

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Material Name

Copaltite

Registration status

This material is imported in amounts < 1 tonne/annum. This product and its components are not subject to REACH.

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

Identified uses

High temperature sealing compound

Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

National Engineering Products, Inc.

5110 Ridgefield Road

Suite 411

Bethesda, MD 20816

Phone: 301-656-1688

Emergency Phone #: 301-656-1688 (Hours: 9:00 am to 4:00 pm EST)

E-mail: nepi.customerservice@gmail.com

Fax: 301-907-8948

1.4 Emergency telephone number

+1-301-656-1688 (Monday-Friday 9AM to 4PM EST)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

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

Acute Toxicity - Oral - Category 3 (52.14% unknown)

Acute Toxicity - Dermal - Category 3 (56.85% unknown)

Acute Toxicity - Inhalation - Vapor - Category 3 (85.09% unknown)

Skin Corrosion/Irritation - Category 1B

Serious Eye Damage/Eye Irritation - Category 1

Skin Sensitization - Category 1A

Germ Cell Mutagenicity - Category 2

Carcinogenicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 2 (eyes , central nervous system)

2.2 Label elements

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

Hazard symbols



Signal word

Danger

Hazard statements

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H371 May cause damage to organs.

Precautionary statements

Prevention

P201 Obtain special instructions before use.

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

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

P281 Use Personal Protective equipment as required.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P270 Do not eat, drink or smoke when using this product.

Response

P308+P311 If exposed or concerned: Call a POISON CENTER or doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep 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.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER or doctor.

P321 Specific treatment (see label).

Storage

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

P405 Store locked up.

Disposal

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

Statement(s) of Unknown Acute Toxicity

Dermal 56.85% of the mixture consists of ingredient(s) of unknown acute toxicity.

Oral 52.14% of the mixture consists of ingredient(s) of unknown acute toxicity.

Inhalation 85.09% of the mixture consists of ingredient(s) of unknown acute toxicity.

2.3 Other hazards

If swallowed there is a risk of blindness.

SECTION 3: Composition / Information on Ingredients

3.2 MIXTURE

CAS EC No Registration No	Component Name Synonyms	1272/2008 (CLP)	Percent
1319-77-3 215-293-2 --	Cresol, all isomers	Annex VI, Table 3: Acute Tox. (Oral) 3 - H301 Acute Tox. (Dermal) 3 - H311 Skin Corr. 1B - H314	15-30

		Note(s): C	
67-56-1 200-659-6 --	Methyl alcohol	Annex VI, Table 3: Flam. Liq. 2 - H225 Acute Tox. (Oral) 3 - H301 Acute Tox. (Vapour) 3 - H331 Acute Tox. (Gas) 3 - H331 Acute Tox. (Dermal) 3 - H311 Acute Tox. (Dust/Mist) 3 - H331 STOT SE 1 - H370	5-<10
7727-43-7 231-784-4 --	Barium sulfate	--	1-5
108-95-2 203-632-7 --	Phenol	Annex VI, Table 3: Acute Tox. (Oral) 3 - H301 Acute Tox. (Vapour) 3 - H331 Acute Tox. (Gas) 3 - H331 Acute Tox. (Dermal) 3 - H311 Acute Tox. (Dust/Mist) 3 - H331 Skin Corr. 1B - H314 Muta. 2 - H341 STOT RE 2 - H373	1-5
50-00-0 200-001-8 --	Formaldehyde	Annex VI, Table 3: Acute Tox. (Oral) 3 - H301 Acute Tox. (Vapour) 3 - H331 Acute Tox. (Gas) 3 - H331 Acute Tox. (Dermal) 3 - H311 Acute Tox. (Dust/Mist) 3 - H331 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 Note(s): B, D Self-Classified: Aquatic Chronic 2 - H411	<1

Note(s). Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers. Certain substances which are susceptible to spontaneous polymerization or decomposition are generally placed on the market in a stabilized form. It is in this form that they are listed in Annex I.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical advice/attention.

Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion

If swallowed, do not induce vomiting. Rinse mouth. Get immediate medical attention.

4.2 Most Important Symptoms/Effects

Acute

Poison. May be fatal if swallowed. If swallowed there is a risk of blindness. Toxic if swallowed, in contact with skin or if inhaled, skin burns, eye burns, allergic reactions, central nervous system damage.

Delayed

allergic reactions, mutagenic effects, cancer

4.3 Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically and supportively. Contains Methanol. Therefore, there is a need for rapid treatment of any ingestion exposure. Call a POISON CENTER.

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media

carbon dioxide, regular dry chemical, foam, water spray

Unsuitable Extinguishing Media

Do not scatter spilled material with high-pressure water streams.

5.2 Special hazards arising from the substance or mixture

Moderate fire hazard. Combustible liquid and vapor. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Containers may rupture or explode if exposed to heat.

Combustion

oxides of carbon, aldehydes, cresol vapors, various organic fragments, oxides of sulfur, oxides of barium

5.3 Advice for firefighters

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Do not scatter spilled material with high-pressure water streams. Fight large fires from a protected location or safe distance. Stay away from the ends of tanks. Stay upwind and keep out of low areas. Avoid inhalation of material or combustion by-products.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective clothing and equipment, see Section 8.

