temperature

70 °C, 158 °F

Maximum Loading Temperature

70 °C, 158 °F

7.2 Conditions for safe storage, including any incompatibilites

Take precautions to avoid release to the environment. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 113 deg F (45 deg C) for extended periods of time or if heat sources in excess of 250 deg F (121 deg C) are used. See section 10 for incompatible materials.

Maximum Storage Temperature

45 °C, 113 °F

7.3 Specific end use(s)

End uses are listed in an attached exposure scenario when one is required.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters

Country	Substance	Long Term (8 Hours T.W.A.)	Short Term (15 mins.)
Austria	Phenol	2 ppm (s)	N/E
Austria	Diphenylamine	0.70 ppm (s)	1.40 ppm
Belgium	Phenol	2 ppm (s)	N/E
Cyprus	Phenol	2 ppm	N/E
Czech Republic	Phenol	7.50 mg/cu. M	15 mg/cu. M (c)
Czech Republic	Diphenylamine	10 mg/cu. M	20 mg/cu. M (c)
Denmark	Phenol	1 ppm	N/E
Denmark	Diphenylamine	5 mg/cu. M	N/E
EU	Phenol	2 ppm (s)	4 ppm
Estonia	Phenol	2 ppm	N/E
Estonia	Diphenylamine	10 mg/cu. M	N/E
Finland	Phenol	2 ppm (s)	5 ppm
Finland	Diphenylamine	5 mg/cu. M	10 mg/cu. M
France	Phenol	2 ppm	4 ppm
France	Diphenylamine	10 mg/cu. M	N/E
Greece	Phenol	5 ppm	10 ppm
Greece	Diphenylamine	10 mg/cu. M	20 mg/cu. M
Hungary	Phenol	7.80 mg/cu. M	7.80 mg/cu. M
Ireland	Phenol	2 ppm (s)	N/E
Ireland	Diphenylamine	10 mg/cu. M	20 mg/cu. M
Italy	Phenol	2 ppm	N/E
Poland	Phenol	7.80 mg/cu. M	N/E
Portugal	Phenol	5 ppm	N/E
Portugal	Diphenylamine	10 mg/cu. M	N/E
Slovenia	Phenol	2 ppm	4 ppm
Slovenia	Diphenylamine	5 mg/cu. M	N/E
Slovak Republic	Phenol	2 ppm	N/E
Spain	Phenol	2 ppm	N/E
Spain	Diphenylamine	10 mg/cu. M	N/E
Sweden	Phenol	1 ppm (s)	2 ppm
Sweden	Diphenylamine	4 mg/cu. M	12 mg/cu. M
Switzerland	Phenol	5 ppm	5 ppm
Switzerland	Diphenylamine	10 mg/cu. M	N/E
Germany (TRGS 900)	Phenol	2 ppm (s)	N/E
UK	Phenol	2 ppm	6 ppm

UK	Diphenylamine	10 mg/cu. M	20 mg/cu. M

Other Exposure Limits

Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.

8.2 Exposure controls

Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.

Eye/face protection

Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

Skin protection

Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear.

Gloves, coveralls, apron, boots as necessary to minimize contact Wear a chemically protective apron when contact with material may occur. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

Respiratory Protection

Use full face respirator with an organic vapor cartridge if the recommended exposure limit is exceeded.

Hygiene Measures

Wash thoroughly after handling this product.

Environmental exposure controls

See section 6 for details.

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Dark amber liquid.
Odour	Strong
Odour Threshold	Not determined.
pH	Not determined.
Melting / Freezing Point	Not determined.
Boiling Point	Not determined.
Boiling Point Range	Not determined.
Flash Point	112 °C, 233.6 °F PMCC (Typical)
Evaporation Rate	Not determined.
Flammability (solid,gas)	Not applicable.
Lower flammability or explosive limit	Not determined.
Upper flammability or explosive limit	Not determined.
Vapour Pressure	Not determined.
Vapour Density	Not determined.
Relative density	1.02 (15.6 °C)
Bulk Density	8.5 Lb/gal, 1.02 Kg/L
Water Solubility	Insoluble.
Other solubilities	Not determined.
Partition coefficient: n-octanol/water	Not determined.
Autoignition Point	Not determined.
Decomposition Temperature	Not determined.
Viscosity	351 Centistokes (25 °C) 130 Centistokes (40 °C) 12 Centistokes (100 °C)
Explosive properties	Material does not have explosive properties.
Oxidising properties	Material is a non-oxidising substance.

