

# Safety Data Sheet NA 3250 MULTI FLEX RAPID 2 GREY

Safety Data Sheet dated: 2/27/2017 - version 1 Date of first edition: 2/27/2017

# 1. Identification

Product identifier Mixture identification: Trade name: NA 3250 MULTI FLEX RAPID 2 GREY

# Recommended use and restrictions on use

Recommended use: Polymer modified mortar

# Restrictions on use: N.A.

# Supplier's details

Company: MAPEI INC. (Canada) 2900 Francis-Hughes Avenue H7L 3J5 - Laval - QC - CAN Phone: 1-450-662-1212

## **Emergency phone number**

(USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

# 2. Hazard identification



### **Classification of the product**

Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
Carc. 1A	May cause cancer if inhaled.
STOT SE 3	May cause respiratory irritation.
STOT RE 1	Causes damage to organs through prolonged or repeated exposure if inhaled.

## Label elements

## **Pictograms and Signal Words**



### Hazard statements:

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.

### Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260.B	Do not breathe dust.
P264.2	Wash 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.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Other hazards	
P501.A	Dispose of contents/container in accordance with applicable regulations.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P363	Wash contaminated clothing before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P321.A	Specific treatment (see supplementary instructions on this label).
P314	Get medical advice/attention if you feel unwell.
P310.B	Immediately call a doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### None

### Ingredient(s) with unknown acute toxicity

None

### 3. Composition/information on ingredients

Substances

N.A.

## Mixtures

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components						
Quantity	Name	Ident. Numb.	Classification			
25-50 %	Portland cement	CAS:65997-15-1	STOT SE 3, H335; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Corr. 1A, H314			
25-50 %	Silica Sand	CAS:14808-60-7	STOT RE 1, H372; Carc. 1A, H350			

### 4. First-aid measures

### Description of necessary first-aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

#### In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

## In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

## Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

### Indication of immediate medical attention and special treatment needed, if necessary

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### 5. Fire-fighting measures

## Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

### Specific hazards arising from the hazardous product

Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: N.A. Explosive properties: N.A. Oxidizing properties: N.A.

## Special protective equipement and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

### Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand Wash with plenty of water.

# 7. Handling and storage

# Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Always keep in a well ventilated place.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

# 8. Exposure controls/personal protection

## Control parameters

### List of components with OEL value

Component	OEL Type Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
Portland cement	OSHA		15					
	OSHA		5					
	ACGIH		1					A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma;
Silica Sand	ACGIH		0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
Appropriate engineering controls								

## Appropriate engineering controls

N.A.

Individual protection measures, such as personal protective equipment (PPE)

## Eye protection:

Use close fitting safety goggles, don't use eye lens. Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

### 9. Physical and chemical properties

## Information on basic physical and chemical properties

Physical state: Solid Appearance and colour: Powder grey Odour: Cement like Odour threshold: N.A. pH: N.A. Melting point / freezing point: N.A. Initial boiling point and boiling range: N.A. Flash point: N.A. Evaporation rate: N.A. Upper/lower flammability or explosive limits: N.A. Vapour density: N.A. Vapour pressure: N.A. Relative density: 1.50 g/cm3 Solubility in water: Insoluble Solubility in oil: N.A. Partition coefficient (n-octanol/water): N.A. Auto-ignition temperature: N.A. Decomposition temperature: N.A. Viscosity: N.A. Explosive properties: N.A. Oxidizing properties: N.A. Solid/gas flammability: N.A.

### **Other information**

Substance groups relevant properties: N.A. Miscibility: N.A. Fat Solubility: N.A. Conductivity: N.A.

# 10. Stability and reactivity

## Reactivity

Stable under normal conditions

## Chemical stability

Data not Available.

### Possibility of hazardous reactions

None.

## Conditions to avoid

Stable under normal conditions.

## Incompatible materials

None in particular.

Hazardous decomposition products

None.