6.2 Environmental precautions

Avoid release to the environment. Prevent entry into waterways, sewers, basements, or confined areas.

6.3 Methods and Materials for Containment and Cleaning Up

Stop leak if possible without personal risk. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry.

6.4 Reference to other sections

Safe handling: see section 7. Personal protection equipment (PPE): see section 8. Disposal: see section 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not breathe gas, fumes, vapor, or spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

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

Store locked up.

Further information on storage conditions: Store and handle in accordance with all current regulations and standards.

Store below 72°F 22 °C. Store in a secure area.

Incompatible Materials

alkali metals, strong acids, acyl halides, aldehydes, halogens, bases, strong oxidizing materials, combustible materials, halocarbons, amines

7.3 Specific end use(s)

High temperature sealing compound

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Component Exposure Limits

Cresol, all isomers	1319-77-3
EU (ILV):	5 ppm TWA (existing scientific data on health effects appear to be particularly limited); 22 mg/m3 TWA (existing scientific data on health effects appear to be particularly limited)
ACGIH:	20 mg/m3 TWA inhalable fraction and vapor
Austria:	5 ppm TWA [TMW] (all isomers); 22 mg/m3 TWA [TMW] (all isomers)
	10 ppm STEL [KZW] (all isomers) 8 X 5 min ; 44 mg/m3 STEL [KZW] (all isomers) 8 X 5 min
	skin notation
Belgium:	5 ppm TWA ; 22 mg/m3 TWA
	Skin
Bulgaria	22 mg/m3 TWA
Croatia	5 ppm TWA [GVI]; 22 mg/m3 TWA [GVI]
Cyprus	5 ppm TWA ; 22 mg/m3 TWA
Czech Republic	20 mg/m3 TWA (all isomers)
	40 mg/m3 Ceiling (technical mixture of isomers)
	Potential for cutaneous absorption (technical mixture of isomers)
Denmark.	5 ppm TWA ; 22 mg/m3 TWA
	Potential for cutaneous absorption
Estonia	5 ppm TWA ; 22 mg/m3 TWA
Finland:	5 ppm TWA ; 22 mg/m3 TWA
	10 ppm STEL ; 45 mg/m3 STEL

	Potential for cutaneous absorption
France:	5 ppm TWA [VME]; 22 mg/m3 TWA [VME]
Germany (DFG):	skin notation (all isomers)
Greece:	5 ppm TWA ; 22 mg/m3 TWA
	skin - potential for cutaneous absorption
Hungary	22 mg/m3 TWA [AK]
Ireland:	5 ppm TWA ; 22 mg/m3 TWA
	15 ppm STEL (calculated); 66 mg/m3 STEL (calculated)
	Potential for cutaneous absorption
Italy:	20 mg/m3 TWA inhalable fraction and aerosol and vapor
	Skin - potential for cutaneous absorption
Latvia	5 ppm TWA ; 22 mg/m3 TWA
Lithuania	5 ppm TWA [IPRD]; 22 mg/m3 TWA [IPRD]
Luxembourg	5 ppm TWA; 22 mg/m3 TWA
Malta	5 ppm TWA ; 22 mg/m3 TWA
Netherlands:	22 mg/m3 TWA
	skin notation
Poland	22 mg/m3 TWA [NDS] (mixture of isomers)
Portugal:	5 ppm TWA [VLE-MP] (indicative limit value); 22 mg/m3 TWA [VLE-MP] (indicative limit value)
	skin - potential for cutaneous exposure
Romania	5 ppm TWA ; 22 mg/m3 TWA
Slovak Republic	5 ppm TWA ; 22 mg/m3 TWA
	Potential for cutaneous absorption
Slovenia	5 ppm TWA ; 22 mg/m3 TWA
Spain:	5 ppm TWA [VLA-ED]; 22 mg/m3 TWA [VLA-ED]
	skin - potential for cutaneous absorption
Sweden:	1 ppm TLV ; 4.5 mg/m3 TLV

	2 ppm Indicative STEL ; 9 mg/m3 Indicative STEL
	Skin notation
Switzerland:	5 ppm TWA [MAK]; 22 mg/m3 TWA [MAK]
	5 ppm STEL [KZW]; 22 mg/m3 STEL [KZW]
	skin notation
Methyl alcohol	67-56-1
EU (IOELV):	200 ppm TWA ; 260 mg/m3 TWA
	Possibility of significant uptake through the skin
ACGIH:	200 ppm TWA
	250 ppm STEL
Austria:	200 ppm TWA [TMW]; 260 mg/m3 TWA [TMW]
	800 ppm STEL [KZW] 4 X 15 min ; 1040 mg/m3 STEL [KZW] 4 X 15 min
	skin notation
Belgium:	200 ppm TWA ; 266 mg/m3 TWA
	250 ppm STEL ; 333 mg/m3 STEL
	Skin
Bulgaria	200 ppm TWA ; 260 mg/m3 TWA
	Skin notation
Croatia	200 ppm TWA [GVI]; 260 mg/m3 TWA [GVI]
	Skin Notation
Cyprus	200 ppm TWA ; 260 mg/m3 TWA
	Skin-potential for cutaneous absorption
Czech Republic	250 mg/m3 TWA
	1000 mg/m3 Ceiling
	Potential for cutaneous absorption
Denmark.	200 ppm TWA ; 260 mg/m3 TWA
	Potential for cutaneous absorption
Estonia	200 ppm TWA ; 250 mg/m3 TWA