9.2 Other information

Pour Point Temperature	-31 °C, -24 °F

The above data are typical values and do not constitute a specification.

Section 10 Stability and Reactivity

10.1 Reactivity

Carefully review all information provided in sections 10.2 - 10.6.

10.2 Chemical stability

Material is normally stable at room temperature and pressure. See the Handling and Storage Section for further details.

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible materials

Acids. Reducing agents. Oxidizing agents. Nitric acid.

10.6 Hazardous decomposition products

Smoke, carbon monoxide,carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: phosphorus, sulfur, zinc.

Section 11	Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Oral

The LD50 in rats is 2000 – 5000 mg/Kg. Based on data from components or similar materials. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal

The LD50 in rabbits is > 5000 mg/Kg. Based on data from components or similar materials.

Inhalation

No data available to indicate product or components may be a toxic inhalation hazard.

Skin corrosion / irritation

May cause mild skin irritation. Does not meet Canadian D2B or EU R38 criteria. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

Serious eye damage / irritation

Severe eye irritant. Risk of irreversible damage to eyes. Based on data from components or similar materials.

Respiratory Irritation

May cause nose, throat, and lung irritation. Based on data from components or similar materials.

Respiratory or skin sensitization

Skin

May cause skin sensitzation in sensitive individuals. Based on data from components or similar materials.

Respiratory

No data available to indicate product or components may be respiratory sensitizers.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

Reproductive Toxicity

This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain.

This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain. There are conflicting reports in the literature concerning the teratogenicity of diphenylamine. However, because the predominant route of exposure was oral (via gavage or diet) and relatively high dose levels were administered in the studies where positive effects were observed, it would not seem to present a workplace hazard.

STOT repeated exposure

This product contains triphenyl phosphite which produced neurotoxic effects (weakness, tremors and paralysis) in experimental animals. In a 28-day oral toxicity study in rats, 2,6-Di-tert-butylphenol showed an increase in liver weight with corresponding histopathology at 600 mg/kg-bw/day; a NOAEL of 100 mg/kg-bw/day was established for systemic toxicity.

Other information

No other health hazards known.

Section 12	Ecological Information

12.1 Toxicity

Freshwater fish

The acute LC50 is 1 - 10 mg/L based on component data.

Freshwater invertebrates

The acute EC50 is 1 - 10 mg/L based on component data. Chronic effects expected at < 1 mg/L based on component data.

Algae

The acute EC50 is 10 - 100 mg/L based on component data.

Saltwater fish

The acute LC50 is 10 - 100 mg/L based on component data.

Saltwater invertebrates

Not determined.

Bacteria

Not determined.

12.2 Persistence and degradability

Substance	Pct. (weight)	Test type	Duration (days)	Pct. degradation
Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)-	From 40 to 49.9 percent	Closed Bottle	27	5
2,6-Di-tert-butylphenol	From 5 to 9.9 percent	Zahn-Wellens	28	24
2,6-Di-tert-butylphenol	From 5 to 9.9 percent	Sturm	28	5
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	From 5 to 9.9 percent	Sturm	28	0
Naphtha (petroleum), heavy aromatic	From 0.1 to 0.9 percent	Manometric Respirometry	28	58
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Miscellaneous-Degradation	56	10
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Sturm	28	25
Diphenylamine	From 0.1 to 0.9 percent	Closed Bottle	28	26
Phenol, 2-(1,1-dimethylethyl)-	From 5 to 9.9 percent	MITI 1	28	31

12.3 Bioaccumulative potential

Substance	Pct. (weight)	Test type	Duration (days)	Log Kow or BCF
Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)-	From 40 to 49.9 percent	Octanol-Water Coefficient	0.1	3.6
2,6-Di-tert-butylphenol	From 5 to 9.9 percent	Octanol-Water Coefficient	0.1	4.5
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	From 5 to 9.9 percent	Bioconcentration Factor	42	3.2
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	From 5 to 9.9 percent	Octanol-Water Coefficient	0.1	3.6
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	From 5 to 9.9 percent	Octanol-Water Coefficient	0.1	7.3
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	From 5 to 9.9 percent	Octanol-Water Coefficient	0.1	8.1
Triphenyl phosphite	From 1 to 4.9 percent	Octanol-Water Coefficient	0.1	5
Naphtha (petroleum), heavy aromatic	From 0.1 to 0.9 percent	Octanol-Water Coefficient	0.1	3.1
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Bioconcentration Factor	27	2.9
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Octanol-Water Coefficient	0.1	7.1
Diphenylamine	From 0.1 to 0.9 percent	Octanol-Water Coefficient	0.1	3.4
Phenol, 2-(1,1-dimethylethyl)-	From 5 to 9.9 percent	Octanol-Water Coefficient	0.1	3.3

12.4 Mobility in soil

Not applicable.

