



Safety Data Sheet dated 7/12/2018, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: IDROLASTIC (A+B)

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

Recommended use:

Two-component elastic technological mortar for waterproofing and protection of concrete surfaces:

COMPONENT A

Uses advised against:

All uses not included in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company:

COLMEF SRL

Z.I. Ponte d'Assi

06024 - GUBBIO (PG)

Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

Competent person responsible for the safety data sheet:

ufficiotecnico@colmef.com

1.4. Emergency telephone number

COLMEF SRL Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)



Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.



Danger, Eye Dam. 1, Causes serious eye damage.



Warning, Skin Sens. 1, May cause an allergic skin reaction.



Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements:

P102 Keep out of reach of children.

P261 Avoid breathing dust.

P280 Wear protective gloves/clothing.

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

P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Special Provisions:

None

Contains

Portland cement, Cr(VI) < 2ppm

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:

Qty	Name	Ident. Number	Classification
50% - 75%	free crystalline silica (Ø > 10 µ)	CAS: 14808-60-7 EC: 238-878-4	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
25% - 50%	Portland cement, Cr(VI) < 2ppm	CAS: 65997-15-1 EC: 266-043-4	 3.8/3 STOT SE 3 H335  3.2/2 Skin Irrit. 2 H315  3.3/1 Eye Dam. 1 H318  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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 induce vomiting.

In case of Inhalation:

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

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

None

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:

None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Water.
 - Carbon dioxide (CO₂).
 - 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.
 - Burning produces heavy smoke.
- 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.
 - Wear breathing apparatus if exposed to vapours/dusts/aerosols.
 - Provide adequate ventilation.
 - Use appropriate respiratory protection.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - 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
 - Wash with plenty of water.
- 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.
 - 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.
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 - 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 ($\text{Ø} > 10 \text{ m}$) - CAS: 14808-60-7

ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer

Portland cement, Cr(VI) < 2ppm - CAS: 65997-15-1

ACGIH - TWA(8h): 1 mg/m³ - Notes: (E,R), A4 - Pulm func, resp symptoms, asthma

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles certified in accordance with EN 166, 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. certified in accordance with EN 374, part 1,2,3.

Respiratory protection:

In case of insufficient ventilation or prolonged exposure wear suitable respiratory protection equipment certified in accordance with EN 149-FFP2.

The life of the protection devices against the chemical agents depends on various factors (the way they are used, climatic factors and storage conditions), that can reduce also the life foreseen by CE standards.

Always consult the manufacturer's instructions.

Instruct the worker in the correct use of the equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Powder

Colour:

Grey

Odour:

Odourless

Odour threshold:

N.A.

Ph:

In aqueous solution ca.12

Melting point / freezing point:

== °C

Initial boiling point and boiling range:

== °C

Solid/gas flammability:

N.A.

Upper/lower flammability or explosive limits:

N.A.

Vapour density:

Not determinated

Flash point:

== °C

Evaporation rate:

Not determinated

Vapour pressure:

Not determinated

Relative density:

N.A.

Solubility in water:

partly soluble

Solubility in oil:

insoluble

Apparent density (g/cm³)

1.20

Auto-ignition temperature:

== °C - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature:

N.A.

Viscosity:

N.A.

Explosive properties:	== - No components with explosive properties
Oxidizing properties:	== - No components with oxidizing properties
9.2. Other information	
Miscibility:	Miscible partially in component B

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
None
- 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
Toxicological information of the product:
N.A.

Toxicological information of the main substances found in the product:
free crystalline silica ($\varnothing > 10 \mu$) - CAS: 14808-60-7

a) acute toxicity:

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

Test: LD50 - Route: Skin > 2000 mg/kg

Corrosive/Irritating Properties:

Skin:

The product can cause irritation by contact.

Eye:

The product can cause damage to eyes by contact

Carcinogenic Effects:

The IARC (International Agency for Research on Cancer) believes that the crystalline silica inhaled at the workplace can cause lung cancer in man.

However, it also points out that the cancer effect depends on the silica characteristics and on the biological-physical condition of the environment. There is a large amount of information in support of the fact that increased risk of cancer is limited to persons suffering from silicosis.