	250 ppm STEL ; 350 mg/m3 STEL
	Skin notation
Finland:	200 ppm TWA ; 270 mg/m3 TWA
	250 ppm STEL ; 330 mg/m3 STEL
	Potential for cutaneous absorption
France:	200 ppm TWA [VME] (restrictive limit) ; 260 mg/m3 TWA [VME] (restrictive limit)
	1000 ppm STEL [VLCT] ; 1300 mg/m3 STEL [VLCT]
	Risk of cutaneous absorption
Germany (TRGS):	200 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) exposure factor 4 ; 270 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) exposure factor 4
	skin notation
Germany (DFG):	100 ppm TWA MAK ; 130 mg/m3 TWA MAK
	200 ppm Peak ; 260 mg/m3 Peak
	skin notation
Greece:	200 ppm TWA ; 260 mg/m3 TWA
	250 ppm STEL ; 325 mg/m3 STEL
	skin - potential for cutaneous absorption
Hungary	260 mg/m3 TWA [AK]
	potential for cutaneous absorption
Ireland:	200 ppm TWA ; 260 mg/m3 TWA
	600 ppm STEL (calculated) ; 780 mg/m3 STEL (calculated)
	Potential for cutaneous absorption
Italy:	200 ppm TWA Media Ponderata nel Tempo ; 260 mg/m3 TWA Media Ponderata nel Tempo
	skin - potential for cutaneous absorption
	200 ppm TWA ; 262 mg/m3 TWA
	Skin - potential for cutaneous absorption
Latvia	200 ppm TWA ; 260 mg/m3 TWA

	skin - potential for cutaneous exposure
Lithuania	200 ppm TWA [IPRD]; 260 mg/m3 TWA [IPRD]
	Skin notation
Luxembourg	200 ppm TWA; 260 mg/m3 TWA
Malta	200 ppm TWA ; 260 mg/m3 TWA
	possibility of significant uptake through the skin
Netherlands:	133 mg/m3 TWA
	skin notation
Poland	100 mg/m3 TWA [NDS]
Portugal:	200 ppm TWA [VLE-MP] (indicative limit value); 260 mg/m3 TWA [VLE-MP] (indicative limit value)
	250 ppm STEL [VLE-CD]
	skin - potential for cutaneous exposure (indicative limit value)
Romania	200 ppm TWA ; 260 mg/m3 TWA
Slovak Republic	200 ppm TWA ; 260 mg/m3 TWA
	Potential for cutaneous absorption
Slovenia	200 ppm TWA ; 260 mg/m3 TWA
Spain:	200 ppm TWA [VLA-ED] (indicative limit value); 266 mg/m3 TWA [VLA-ED] (indicative limit value)
	skin - potential for cutaneous absorption
Sweden:	200 ppm TLV ; 250 mg/m3 TLV
	250 ppm Indicative STEL ; 350 mg/m3 Indicative STEL
	Skin notation
Switzerland:	200 ppm TWA [MAK]; 260 mg/m3 TWA [MAK]
	800 ppm STEL [KZW]; 1040 mg/m3 STEL [KZW]
	skin notation
United Kingdom:	200 ppm TWA ; 266 mg/m3 TWA
	250 ppm STEL ; 333 mg/m3 STEL

	Potential for cutaneous absorption
Barium sulfate	7727-43-7
ACGIH:	5 mg/m3 TWA inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica
Belgium:	10 mg/m3 TWA
Bulgaria	10 mg/m3 TWA
Croatia	10 mg/m3 TWA [GVI] total dust, inhalable particles ; 4 mg/m3 TWA [GVI] respirable dust
Germany (DFG):	4 mg/m3 TWA MAK inhalable fraction ; 0.3 mg/m3 TWA MAK (multiplied by the material density) respirable fraction
	2.4 mg/m3 Peak (multiplied by the material density) respirable fraction
Ireland:	5 mg/m3 TWA respirable dust
	15 mg/m3 STEL (calculated) respirable dust
Italy:	5 mg/m3 TWA inhalable fraction, particulate matter containing no Asbestos and <1% Crystalline silica
Portugal:	10 mg/m3 TWA [VLE-MP]
Slovak Republic	4 mg/m3 TWA inhalable fraction ; 1.5 mg/m3 TWA respirable fraction
Spain:	10 mg/m3 TWA [VLA-ED] (this value is for the particulate matter that is free from asbestos and contains less than 1% of crystalline silica)
United Kingdom:	10 mg/m3 TWA inhalable dust ; 4 mg/m3 TWA respirable dust
	30 mg/m3 STEL (calculated) inhalable dust ; 12 mg/m3 STEL (calculated) respirable dust
Phenol	108-95-2
EU (IOELV):	2 ppm TWA ; 8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
	Possibility of significant uptake through the skin
ACGIH:	5 ppm TWA
Austria:	2 ppm TWA [TMW] ; 8 mg/m3 TWA [TMW]
	4 ppm STEL [KZW] 4 X 15 min ; 16 mg/m3 STEL [KZW] 4 X 15 min
	skin notation
Belgium:	2 ppm TWA ; 8 mg/m3 TWA

