

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

Safety Data Sheet dated 16/5/2015, version 1

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

1.1. Product identifier

Trade name: RASCObond EP Adhesive Filler A-Comp

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

Recommended use:

Epoxy adhesive.

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

Rascor International AG

Gewerbestrasse 4, 8162 Steinmaur, Switzerland

Competent person responsible for the safety data sheet:

info@rascor.com

1.4. Emergency telephone number

Rascor International AG - phone: +41 44 857 11 11

fax: +41 44 857 11 00

www.rascor.ch (office hours)

Swiss Toxycological Information Center, Emergency phone 145

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- ⚠ Warning, Skin Sens. 1A, May cause an allergic skin reaction.
- 🌿 Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

### Warning

#### Hazard Statements:

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H411 Toxic to aquatic life with long lasting effects.

#### Precautionary Statements:

- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P391 Collect spillage.
- P501 Dispose of contents/container in accordance with applicable regulations.

#### Special Provisions:

- EUH205 Contains epoxy constituents. May produce an allergic reaction.

#### Contents:

- oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
- reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ ): May produce an allergic reaction.
- bisphenol F - epoxy resin: May produce an allergic reaction.

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

#### Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:  
 $\geq 20\%$  -  $< 25\%$  reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ )

REACH No.: 01-2119456619-26-xxxx, Index number: 603-074-00-8, CAS: 25068-38-6, EC: 500-033-5

- ⚠ 3.3/2 Eye Irrit. 2 H319
- ⚠ 3.2/2 Skin Irrit. 2 H315
- ⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- ⚠ 4.1/C2 Aquatic Chronic 2 H411

$\geq 20\%$  -  $< 25\%$  free crystalline silica ( $\text{Ø} > 10 \mu$ )

CAS: 14808-60-7, EC: 238-878-4

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

$\geq 5\%$  -  $< 10\%$  oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

REACH No.: 01-2119485289-22-xxxx, Index number: 603-103-00-4, CAS: 68609-97-2, EC: 271-846-8

- ⚠ 3.2/2 Skin Irrit. 2 H315
- ⚠ 3.4.2/1A Skin Sens. 1A H317

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

>= 2.5% - < 4.99% bisphenol F - epoxy resin  
REACH No.: 01-2119454392-40-0006, CAS: 28064-14-4, EC: 500-006-8  
⚠ 3.2/2 Skin Irrit. 2 H315  
⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  
⚠ 4.1/C2 Aquatic Chronic 2 H411

>= 0.25% - < 0.49% free crystalline silica ( $\text{Ø} < 10 \mu$ )(\*  
CAS: 14808-60-7, EC: 238-878-4  
⚠ 3.9/2 STOT RE 2 H373

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off 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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

A suspension of activated charcoal in water, or petroleum jelly may be administered.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema.

If brought into contact with the skin, the product may cause sensitisation of the skin.

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

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

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

Treatment:

(see paragraph 4.1)

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

None in particular.

Water.

Extinguishing media which must not be used for safety reasons:

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

Burning produces heavy smoke.

The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

### 5.3. Advice for firefighters

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.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

### 6.2. Environmental precautions

Limit leakages with earth or sand.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

### 6.3. Methods and material for containment and cleaning up

Rapidly recover the product, wearing protective clothing.

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

### 6.4. Reference to other sections

See also section 8 and 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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

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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Fine dust may form explosive mixture with air. Keep away from open flames, heat and sparks.

Do not remove shrink film in hazardous locations (because of risk of static charging/discharge)

### 7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

free crystalline silica ( $\text{Ø} > 10 \mu$ ) - CAS: 14808-60-7

ACGIH - LTE mg/m<sup>3</sup>(8h): 0.025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

free crystalline silica ( $\text{Ø} < 10 \mu$ )(\*) - CAS: 14808-60-7

EU - LTE mg/m<sup>3</sup>(8h): 0.025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer

ACGIH - LTE mg/m<sup>3</sup>(8h): 0,025 mg/m<sup>3</sup> - Notes: A2 (R) - Pulm fibrosis, lung cancer

### DNEL Exposure Limit Values

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight  $\leq 700$ ) - CAS: 25068-38-6

Worker Industry: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Industry: 12.25 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 8.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 12.25 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Consumer: 3.571 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.75 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2

Worker Industry: 17 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Industry: 0.029 mg/l - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 0.0098 mg/l - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 3.9 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 0.0138 mg/l - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 1.7 mg/kg - Exposure: Human Dermal - Frequency: Long Term, local effects

Worker Industry: 0.00098 mg/l - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 10 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Consumer: 0.0076 mg/l - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 1219 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Consumer: 40 mg/kg - Exposure: Human Dermal - Frequency: Short Term, local effects

Consumer: 0.0029 mg/l - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 2.35 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.0041 mg/l - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 1 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

bisphenol F - epoxy resin - CAS: 28064-14-4

Worker Professional: 0.0083 mg/cm<sup>2</sup> - Exposure: Human Dermal - Frequency: Short Term, local effects

Worker Professional: 104.15 mg/kg - Consumer: 62.5 mg/kg - Exposure: Human Dermal

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

- Frequency: Long Term, systemic effects  
Worker Professional: 29.39 mg/m<sup>3</sup> - Consumer: 8.7 mg/m<sup>3</sup> - Exposure: Human  
Inhalation - Frequency: Long Term, systemic effects  
Consumer: 6.25 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

