# SAFETY DATA SHEET

**Creation Date** Oct-2013 **Revision Date** Oct-2018 **Revision Number** 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identification

| | |
|---|---|
| **Product Description:** | **Cobalt(II) acetate tetrahydrate** |
| **Product Grade:** | SQ |
| **Cat No. :** | Q22605 |
| **Synonyms** | Acetic acid cobalt(2+) salt; Cobaltous acetate tetrahydrate. |
| **CAS-No** | 6147-53-1 |
| **Molecular Formula** | C4 H6 Co O4 . 4 H2 O |

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

| | |
|---|---|
| **Recommended Use** | Laboratory chemicals. |
| **Uses advised against** | No Information available |

### 1.3. Details of the supplier of the safety data sheet

| | |
|---|---|
| **Company** | Thermo Fisher Scientific India Pvt. Ltd<br>403-404, B-wing, Delphi, Hiranandani Business Park,<br>Powai, Mumbai 400076, INDIA. |
| **E-mail address** | laboratorysolutions@thermofisher.com |

### 1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30
Chemtrec US: (800) 424-9300
Chemtrec EU: 001 (202) 483-7616

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**CLP Classification - Regulation (EC) No 1272/2008**

**Physical hazards**
Based on available data, the classification criteria are not met

**Health hazards**

| | |
|---|---|
| Respiratory Sensitization | Category 1 |
| Skin Sensitization | Category 1 |
| Germ Cell Mutagenicity | Category 2 |
| Carcinogenicity | Category 1B |
| Reproductive Toxicity | Category 1B |

**Environmental hazards**

| | |
|---|---|
| Acute aquatic toxicity | Category 1 |
| Chronic aquatic toxicity | Category 1 |

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

| | |
|---|---|
| **Symbol(s)** | T - Toxic<br>N - Dangerous for the environment |
| **R-phrase(s)** | R49 - May cause cancer by inhalation |

R60 - May impair fertility
R68 - Possible risk of irreversible effects
R42/43 - May cause sensitization by inhalation and skin contact
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.*

### 2.2. Label elements

**Signal Word** **Danger**

**Hazard Statements**

H317 - May cause an allergic skin reaction
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 - Suspected of causing genetic defects
H350i - May cause cancer by inhalation
H360F - May damage fertility
H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements**

P201 - Obtain special instructions before use
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician
P273 - Avoid release to the environment

**Additional EU labelling**

Restricted to professional users

### 2.3. Other hazards

No information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component | CAS-No | EC-No. | Weight % | CLP Classification - Regulation (EC) No 1272/2008 | DSD Classification - 67/548/EEC |
|---|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | 6147-53-1 | | >95 | Skin Sens. 1 (H317) Resp. Sens. 1 (H334) Muta. 2 (H341) Carc. 1B (H350i) Repr. 1B (H360F) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | R42/43 Carc.Cat.2; R49 N; R50-53 Repr.Cat.2; R60 Muta.Cat.3; R68 |
| Cobalt(II) acetate | 71-48-7 | EEC No. 200-755-8 | - | Skin Sens. 1 (H317) Resp. Sens. 1 (H334) Muta. 2 (H341) Carc. 1B (H350i) Repr. 1B (H360F) Aquatic Acute 1 (H400) | R42/43 Carc.Cat.2; R49 N; R50-53 Repr.Cat.2; R60 Muta.Cat.3; R68 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Aquatic Chronic 1 (H410) | |

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.*

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Obtain medical attention.

**Protection of First-aiders** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. . Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

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

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons**
No information available.

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

Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**
Cobalt oxides, Carbon monoxide (CO), Carbon dioxide ($CO_2$).

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. Wash hands before breaks and immediately after handling the product.