## **11. Toxicological information** Information on toxicological effects

## Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

### Toxicological information on main components of the mixture:

Silica	Sand

a) acute toxicity

LD50 Oral Rat = 500 mg/kg

## If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

a) espiratory or skin sensitiaation         a) gern cell mutagenichy         b) gern cell mutagenichy         carcinogenichy         a) STOT-single exposure         b) STOT-single exposure         b) STOT-appeted te bacosure         b) STOT-appeted exposure         b) Stota exposure         b) Stota expose expot expot expot expot expose expose expose expose expot		c) serious eye damage/irritation		
<pre></pre>		d) respiratory or skin sensitisation		
<pre></pre>		e) germ cell mutagenicity		
h STOT-single exposure i) STOT-single exposure j) apiration hazard Substance(s) listed on the LARC Monographs: Silice Sand Group 1 Substance(s) listed as NOSH Carcinogen(s): Silice Sand Substance(s) listed as NOSH Carcinogen(s): Silice Sand Substance(s) listed on the NTP report on Carcinogen(s): Silice Sand Substance(s) listed Sand Substan		f) carcinogenicity		
i STOT-repeated exposure j aspiration hazard Substance(s) listed on the IARC Monograph: Silica Sand Substance(s) listed as OSHA Carcinogen(s): Silica Sand Substance(s) listed as NOSH Carcinogen(s): Silica Sand Substance(s) listed on the NTP report on Carcinogens: Silica Sand Substance(s) listed on the NTP report on Carcinogens: Silica Sand 12. Ecological information Ecotoxicity Adopt good working practices, so that the product is not released into the environment. List of components with eco-toxicological properties Quantity Component Ident. Numb. Ecotox Infos PersiEcotoxicity: LC50 carp > 10000,0000 mg/L 72h PersiEcotoxicity in soil N.A. Mobility in soil N.A. Other adverse effects		g) reproductive toxicity		
i sepiration hazari Substance(s) listed on the IARC Monographs: Silica Sand Group 1 Substance(s) listed as OSHA Carcinogen(s): Silica Sand Substance(s) listed as NIOSH Carcinogen(s): Silica Sand Substance(s) listed on the NTP report on Carcinogens: Silica Sand Substance(s) listed on the other proton Carcinogens: Silica Sand Case: takoef or protect is not released into the environment. List of components with eco-toxicological properties Quantiv Component with eco-toxicological properties Quantiv Component with eco-toxicological properties Quantiv Component difference Case: takoef or a) Aquatic acute toxicity: LC50 carp > 10000,00000 mg/L 72h Persister: N.A. Biocaccumulative potential N.A. Mobility in soil N.A. Other adverse effects		h) STOT-single exposure		
Subtance (s) listed on the IARC Monographs: Silica Sand Subtance (s) listed as NIOSH Carcinogen(s): Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed on the NTP report on Carcinogens: Silica Sand Subtance (s) listed for the INUM. Subtance (s) listed for the INUM.		i) STOT-repeated exposure		
Silica Sand       Group 1         Substance(s) listed as OSHA Carcinogen(s):       Silica Sand         Substance(s) listed as NIOSH Carcinogen(s):       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         Substance(s) listed on the NTP report on Carcinogens:       Silica Sand         List of components with eco-toxicological properties       Component         Quantity Component       Ident. Numb.       Ecotox Infos         Substance(s) listed sand       CAS: 14808-60-7       a) Aquatic acute toxicity: LC50 carp > 10000.00000 mg/L 72h         Persister:       N.A.       Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity: LC50 carp > 10000.00000 mg/L 72h         N.		j) aspiration hazard		
Substance(s) listed as OSHA Carcinogen(s): Silica Sand Substance(s) listed as NIOSH Carcinogen(s): Silica Sand Substance(s) listed on the NTP report on Carcinogens: Silica Sand 12. Ecological information Ecotox:	Substand	e(s) listed on the IARC Monographs:		
siica Sand Subetance(s) Isited as NIOSH Carcinogen(s): Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited on the NTP report on Carcinogens: Silica Sand Subetance(s) Isited Sand Sand Sand Sand Sand Sand Sand Sand		Silica Sand	Group 1	
Substance(s) listed as NIOSH Carcinogen(s):       Silica Sand         Substance(s) listed on the NTP report on Carcinogens::       Silica Sand         Silica Sand       Silica Sand         T. Ecological information         Ecotaxity         Adopt good working practices, so that the product is not released into the environment.         List of component with eco-toxicological properties         Quant Ministry Component Ident. Numb.       Ecotax Infos         Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity : LC50 carp > 10000,0000 mg/L 72h         Persistive potential         N.A.         Biological properties         N.A.         MARE Sand       CAS: 14808-60-7       a) Aquatic acute toxicity : LC50 carp > 10000,0000 mg/L 72h         Persistive potential         N.A.         Biological properties         N.A.         Mobility in soil         N.A.         Subscription         N.A.         Mobility in soil         N.A.         Subscription         N.A. </th <th>Substand</th> <th>e(s) listed as OSHA Carcinogen(s):</th> <th></th> <th></th>	Substand	e(s) listed as OSHA Carcinogen(s):		
Silica Sand         24. Ecotometry         25. Ecotometry         Adopt good working practices, so that the product is not releveed into the environment.         List of component       Ident. Numb.         Quantity       Omponent       Ident. Numb.         Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Persister       and degradability       a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Bioacc       N.A.       Silica Sand       CAS: 14808-60-7       b) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Persister       and       CAS: 14808-60-7       b) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Persister       N.A.       Silica Sand       CAS: 14808-60-7       b) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Persister       N.A.       Silica Sand       CAS: 14808-60-7       b) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Mobility       N.A.       Silica Sand       CAS: 14808-60-7       b) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Mobility       N.A.       Silica Sand       Silica Sand       Silica Sand         Mobility       Isosol       Silica Sand       Silica Sand       Silica Sand         Mobility		Silica Sand		
Substance (a) listed on the NTP report on Carcinogens:         Suitica Sand         12. E/Sica I information         Ecotox///         Ecotox///         Modpt good working practices, so that the product is not relessed into the environment.         List of component       Ident. Numb.         Quantity       Component       Ident. Numb.         Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity: LC50 carp > 10000,0000 mg/L 72h         Persister       and degradability       N.A.         Bioaccumulative potential       N.A.         Mobility in soil       N.A.         Other J/verse effects       Silica Sand	Substand	e(s) listed as NIOSH Carcinogen(s):		
Silica Sand		Silica Sand		
12. Ecological information         Ecotoxicity         Adopt good working practices, so that the product is not released into the environment.         List of components with eco-toxicological properties         Quantity       Component       Ident. Numb.       Ecotox Infos         25-50 %       Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h         Persistence and degradability       N.A.       N.A.         Bioaccumulative potential       Version Section Sectio	Substand	e(s) listed on the NTP report on Carcinog	ens:	
Ecotox i < v       V         Adopt vorking practices, so that the product is not released into the environment.         List of covernets with eco-toxicological properties         Quantity       Component       Ident. Numb.       Ecotox Infos         25:50 %       Silica Sand       CAS: 14808-60-7       a) Aquatic acute toxicity : LC50 carp > 10000,0000 mg/L 72h         Persister ce and degradability         N.A.       N.A.         Bioaccurulative potential         N.A.       N.A.         Mobility in soil         N.A.       V         Other adverse effects		Silica Sand		
Quantity     Component     Ident. Numb.     Ecotox Infos       25-50%     3 klica Sand     CAS: 14808-60-7     a) Aquatic acute toxicity : LC50 carp > 10000,0000 mg/L 72h       Persister cand degradability       N.A.     N.A.       Bioaccumulative potential       N.A.       Mobility     In soil       N.A.       Other setffects	Ecotox	licity	e product is not rele	eased into the environment.
25-50 % Silica Sand CAS: 14808-60-7 a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h Persistence and degradability N.A. Bioaccumulative potential N.A. Mobility in soil N.A. Other adverse effects	List of co	mponents with eco-toxicological propertie	S	
Persistence and degradability N.A. Bioaccumulative potential N.A. Mobility in soil N.A. Other adverse effects	Quantity	Component	Ident. Numb.	Ecotox Infos
N.A. Bioaccumulative potential N.A. Mobility in soil N.A. Other adverse effects	25-50 %	Silica Sand	CAS: 14808-60-7	a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h
Bioaccumulative potential N.A. Mobility in soil N.A. Other adverse effects	Persis	tence and degradability		
N.A. Mobility in soil N.A. Other adverse effects		N.A.		
Mobility in soil N.A. Other adverse effects	Bioacc	umulative potential		
N.A. Other adverse effects		N.A.		
Other adverse effects	Mobilit	ty in soil		
		N.A.		
N.A.		adverse effects		
	Other			
13. Disposal considerations	Other	N.A.		