In the current situation of studies, protection of workers from silicosis can be ensured by respecting the exposure limit values.

If not differently specified, the information required in Regulation (EU)2015/830 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 working practices, so that the product is not released into the environment.
N.A.
- 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
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
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. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of hardened product (EC waste code) :17 01 01
Disposal of not hardened product (EC waste code) :17 01 01
The suggested European waste code is just based on the composition of the product.
According to the specific process or application field a different waste code may be necessary.

SECTION 14: Transport information

- 14.1. UN number
- 14.2. UN proper shipping name
ADR-Shipping Name: --
IATA-Shipping Name: --
IMDG-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 MARPOL73/78 and the IBC Code
N.A.

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)
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) 2015/830
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)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None
Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H335 May cause respiratory irritation.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 6: Accidental release measures
SECTION 8: Exposure controls/personal protection
SECTION 11: Toxicological information
SECTION 14: Transport information
SECTION 15: Regulatory information
SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

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.

Safety Data Sheet IDROLASTIC (A+B)



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.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

Safety Data Sheet dated 7/12/2018, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: IDROLASTIC (A+B)

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

Recommended use:

Two-component elastic technological mortar for waterproofing and protection of concrete surfaces:

COMPONENT B

Uses advised against:

All uses not included in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company:

COLMEF SRL

Z.I. Ponte d'Assi

06024 - GUBBIO (PG)

Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

Competent person responsible for the safety data sheet:

ufficiotecnico@colmef.com

1.4. Emergency telephone number

COLMEF SRL Tel. +39-075-923561 (8:00-13:00;14:30-18:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

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:
None.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

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

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

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.

Burning produces heavy smoke.

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

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

Wash with plenty of water.

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.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
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
No occupational exposure limit available
DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
N.A.
- 8.2. Exposure controls
Eye protection:
Use close fitting safety goggles certified in accordance with EN 166, don't use eye lens.
Protection for skin:
No special precaution must be adopted for normal use.
Protection for hands:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
certified in accordance with EN 374, part 1,2,3.
Respiratory protection:
In case of insufficient ventilation or prolonged exposure wear suitable respiratory protection
equipment certified in accordance with EN 149-FFP2.
The life of the protection devices against the chemical agents depends on various factors (the
way they are used, climatic factors and storage conditions), that can reduce also the life
foreseen by CE standards.
Always consult the manufacturer's instructions.
Instruct the worker in the correct use of the equipment.
- Thermal Hazards:
None
- Environmental exposure controls:
None
- Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties
- | | |
|---|--------|
| Appearance | LIQUID |
| Colour: | WHITE |
| Odour: | N.A. |
| Odour threshold: | N.A. |
| pH: | 10 |
| Melting point / freezing point: | 0 °C |
| Initial boiling point and boiling range: | 100 °C |
| Solid/gas flammability: | N.A. |
| Upper/lower flammability or explosive limits: | N.A. |
| Vapour density: | N.A. |
| Flash point: | N.A. |
| Evaporation rate: | N.A. |
| Vapour pressure: | N.A. |
| Relative density: | N.A. |

Solubility in water:	N.A.
Solubility in oil:	N.A.
Apparent density (g/cm ³):	1.10
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
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
 - None
- 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

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

N.A.

If not differently specified, the information required in Regulation (EU)2015/830 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 working practices, so that the product is not released into the environment.
 - N.A.
- 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

- vPvB Substances: None - PBT Substances: None
12.6. Other adverse effects
None

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.

SECTION 14: Transport information

- 14.1. UN number
14.2. UN proper shipping name
ADR-Shipping Name: --
IATA-Shipping Name: --
IMDG-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 MARPOL73/78 and the IBC Code
N.A.

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)
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) 2015/830
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)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None
Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)
Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None
- 15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 6: Accidental release measures

SECTION 11: Toxicological information
SECTION 14: Transport information
SECTION 15: Regulatory information
SECTION 16: Other information

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

Main bibliographic sources:

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Nostrand Reinold

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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.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.