	4 ppm STEL ; 16 mg/m3 STEL
	Skin
Bulgaria	2 ppm TWA ; 8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
	Skin notation
Croatia	2 ppm TWA [GVI]; 8 mg/m3 TWA [GVI]
	4 ppm STEL [KGVI]; 16 mg/m3 STEL [KGVI]
Cyprus	8 mg/m3 TWA ; 2 ppm TWA
	16 mg/m3 STEL ; 4 ppm STEL
	Skin-potential for cutaneous absorption
Czech Republic	7.5 mg/m3 TWA
	15 mg/m3 Ceiling
	Potential for cutaneous absorption
Denmark.	1 ppm TWA ; 4 mg/m3 TWA
	Potential for cutaneous absorption
Estonia	2 ppm TWA ; 8 mg/m3 TWA
	16 mg/m3 STEL ; 4 ppm STEL
	Skin notation
Finland:	2 ppm TWA ; 8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
	Potential for cutaneous absorption
France:	2 ppm TWA [VME] (restrictive limit) ; 7.8 mg/m3 TWA [VME] (restrictive limit)
	4 ppm STEL [VLCT] (restrictive limit) ; 15.6 mg/m3 STEL [VLCT] (restrictive limit)
	Risk of cutaneous absorption
Germany (TRGS):	2 ppm TWA AGW (sum of vapor and aerosol) exposure factor 2 ; 8 mg/m3 TWA AGW (sum of vapor and aerosol) exposure factor 2
	skin notation
Germany (DFG):	skin notation

Greece:	2 ppm TWA ; 8 mg/m ³ TWA
	4 ppm STEL ; 16 mg/m ³ STEL
	skin - potential for cutaneous absorption
Hungary	8 mg/m ³ TWA [AK]
	16 mg/m ³ STEL [CK]
	potential for cutaneous absorption
Ireland:	2 ppm TWA ; 8 mg/m ³ TWA
	4 ppm STEL ; 16 mg/m ³ STEL
	Potential for cutaneous absorption
Italy:	2 ppm TWA Media Ponderata nel Tempo ; 8 mg/m ³ TWA Media Ponderata nel Tempo
	4 ppm STEL Breve termine ; 16 mg/m ³ STEL Breve termine
	skin - potential for cutaneous absorption
	5 ppm TWA ; 19.2 mg/m ³ TWA
	Skin - potential for cutaneous absorption
Latvia	2 ppm TWA ; 8 mg/m ³ TWA
	4 ppm STEL ; 16 mg/m ³ STEL
	skin - potential for cutaneous exposure
Lithuania	2 ppm TWA [IPRD]; 8 mg/m ³ TWA [IPRD]
	4 ppm STEL [TPRD]; 16 mg/m ³ STEL [TPRD]
	Skin notation
Luxembourg	2 ppm TWA; 8 mg/m ³ TWA
	16 mg/m ³ STEL ; 4 ppm STEL
Malta	2 ppm TWA ; 8 mg/m ³ TWA
	16 mg/m ³ STEL ; 4 ppm STEL
	possibility of significant uptake through the skin
Netherlands:	8 mg/m ³ TWA
	skin notation
Poland	7.8 mg/m ³ TWA [NDS]

	16 mg/m3 STEL ; 4 ppm STEL
Portugal:	2 ppm TWA [VLE-MP] (indicative limit value); 8 mg/m3 TWA [VLE-MP] (indicative limit value)
	4 ppm STEL [VLE-CD] (indicative limit value); 16 mg/m3 STEL [VLE-CD] (indicative limit value)
	skin - potential for cutaneous exposure (indicative limit value)
Romania	2 ppm TWA ; 8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
Slovak Republic	2 ppm TWA ; 8 mg/m3 TWA
	16 mg/m3 Ceiling
	Potential for cutaneous absorption
Slovenia	2 ppm TWA ; 8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
Spain:	2 ppm TWA [VLA-ED] (indicative limit value); 8 mg/m3 TWA [VLA-ED] (indicative limit value)
	4 ppm STEL [VLA-EC]; 16 mg/m3 STEL [VLA-EC]
	skin - potential for cutaneous absorption
Sweden:	1 ppm TLV ; 4 mg/m3 TLV
	4 ppm Binding STEL ; 16 mg/m3 Binding STEL
	Skin notation
Switzerland:	5 ppm TWA [MAK]; 19 mg/m3 TWA [MAK]
	5 ppm STEL [KZW]; 19 mg/m3 STEL [KZW]
	skin notation
United Kingdom:	2 ppm TWA ; 7.8 mg/m3 TWA
	4 ppm STEL ; 16 mg/m3 STEL
	Potential for cutaneous absorption
Formaldehyde	50-00-0
ACGIH:	0.1 ppm TWA
	0.3 ppm STEL