# Safe handling and methods for disposal

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

### **UN** number

TDG-UN number: N.A. ADR-UN number: N.A. DOT-UN Number: N.A. IATA-Un number: N.A. IMDG-Un number: N.A.

# UN proper shipping name

TDG-Shipping Name: N.A. ADR-Shipping Name: N.A. DOT-Proper Shipping Name: N.A. IATA-Technical name: N.A. IMDG-Technical name: N.A.

## Transport hazard class(es)

TDG-Class: N.A. ADR-Class: N.A. DOT-Hazard Class: N.A. IATA-Class: N.A.

IMDG-Class: N.A. **Packing group** TDG-Packing Group: N.A. ADR-Packing Group: N.A. DOT Packing Group: N.A. IATA-Packing group: N.A. IMDG-Packing group: N.A. **Environmental hazards** Marine pollutant: No Environmental Pollutant: N.A. Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code) N.A. Special precautions in connection with transport or conveyance TDG: TDG Special provisions: N/A Department of Transportation (DOT): N.A. Road and Rail (ADR-RID): N.A. Air (IATA): N.A. Sea (IMDG): N.A.

### 15. Regulatory information

## **Canada - Federal regulations**

- **DSL Domestic Substances List** 
  - DSL Inventory:

All the substances are listed in the DSL.

### **NDSL - Non Domestic Substances List**

NDSL Inventory: no substances listed

### **NPRI - National Pollutant Release Inventory**

Substances listed in NPRI:

no substances listed

## **USA - Federal regulations**

**TSCA - Toxic Substances Control Act** 

TSCA inventory:

All the components are listed on the TSCA inventory

## TSCA listed substances:

Portland cement	is listed in TSCA	Section 8b
Silica Sand	is listed in TSCA	Section 8b

## SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

# CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

## CAA - Clean Air Act

CAA listed substances:

no substances listed

### CWA - Clean Water Act CWA listed substances:

no substances listed

### **USA - State specific regulations**

#### **California Proposition 65**

Substance(s) listed under California Proposition 65:

Silica Sand

Massachusetts Right to know

#### Substance(s) listed under Massachusetts Right to know:

Listed as carcinogen

Portland cement

Silica Sand

### Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Portland cement

Silica Sand

### New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Portland cement

Silica Sand

#### 16. Other information

#### Code Description

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H350 May cause cancer .

H350.A May cause cancer if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure .

H372.A Causes damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 2/27/2017 - version 1

### Product code: 9024296

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

## Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit. STOT: Specific Target Organ Toxicity. WGK: German Water Hazard Class. KSt: Explosion coefficient.