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

Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

**Exposure limits**
List source(s): **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement.

| Component | European Union | The United Kingdom | France | Belgium | Spain |
|---|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | | STEL: 0.3 mg/m³ 15 min<br>TWA: 0.1 mg/m³ 8 hr<br>Resp. Sens. | | | |
| Cobalt(II) acetate | | STEL: 0.3 mg/m³ 15 min<br>TWA: 0.1 mg/m³ 8 hr<br>Resp. Sens. | | | |

| Component | Italy | Germany | Portugal | The Netherlands | Finland |
|---|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | | Haut | | | |
| Cobalt(II) acetate | | Haut | | | |

| Component | Austria | Denmark | Switzerland | Poland | Norway |
|---|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | Haut | | Haut/Peau<br>TWA: 0.05 mg/m³ 8 Stunden | | TWA: 0.02 mg/m³ 8 timer |
| Cobalt(II) acetate | Haut | | Haut/Peau<br>TWA: 0.05 mg/m³ 8 Stunden | | TWA: 0.02 mg/m³ 8 timer |

**Biological limit values**
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Monitoring methods**
BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust
MDHS30/2 Cobalt and cobalt compounds in air Laboratory method using flame atomic absorption spectrometry

**Derived No Effect Level (DNEL)** No information available

| Route of exposure | Acute effects (local) | Acute effects (systemic) | Chronic effects (local) | Chronic effects (systemic) |
|---|---|---|---|---|
| **Oral** | | | | |
| **Dermal** | | | | |
| **Inhalation** | | | | |

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

**Engineering Measures**
Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

**Personal protective equipment**

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|---|---|---|---|---|
| Natural rubber<br>Nitrile rubber<br>Neoprene<br>PVC | See manufacturers recommendations | - | EN 374 | (minimum requirement) |

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
**Recommended Filter type:** Particulates filter conforming to EN 143

**Small scale/Laboratory use** Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001
When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

| | | |
|---|---|---|
| **Appearance** | Light red | |
| **Physical State** | Solid | |
| **Odor** | vinegar-like | |
| **Odor Threshold** | No data available | |
| **pH** | 6.8 | 0.2 M aq.sol |
| **Melting Point/Range** | 140 °C / 284 °F | |
| **Softening Point** | No data available | |
| **Boiling Point/Range** | No information available | |
| **Flash Point** | No information available | **Method -** No information available |
| **Evaporation Rate** | Not applicable | Solid |
| **Flammability (solid,gas)** | No information available | |
| **Explosion Limits** | No data available | |
| **Vapor Pressure** | No data available | |
| **Vapor Density** | Not applicable | Solid |
| **Specific Gravity / Density** | No data available | |
| **Bulk Density** | No data available | |
| **Water Solubility** | 380 g/L (20°C) | |
| **Solubility in other solvents** | No information available | |
| **Partition Coefficient (n-octanol/water)** | | |
| **Autoignition Temperature** | Not applicable | |
| **Decomposition Temperature** | No data available | |
| **Viscosity** | Not applicable | Solid |
| **Explosive Properties** | No information available | |
| **Oxidizing Properties** | No information available | |

### 9.2. Other information

| | |
|---|---|
| **Molecular Formula** | C4 H6 Co O4 . 4 H2 O |
| **Molecular Weight** | 249.08 |

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Hygroscopic

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.
**Hazardous Reactions** None under normal processing.

### 10.4. Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.

### 10.5. Incompatible materials

Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Cobalt oxides. Carbon monoxide (CO). Carbon dioxide ($CO_2$).

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**

**Product Information**

**(a) acute toxicity;**

**Oral** Based on available data, the classification criteria are not met
**Dermal** No data available
**Inhalation** No data available

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | 503 mg/kg ( Rat ) 708 mg/kg ( Rat ) | | |
| Cobalt(II) acetate | 503 mg/kg ( Rat ) | | |

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** No data available

**(d) respiratory or skin sensitization;**

**Respiratory** Category 1
**Skin** Category 1

**(e) germ cell mutagenicity;** Category 2

Mutagenic effects have occurred in experimental animals

**(f) carcinogenicity;** Category 1B

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | EU | UK | Germany | IARC |
|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | | | | Group 2B |
| Cobalt(II) acetate | Carc Cat. 1B | | | Group 2B |

**(g) reproductive toxicity;** Category 1B
**Reproductive Effects** May impair fertility.

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs** Skin, Respiratory system.