	dermal sensitizer ;respiratory sensitizer
Austria:	0.3 ppm TWA [TMW]; 0.37 mg/m3 TWA [TMW]
	0.6 ppm STEL [KZW]; 0.74 mg/m3 STEL [KZW]
	Skin sensitizer
Bulgaria	1 mg/m3 TWA
	2 mg/m3 STEL
Croatia	2 ppm TWA [GVI]; 2.5 mg/m3 TWA [GVI]
	2 ppm STEL [KGVI]; 2.5 mg/m3 STEL [KGVI]
Czech Republic	0.5 mg/m3 TWA
	1 mg/m3 Ceiling
	Potential for cutaneous absorption
	Sensitizer
Denmark:	0.3 ppm Ceiling ; 0.4 mg/m3 Ceiling
Estonia	0.5 ppm TWA ; 0.6 mg/m3 TWA
	1 ppm STEL ; 1.2 mg/m3 STEL
Finland:	0.3 ppm TWA ; 0.37 mg/m3 TWA
	1 ppm Ceiling ; 1.2 mg/m3 Ceiling
France:	0.5 ppm TWA [VME]
	1 ppm STEL [VLCT]
Germany (TRGS):	0.3 ppm TWA AGW (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed ;carcinogenic substance Cat. 1A/1B ;article 10 of the German Hazardous Substances Ordinance must be observed when working with this substance) exposure factor 2 ; 0.37 mg/m3 TWA AGW (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed ;carcinogenic substance Cat. 1A/1B ;article 10 of the German Hazardous Substances Ordinance must be observed when working with this substance) exposure factor 2
Germany (DFG):	0.3 ppm TWA MAK (no irritation should occur during mixed exposure); 0.37 mg/m3 TWA MAK (no irritation should occur during mixed exposure)
	0.6 ppm Peak (no irritation should occur during mixed exposure ;a ceiling value 1 mL/m3 or 1.2 mg/m3 must not be exceeded); 0.74 mg/m3 Peak (no irritation should occur during mixed exposure ;a ceiling value 1 mL/m3 or 1.2 mg/m3 must not be exceeded)
	skin sensitizer

Greece:	2 ppm TWA ; 2.5 mg/m3 TWA
	2 ppm STEL ; 2.5 mg/m3 STEL
Hungary	0.6 mg/m3 TWA [AK]
	0.6 mg/m3 STEL [CK]
	potential for cutaneous absorption
	sensitizer
Ireland:	0.2 ppm TWA
	0.4 ppm STEL
Italy:	0.3 ppm Ceiling ; 0.37 mg/m3 Ceiling
	Sensitizer
Latvia	0.5 mg/m3 TWA
Lithuania	0.5 ppm TWA [IPRD]; 0.6 mg/m3 TWA [IPRD]
	1 ppm Ceiling [NRD]; 1.2 mg/m3 Ceiling [NRD]
	Sensitizer
Netherlands:	0.15 mg/m3 TWA
	0.5 mg/m3 STEL
Poland	0.37 mg/m3 TWA [NDS]
Portugal:	0.3 ppm Ceiling
	Sensitizer
Romania	1 ppm TWA ; 1.2 mg/m3 TWA
	2 ppm STEL ; 3 mg/m3 STEL
Slovak Republic	0.3 ppm TWA ; 0.37 mg/m3 TWA
	0.74 mg/m3 Ceiling
	Sensitizer
Slovenia	0.5 ppm TWA ; 0.62 mg/m3 TWA
	0.5 ppm STEL ; 0.62 mg/m3 STEL
	Category 2
Spain:	0.3 ppm TWA [VLA-ED]; 0.37 mg/m3 TWA [VLA-ED]

	0.6 ppm STEL [VLA-EC]; 0.74 mg/m3 STEL [VLA-EC]
	sensitizer
Sweden:	0.3 ppm TLV ; 0.37 mg/m3 TLV
	0.6 ppm Binding STEL ; 0.74 mg/m3 Binding STEL
	Skin notation
	Sensitizer
Switzerland:	0.3 ppm TWA [MAK]; 0.37 mg/m3 TWA [MAK]
	0.6 ppm STEL [KZW]; 0.74 mg/m3 STEL [KZW]
	Sensitizer
United Kingdom:	2 ppm TWA ; 2.5 mg/m3 TWA
	2 ppm STEL ; 2.5 mg/m3 STEL