### PNEC Exposure Limit Values

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Target: Fresh Water - Value: 0.006 mg/l

Target: Marine water - Value: 0.0006 mg/l

Target: Freshwater sediments - Value: 0.0627 mg/kg

Target: Marine water sediments - Value: 0.00627 mg/kg

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2

Target: Fresh Water - Value: 0.0072 mg/l

Target: Marine water - Value: 0.00072 mg/l

Target: MAP2 - Value: 0.072 mg/l

Target: Freshwater sediments - Value: 66.77 mg/kg

Target: Marine water sediments - Value: 6.677 mg/kg

Target: Soil (agricultural) - Value: 80.12 mg/kg

Target: Microorganisms in sewage treatments - Value: 10 mg/l

bisphenol F - epoxy resin - CAS: 28064-14-4

Target: Fresh Water - Value: 0.003 mg/l

Target: Marine water - Value: 0.0003 mg/l

Target: MAP2 - Value: 0.0254 mg/l

Target: Freshwater sediments - Value: 0.294 mg/kg

Target: Marine water sediments - Value: 0.0294 mg/kg

Target: Soil (agricultural) - Value: 0.237 mg/kg

### 8.2. Exposure controls

#### 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:

Not needed for normal use.

In case of insufficient ventilation use mask with B type filters (EN 14387).

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

#### Thermal Hazards:

None

#### Environmental exposure controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance:	paste
Colour:	grey
Odour:	typical
Odour threshold:	N.A.

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	== °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	== °C
Evaporation rate:	N.A.
Vapour pressure:	<0.01 kPa (23°C)
Relative density:	1,70-1,75 g/cm <sup>3</sup> (23°C)
Vapour density (air=1):	N.A.
Solubility in water:	insoluble
Solubility in oil:	soluble
Viscosity:	650 mPa.s (23°C)
Auto-ignition temperature:	== °C
Explosion limits(by volume):	==
Decomposition temperature:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Explosive properties:	==
Oxidizing properties:	N.A.

### 9.2. Other information

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

## SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
It may catch fire on contact with powerful oxidising agents.
- 10.4. Conditions to avoid  
Stable under normal conditions.
- 10.5. Incompatible materials  
None in particular.
- 10.6. Hazardous decomposition products  
None.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Route(s) of entry:

Ingestion:	Yes
Inhalation:	Yes
Contact:	Yes

Toxicological information related to the product:

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:

Toxicological information of the mixture:  
N.A.

Toxicological information of the main substances found in the mixture:

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

<= 700) - CAS: 25068-38-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 15000 mg/kg - Notes: riferito a prodotto di reazione:bisfenolo-A-epicloridrina;resine epossidiche

Test: LD50 - Route: Skin - Species: Rabbit = 23000 mg/kg - Notes: riferito a prodotto di reazione:bisfenolo-A-epicloridrina;resine epossidiche

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 26800 mg/kg

bisphenol F - epoxy resin - CAS: 28064-14-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Corrosive/Irritating Properties:

Skin:

The product can cause irritation by contact.

Eye:

The product can cause irritation by contact

Sensitizing Properties:

Frequent contact may cause sensitization.

Cancerogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

Additional Information:

Liquid epoxy resin contained in this material causes only minor skin irritation. However, all epoxy resins are capable of causing sensitizing of the skin.

Susceptibility to skin irritation and sensitization varies from person to person.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact.

Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

### SECTION 12: Ecological information

12.1. Toxicity

Adopt good industrial practices, so that the product is not released into the environment.

Not available data on the mixture



# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

Biodegradability: not readily biodegradable  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1.5 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 1.8 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae > 11 mg/l - Duration h: 72

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

List of substances dangerous for the environment and corresponding classification:

>= 20% - < 25% reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

CAS: 25068-38-6

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

>= 2.5% - < 4.99% bisphenol F - epoxy resin

CAS: 28064-14-4

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Not available data on the mixture

### SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

Dispose of this material and its container to hazardous or special waste collection point.

Avoid release to the environment. Refer to special instructions/Safety data sheets.

RS 814.600 Technical Ordinance on Waste

### SECTION 14: Transport information

14.1. UN number

UN Number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): 9, III

ADR-Upper number: NA

Air (ICAO/IATA): 9, III

Sea (IMO/IMDG): 9, III

LIMITED QUANTITY (3.4.6. ADR e 3.4.2. IMDG)

Dangerous goods in limited quantities

14.4. Packing group

14.5. Environmental hazards

Marine pollutant: No

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

- 14.6. Special precautions for user  
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
N.A.  
No

### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Dir. 2006/8/EC  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 453/2010 (Annex I)  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:  
Restrictions related to the product:  
Restriction 3  
Restrictions related to the substances contained:  
No restriction.
- Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"  
Directive 2000/39/CE and s.m.i. (Professional threshold limit)  
Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)  
Directive 105/2003/CE (Seveso III): N.A.  
ADR Agreement – IMDG Code – IATA Regulation  
Wassergefährdungsklasse (WGK): 2  
VOC (2004/42/EC) : N.A. g/l

Swiss legislation: National and local provisions must be complied with, in particular:

- 15.2. Chemical safety assessment  
No

### SECTION 16: Other information

Text of phrases referred to under heading 3:  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.  
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

# Safety Data Sheet

## RASCObond EP Adhesive Filler A-Comp

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

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

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX'S - Dangerous properties of industrial materials

Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

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

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
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).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	European threshold limit value
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List