12.5 Results of PBT and vPvB assessment

Not Available

12.6 Other adverse effects

None known.

Section 13 Disposal Considerations

13.1 Waste treatment methods

All disposal practices must be in accordance with local, regional, national and international regulations. Do not dispose in landfill.

Dispose of packaging or containers in accordance with local, regional, national and international regulations.

Section 14 Transport Information

14.1 UN number

ADR/RID	UN3082
ICAO	UN3082
IMDG	UN3082

14.2 UN proper shipping name

ADR/RID	Environmentally hazardous substance, liquid, n.o.s.(Butylated phenol, Zinc alkyldithiophosphate)
ICAO	Environmentally hazardous substance, liquid, n.o.s.(Butylated phenol, Zinc alkyldithiophosphate)
IMDG	Environmentally hazardous substance, liquid, n.o.s.(Butylated phenol, Zinc alkyldithiophosphate)

14.3 Transport hazard class(es)

ADR/RID	9
ICAO	9
IMDG	9

14.4 Packing group

ADR/RID	III
ICAO	III
IMDG	III

14.5 Environmental hazards

ADR/RID	Aquatic Pollutant(Butylated phenol, Zinc alkyldithiophosphate)
ICAO	Marine Pollutant(Butylated phenol, Zinc alkyldithiophosphate)
IMDG	Marine Pollutant(Butylated phenol, Zinc alkyldithiophosphate)

14.6 Special precautions for users

Review classification requirements before shipping materials at elevated temperatures.

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code

Not determined.

Section 15 Regulatory Information

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

Global Chemical Inventories

Australia	All components are in compliance with chemical notification requirements in Australia.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
EU	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
Japan	All components are in compliance with the Chemical Substances Control Law of Japan.
Korea	All components are in compliance in Korea.
New Zealand	All components are in compliance with chemical notification requirements in New Zealand.
Philippines	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
Switzerland	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Taiwan	All components of this product are listed on the Taiwan inventory.
USA	All components of this material are on the US TSCA Inventory or are exempt.

German water hazard classes

WGK = 2 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16	Other Information

Created by

Product Safety and Compliance Department (440-943-1200)

Created Date

09 July 2011

Revision date

20 April 2012

SDS No.

11519897-1124924-0054261-102103

HMIS Codes

Health	Fire	Reactivity
3*	1	0

Relevant R Phrases

R21 -- Harmful in contact with skin.
R22 -- Harmful if swallowed.
R23/24/25 -- Toxic by inhalation, in contact with skin and if swallowed.
R33 -- Danger of cumulative effects.
R34 -- Causes burns.
R36/38 -- Irritating to eyes and skin.
R38 -- Irritating to skin.
R41 -- Risk of serious damage to eye.
R43 -- May cause sensitisation by skin contact.
R48/20/21/22 -- Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R50/53 -- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 -- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 -- May cause long-term adverse effects in aquatic environment.
R62 -- Possible risk of impaired fertility.
R65 -- Harmful: may cause lung damage if swallowed.
R68 -- Possible risk of irreversible effects.

Relevant hazard phrases

H226 - Flammable liquid and vapor.
H301 - Toxic if swallowed.
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H311 - Toxic in contact with skin.
H314 - Causes severe skin burns and eye damage.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H331 - Toxic if inhaled.
H341 - Suspected of causing genetic defects.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
H411 - Toxic to aquatic life with long lasting effects.
H413 - May cause long lasting harmful effects to aquatic life.

Revision Indicators

Section: 3 CLP Hazardous Ingredients	Changed: 25 May 2012
Section: 3 EU hazardous ingredients.	Changed: 25 May 2012
Section: 10 Incompatibility.	Changed: 2 September 2011
Section: 11 Chronic toxicity.	Changed: 2 September 2011
Section: 12 Algae toxicity.	Changed: 2 September 2011
Section: 15 Taiwan	Changed: 5 August 2011
Section: 16 Relevant hazard phrases	Changed: 25 May 2012
Section: 16 HMIS codes.	Changed: 2 September 2011

responsibility of the user.