Component Biological Exposure Limits

Methyl alcohol	67-56-1
ACGIH:	15 mg/l Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
Croatia	7 mg/g Creatinine Medium: urine Time: at the end of the work shift Parameter: Methanol (calculated on the average Creatinine value of 1.2 g/L urine ;for all results that are expressed as Creatinine, Creatinine concentration less than 0.5 g/L and greater than 3.0 g/L should not be considered)
Czech Republic	15 mg/l Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
France	15 mg/l Medium: urine Time: end of shift Parameter: Methanol (Background noise on non-exposed subjects ;Non-specific (observed after the exposure to other substances))
Germany (TRGS)	30 mg/l Medium: urine Time: end of shift Parameter: Methanol ; 30 mg/l Medium: urine Time: end of several shifts Parameter: Methanol (for long-term exposures)
Ireland	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background;non-specific)
Italy	15 mg/l Medium: urine Sampling Time: end of shift Parameter: Methanol (Background, nonspecific)
Romania	6 mg/l Medium: urine Time: end of shift Parameter: Methanol
Slovak Republic	30 mg/l Medium: urine Time: end of exposure or work shift Parameter: Methanol ; 30 mg/l Medium: urine Time: after all work shifts Parameter: Methanol (for long-term exposure)
Switzerland	30 mg/l Medium: urine Time: end of shift, and after several shifts (for long-term exposures) Parameter: Methanol

Phenol	108-95-2
ACGIH:	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)
Bulgaria	200 µg/l Medium: urine Sampling Time: at the end of exposure or end of shift Parameter: Phenol
Croatia	120 mg/g Creatinine Medium: urine Time: at the end of the work shift Parameter: Phenol (calculated on the average Creatinine value of 1.2 g/L urine ;for all results that are expressed as Creatinine, Creatinine concentration less than 0.5 g/L and greater than 3.0 g/L should not be considered ;interference of normally present Phenols (<8 mg/L) and simultaneous exposure to Benzene)
Czech Republic	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)
Finland	1.3 mmol/L Medium: urine Time: after the shift Parameter: Total phenol
France	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Total Phenol (Background noise on non-exposed subjects ;Non-specific (observed after the exposure to other substances))
Germany (TRGS)	120 mg/g Medium: urine Time: end of shift Parameter: Phenol (after hydrolysis ;measured as mg/g Creatinine)
Ireland	120 mg/g Creatinine Medium: urine Time: end of shift Parameter: Phenol (8 hours exposure to 2 ppm Phenol corresponds to an end of shift urine concentration of 120 mg Phenol/g Creatinine)
Italy	250 mg/g Creatinine Medium: urine Sampling Time: end of shift Parameter: Phenol (with hydrolysis) (Background, nonspecific)
Romania	120 mg/g Creatinine Medium: urine Time: end of shift Parameter: total Phenol (SCOEL)
Slovak Republic	200 mg/l Medium: urine Time: end of exposure or work shift Parameter: Phenol
Switzerland	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol [N,X]

Derived No Effect Levels (DNELs)

No DNELs available.

Predicted No Effect Concentrations (PNECs)

No PNECs available.

8.2 Exposure Controls

Engineering controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Eye/face protection

Use eye protection according to EN 166, designed to protect against liquid splashes.

Skin Protection

Wear appropriate chemical resistant clothing (EN ISO 6529).

Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Consult with a health and safety professional for specific respirators appropriate for your use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator (EN 137).

Glove Recommendations

Wear appropriate chemical resistant gloves: plastic, rubber gloves (EN 374).

Protective Materials

plastic and rubber

Environmental exposure controls

Do not allow to enter into ground-water, surface water or drains.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	red, black liquid	Physical State	liquid
Odor	slight odor ,methanol	Color	red , black
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	80 C (@ 760 mm Hg)
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	7 (Butyl Acetate = 1)	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	190 - 200 F [TOC]
Lower Explosive Limit	6.7	Decomposition temperature	Not available
Upper Explosive Limit	36	Vapor Pressure	52 mm Hg (@ 25 C)
Vapor Density (air=1)	1.1	Specific Gravity (water=1)	1.135 - 1.165 (20/20C)
Water Solubility	100 %	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Kinematic viscosity	Not available
Solubility (Other)	Not available	Density	Not available
Molecular Weight	Not available		

9.2 Other information

No additional information is available.

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazard is expected.

10.2 Chemical stability

Stable at normal temperatures and pressure.

10.3 Possibility of hazardous reactions

May polymerize when heated.

10.4 Conditions to avoid

Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.

10.5 Incompatible materials

alkali metals, strong acids, acyl halides, aldehydes, halogens, bases, strong oxidizing materials, combustible materials, halocarbons, amines

10.6 Hazardous decomposition products

oxides of carbon, aldehydes, cresol vapors, various organic fragments, oxides of sulfur, oxides of barium

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Cresol, all isomers (1319-77-3)

Oral LD50 Rat 1454 mg/kg

Dermal LD50 Rabbit 2000 mg/kg

Methyl alcohol (67-56-1)

Oral LD50 Rat 6200 mg/kg

Dermal LD50 Rabbit 15840 mg/kg

Inhalation LC50 Rat 22500 ppm 8 h

Barium sulfate (7727-43-7)

Oral LD50 Rat 307000 mg/kg

Phenol (108-95-2)

Oral LD50 Rat 340 mg/kg

Dermal LD50 Rabbit 630 mg/kg

Formaldehyde (50-00-0)

Oral LD50 Rat 100 mg/kg

Dermal LD50 Rabbit 270 mg/kg

Inhalation LC50 Rat 0.578 mg/L 4 h

Product Toxicity Data

Acute Toxicity Estimate

Dermal	324.983 mg/kg
Inhalation - Vapor	3.1814 mg/L
Oral	113.1442 mg/kg

Irritation/Corrosivity Data

skin burns, eye burns

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

May cause an allergic skin reaction.