**(j) aspiration hazard;** Not applicable
Solid

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

**Symptoms / effects,both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

| | |
|---|---|
| **Ecotoxicity effects** | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. |
| **12.2. Persistence and degradability** | The product includes heavy metals. Prevent release into the environment. Special pretreatment required |
| **Persistence** | May persist, based on information available. |
| **Degradability** | Not relevant for inorganic substances. |
| **Degradation in sewage treatment plant** | Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants. |
| **12.3. Bioaccumulative potential** | May have some potential to bioaccumulate |
| **12.4. Mobility in soil** | The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils |
| **12.5. Results of PBT and vPvB assessment** | No data available for assessment. |
| **12.6. Other adverse effects** | |
| **Endocrine Disruptor Information** | This product does not contain any known or suspected endocrine disruptors |
| **Persistent Organic Pollutant** | This product does not contain any known or suspected substance |
| **Ozone Depletion Potential** | This product does not contain any known or suspected substance |

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

| | |
|---|---|
| **Waste from Residues / Unused Products** | Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
| **Contaminated Packaging** | Dispose of this container to hazardous or special waste collection point. |
| **European Waste Catalogue (EWC)** | According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. |
| **Other Information** | Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment. |

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO**

| | |
|---|---|
| **14.1. UN number** | UN3077 |
| **14.2. UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S |
| **14.3. Transport hazard class(es)** | 9 |
| **14.4. Packing group** | III |

**ADR**

| | |
|---|---|
| **14.1. UN number** | UN3077 |
| **14.2. UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S |
| **14.3. Transport hazard class(es)** | 9 |
| **14.4. Packing group** | III |

**IATA**

| | |
|---|---|
| **14.1. UN number** | UN3077 |
| **14.2. UN proper shipping name** | Environmentally hazardous substance, solid, n.o.s |
| **14.3. Transport hazard class(es)** | 9 |

**14.4. Packing group** III

**14.5. Environmental hazards** Dangerous for the environment
Product is a marine pollutant according to the criteria set by IMDG/IMO

**14.6. Special precautions for user** No special precautions required

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**International Inventories** X = listed

| Component | EINECS | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | IECSC | AICS | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acetic acid, cobalt(2+) salt, tetrahydrate | - | - | | - | - | - | - | X | X | X | - |
| Cobalt(II) acetate | 200-755-8 | - | | X | X | - | X | X | X | X | X |

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|
| Cobalt(II) acetate | | | SVHC Candidate list - (Carcinogenic, Article 57a)<br>SVHC Candidate list - (Toxic for reproduction, Article 57c) |

**National Regulations**

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.
Take note of Dir 94/33/EC on the protection of young people at work
Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work
Take note of Dir 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**15.2. Chemical safety assessment**

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

**Full text of R-phrases referred to under sections 2 and 3**
R49 - May cause cancer by inhalation
R60 - May impair fertility
R68 - Possible risk of irreversible effects
R42/43 - May cause sensitization by inhalation and skin contact
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Full text of H-Statements referred to under sections 2 and 3**
H317 - May cause an allergic skin reaction
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 - Suspected of causing genetic defects
H350i - May cause cancer by inhalation
H360F - May damage fertility
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

**Legend**

**CAS** - Chemical Abstracts Service
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**ENCS** - Japanese Existing and New Chemical Substances
**IECSC** - Chinese Inventory of Existing Chemical Substances
**AICS** - Australian Inventory of Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit
**TWA** - Time Weighted Average
**ACGIH** - American Conference of Governmental Industrial Hygienists
**IARC** - International Agency for Research on Cancer
**DNEL** - Derived No Effect Level
**PNEC** - Predicted No Effect Concentration
**RPE** - Respiratory Protective Equipment
**LD50** - Lethal Dose 50%
**LC50** - Lethal Concentration 50%
**EC50** - Effective Concentration 50% **NOEC** - No Observed Effect Concentration
**POW** - Partition coefficient Octanol:Water **PBT** - Persistent, Bioaccumulative, Toxic
**vPvB** - very Persistent, very Bioaccumulative
**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road
**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association
**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code
**MARPOL** - International Convention for the Prevention of Pollution from Ships
**OECD** - Organisation for Economic Co-operation and Development
**ATE** - Acute Toxicity Estimate
**BCF** - Bioconcentration factor
**VOC** - Volatile Organic Compounds

**Key literature references and sources for data**
Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Training Advice**
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
First aid for chemical exposure, including the use of eye wash and safety showers.
Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
Chemical incident response training.

| | |
|---|---|
| **Creation Date** | Oct-2013 |
| **Next Revision Date** | Oct-2023 |
| **Revision Summary** | SDS section 1 updated and update of Format. |

## This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

# End of Safety Data Sheet