Germ Cell Mutagenicity

May cause genetic defects.

Component Carcinogenicity

Cresol, all isomers	1319-77-3
DFG:	Category 3A (could be carcinogenic for man ;all isomers)
Barium sulfate	7727-43-7

DFG:	Category 4 (no significant contribution to human cancer)
Phenol	108-95-2
IARC:	Monograph 71 [1999] ; Monograph 47 [1989] (Group 3 (not classifiable))
DFG:	Category 3B (could be carcinogenic for man)
Formaldehyde	50-00-0
IARC:	Monograph 100F [2012] ; Monograph 88 [2006] ; Monograph 62 [1995] ; Supplement 7 [1987] (Group 1 (carcinogenic to humans))
DFG:	Category 4 (no significant contribution to human cancer)

Toxicity for reproduction

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

eyes, central nervous system

Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

No data available.

SECTION 12: Ecological Information

12.1 Toxicity

Component Analysis - Aquatic Toxicity

Cresol, all isomers	1319-77-3
Fish:	LC50 96 h Pimephales promelas 12.8 mg/L [flow-through] ; LC50 96 h Lepomis macrochirus 10 mg/L [static]
Methyl alcohol	67-56-1
Fish:	LC50 96 h Pimephales promelas 28200 mg/L [flow-through] ; LC50 96 h Pimephales promelas >100 mg/L [static] ; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through] ; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static] ; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through]]
Phenol	108-95-2
Fish:	LC50 96 h Pimephales promelas 11.9 - 50.5 mg/L [flow-through] ; LC50 96 h Pimephales promelas 20.5 - 25.6 mg/L [static] ; LC50 96 h Pimephales promelas 32 mg/L; LC50 96 h Oncorhynchus mykiss 5.449 - 6.789 mg/L [flow-through] ; LC50 96 h Oncorhynchus mykiss 7.5 - 14 mg/L [static] ; LC50 96 h Oncorhynchus mykiss 4.23 - 7.49 mg/L [semi-static] ; LC50 96 h Oncorhynchus mykiss 5 - 12 mg/L; LC50 96 h Lepomis macrochirus 13.5 mg/L [static] ; LC50 96 h Lepomis macrochirus 11.9 - 25.3 mg/L [flow-through] ; LC50 96 h Lepomis macrochirus 11.5 mg/L [semi-static] ; LC50 96 h Poecilia reticulata 34.09 - 47.64 mg/L [static] ; LC50 96 h Poecilia reticulata 31 mg/L [semi-static] ; LC50 96 h Brachydanio rerio 27.8 mg/L; LC50 96 h Cyprinus carpio 0.00175 mg/L [semi-static] ; LC50 96 h Oryzias latipes 33.9 - 43.3 mg/L [flow-through] ; LC50 96 h Oryzias latipes 23.4 - 36.6 mg/L [static]]

Algae:	EC50 96 h Pseudokirchneriella subcapitata 46.42 mg/L EPA ; EC50 96 h Pseudokirchneriella subcapitata 0.0188 - 0.1044 mg/L [static] EPA ; EC50 72 h Desmodesmus subspicatus 187 - 279 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 4.24 - 10.7 mg/L [Static] EPA ; EC50 48 h Daphnia magna 10.2 - 15.5 mg/L EPA
Formaldehyde	50-00-0
Fish:	LC50 96 h Pimephales promelas 22.6 - 25.7 mg/L [flow-through] ; LC50 96 h Lepomis macrochirus 1510 µg/L [static] ; LC50 96 h Brachydanio rerio 41 mg/L [static] ; LC50 96 h Oncorhynchus mykiss 0.032 - 0.226 mL/L [flow-through] ; LC50 96 h Oncorhynchus mykiss 100 - 136 mg/L [static] ; LC50 96 h Pimephales promelas 23.2 - 29.7 mg/L [static]
Invertebrate:	LC50 48 h Daphnia magna 2 mg/L IUCLID ; EC50 48 h Daphnia magna 11.3 - 18 mg/L [Static] EPA

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No components of this material are listed.

12.6 Other adverse effects

No additional information available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to LoW: EWC-code: 20 01 13*.

Dispose in accordance with all applicable regulations.

Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways.

Dispose in accordance with all applicable federal, state/regional and local laws and regulations.

SECTION 14: Transport Information

		ADR	RID	ICAO	IATA	ADN	IMDG
14.1	UN Number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2	UN Proper Shipping Name	--	--	--	--	--	--
14.3	Transport Hazard Class(es)	--	--	--	--	--	--
14.4	Packing Group	--	--	--	--	--	--
14.5	Environmental Hazards	--	--	--	--	--	--
14.6	Special Precautions For User	--	--	--	--	--	--

14.7	Transport in Bulk According to Annex II of MARPOL and the IBC Code	--	--	--	--	--	--
14.8	Further information	--	--	--	--	--	--

International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Cresol, all isomers	1319-77-3
IBC Code:	Category Y (dephenolized)
Methyl alcohol	67-56-1
IBC Code:	Category Y
Phenol	108-95-2
IBC Code:	Category Y
Formaldehyde	50-00-0
IBC Code:	Category Y (<=45% solution)

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REACH Candidate List of Substances of Very High Concern (SVHC) for Authorization (Article 59(1)) - Reg. (EU) No. 1907/2006

No components of this material are listed.

EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles REACH List of Substances Subject to Restriction (Annex XVII) - Reg. (EU) No. 1907/2006

This list includes substances subject to Restriction. Under REACH, these substances are subject to restrictions on manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Methyl alcohol (67-56-1)

Use restricted. See item 69

Formaldehyde (50-00-0)

Use restricted. See item 72 ; Use restricted. See item 28

EU - Substances Depleting the Ozone layer (1005/2009)

No components of this material are listed.

EU - Persistent Organic Pollutants (850/2004)

No components of this material are listed.

EU - Export and Import Restrictions (689/2008) - Chemicals and Articles Subject to Export Ban

No components of this material are listed.

EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances

Methyl alcohol	67-56-1
Lower-Tier Requirements	500 tonne
Higher-Tier Requirements	5000 tonne

Formaldehyde	50-00-0
Lower-Tier Requirements	5 tonne (concentration >=90%)
Higher-Tier Requirements	50 tonne (concentration >=90%)

EU - Plant Protection Products (1107/2009/EC)

No components of this material are listed.

EU - Biocides (528/2012/EU)

No components of this material are listed.

EU – Water Framework Directive (2000/60/EC)

No components of this material are listed.

EU - Limitation of Emissions of Volatile Organic Compounds Due to the Use of Organic Solvents in Certain Activities and Installations (1999/13/EC)

No components of this material are listed.

EU - Detergent Regulation (648/2004/EC)

Methyl alcohol	67-56-1
Consumer Labeling Requirements	Listed at concentrations exceeding 5.0% by weight (substance pursuant to Directive 76/768/EEC Annex III Part 1)
Formaldehyde	50-00-0
Consumer Labeling Requirements	Listed at concentrations exceeding 5.0% by weight (substance pursuant to Directive 76/768/EEC Annex III Part 1)

Germany Regulations

Germany Water Classification - Product

hazard class 3 - severe hazard to waters

* Self-classification

Germany Water Classification - Component

Cresol, all isomers (1319-77-3)

Reg. no 7088 , hazard class 1 - slightly hazardous to water

Methyl alcohol (67-56-1)

Reg. no 145 , hazard class 2 - obviously hazardous to water

Barium sulfate (7727-43-7)

Reg. no 308 , non-hazardous to water

Phenol (108-95-2)

Reg. no 170 , hazard class 2 - obviously hazardous to water

Formaldehyde (50-00-0)

Reg. no 112 , hazard class 3 - highly hazardous to water

Denmark Regulations

Methyl alcohol	67-56-1
	Solvents
	Properties of concern with regard to the List of hazardous substances
Phenol	108-95-2
	Solvents (used in a number of products including glues, paints, coatings and metal surface treatment agents)

	Properties of concern with regard to the List of hazardous substances
Formaldehyde	50-00-0
	Raw materials ; Preservatives
	Properties of concern with regard to the List of hazardous substances

Component Analysis - Inventory

Cresol, all isomers (1319-77-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	No	Yes	Yes

Methyl alcohol (67-56-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Barium sulfate (7727-43-7)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Phenol (108-95-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Formaldehyde (50-00-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out for the substance/mixture.

SECTION 16: Other Information

16.1 Indication of changes

28/12/2018 - Update to Section(s) 2, 3, 8, 11, 12, 15.

Preparation Date

20 November 2014

Revision date

28 December 2018

16.2 Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne - Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada)

16.3 Key literature references and sources for data

Available upon request.

16.4 Methods Used for Classification of Mixture According to Regulation (EC) No 1272/2008

Available upon request.

16.5 Relevant H- and EUH-phrases (Number and full text) and Notes

H225 Highly flammable liquid and vapor

H301 Toxic if swallowed

H311 Toxic in contact with skin

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H331 Toxic if inhaled

H341 Suspected of causing genetic defects

H350 May cause cancer

H370 Causes damage to organs

H373 May cause damage to organs through prolonged or repeated exposure

H411 Toxic to aquatic life with long lasting effects

NOTE B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. 31.12.2008 EN Official Journal of the European Union L 353/333. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

NOTE C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

NOTE D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilized form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "nonstabilised".

16.6 Training advice

Read the Safety Data Sheet before handling product.

16.7 Further Information

Disclaimer:

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.