

# Safety Data Sheet per OSHA HazCom 2012

| Reviewed on 10/06/2008   |
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| 1 Identification   |
| Product identifier   |
| Product name: 4-Acetylbenzonitrile   |
| Stock number: L05184<br>CAS Number:<br>1443-80-7   |
| <b>EC</b> number:<br>215-885-0   |
| 213-009-0<br>Relevant identified uses of the substance or mixture and uses advised against.<br>Identified use: SU24 Scientific research and development  |
| Details of the supplier of the safety data sheet<br>Manufacturer/Supplier:   |
| Alfa Aesar<br>Thermo Fisher Scientific Chemicals, Inc.   |
| 30 Bond Street<br>Ward Hill, MA 01835-8099   |
| Tel: 800-343-0660<br>Fax: 800-322-4757   |
| Email: tech@alfa.com<br>www.alfa.com   |
| Information Department: Health, Safety and Environmental Department  |
| Emergency telephone number:<br>During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.  |
| 2 Hazard(s) identification   |
| Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)   |
| GHS06 Skull and crossbones   |
| Acute Tox. 3 H331 Toxic if inhaled.  |
| С днѕот  |
| Acute Tox. 4 H302 Harmful if swallowed.  |
| Acute Tox. 4 H312 Harmful in contact with skin.  |
| Skin Irrit. 2 H315 Causes skin irritation.<br>Eye Irrit. 2A H319 Causes serious eye irritation.  |
| STOT SE 3 H335 May cause respiratory irritation.<br>Hazards not otherwise classified No information known.   |
|  |
| Label elements<br>GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)<br>Hazard pictograms  |
|  |
| GHS06  |
| Signal word Danger   |
| Hazard statements<br>H302+H312 Harmful if swallowed or in contact with skin.   |
| H331 Toxic if inhaled.<br>H315 Causes skin irritation.   |
| H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.  |
| Precautionary statements   |
| P261 Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>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.   |
| P405 Store locked up.<br>P501 Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| WHMIS classification   |
| D1B - Toxic material causing immediate and serious toxic effects<br>D2B - Toxic material causing other toxic effects   |
|  |
| Classification system<br>HMIS ratings (scale 0-4)  |
| (Hazardous Materials Identification System)  |
| HEALTH       2         FIRE       1         Flammability = 1         REACTIVITY       1         Physical Hazard = 1  |
| Other hazards<br>Results of PBT and vPvB assessment  |
| <b>PBT</b> : Not applicable.<br><b>vPvB</b> : Not applicable.  |
|  |
| 3 Composition/information on ingredients<br>Chemical characterization: Substances  |
| CAS# Description:  |
| 1443-80-7 4-Àcetylbenzonitrile<br>(Contd. on page 2)   |
|  |

Product name: 4-Acetylbenzonitrile

Identification number(s): EC number: 215-885-0

## 4 First-aid measures

### Description of first aid measures

After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen cyanide (HCN) **Advice for firefighters Protective equipment:** Wear self-contained respirator. Wear fully protective impervious suit.

### 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13. Prevention of secondary hazards: No special measures required. **Reference to other sections** See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

# 7 Handling and storage

# Handling Precautions for safe handling *Recautions for sale nanoung* Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. *Information about protection against explosions and fires:* No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. **Specific end use(s)** No further relevant information available. 8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters Components with limit values that require monitoring at the workplace: Not required. Additional information: No data

### Exposure controls

Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves

Impervious gloves Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Eye protection:** Safety glasses **Body protection:** Protective work clothing.

(Contd. of page 1)

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Appearance: Form: Color:

Odor: Odor threshold:

# Product name: 4-Acetylbenzonitrile

9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Crystalline powder Off-white Not determined

Not determined

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|   | Not determined.  |  |  |
|---|--|--|--|
| pH-value:   | Not applicable.  |  |  |
| Change in condition<br>Melting point/Melting range:<br>Boiling point/Boiling range:<br>Sublimation temperature / start:   | 55-58 °C (131-136 °F)<br>95-96 °C (203-205 °F) (14mm Hg)<br>Not determined   |  |  |
| Flash point:<br>Flammability (solid, gaseous)<br>Ignition temperature:<br>Decomposition temperature:<br>Auto igniting:  | Not applicable<br>Not determined.<br>Not determined<br>Not determined<br>Not determined.   |  |  |
| Danger of explosion:<br>Explosion limits:   | Product does not present an explosion hazard.  |  |  |
| Lower:<br>Upper:<br>Vapor pressure:<br>Density:<br>Relative density<br>Vorsey density   | Not determined<br>Not determined<br>Not applicable.<br>Not determined<br>Not determined  |  |  |
| Vapor density<br>Evaporation rate<br>Solubility in / Miscibility with   | Not applicable.<br>Not applicable.   |  |  |
| Water: Insoluble<br>Partition coefficient (n-octanol/water): Not determined.<br>Viscosity:  |  |  |  |
| dynamic:<br>kinematic:<br>Other information   | Not applicable.<br>Not applicable.<br>No further relevant information available.   |  |  |
|   |  |  |  |
| 10 Stability and reactivity<br>Reactivity No information known.<br>Chemical stability Stable under recommended storage conditions.<br>Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.<br>Possibility of hazardous reactions No dangerous reactions known<br>Conditions to avoid No further relevant information available.<br>Incompatible materials: Oxidizing agents<br>Hazardous decomposition products:<br>Carbon monoxide and carbon dioxide<br>Nitrogen oxides<br>Hydrogen cyanide |  |  |  |
| 11 Toxicological information  |  |  |  |
| <b>Reproductive toxicity:</b> No effects kno  | r classification: No data<br>skin irritation.<br>serious eye irritation.<br>mown.<br>nown.<br>ta on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.<br>wm.<br><b>y - repeated exposure:</b> No effects known.<br><b>y - single exposure:</b> May cause respiratory irritation. |  |  |

Specific target organ system toxicity - single exposure. May cause respiratory inflation. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Subacute to chronic toxicity: Nitriles may resemble cyanides in toxicity. Exposure to nitriles may cause increased salivation, flushing of the face, eye and respiratory tract irritation, shallow respiration, nausea, vomiting, weakness, headache and diarrhea. Jaundice, anemia, and leucocytosis has been reported in some cases. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

## 12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper co General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

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| 19 Disposal considerations  |  |   |  |
|---|--|---|--|
| Recommendation: Constant sequilations to onsure proper dispatal.         Recommendation: Charles in mate and according to official regulations.         11         Transport information         Work proper happing name         Note (Links): Links   | 13 Disposal considerations   |   |  |
| Uncleased packagings:<br>Recommendation: Daphase muscle seaded according to official regulations.         11 Transport information<br>UN-Wurdberg, IATA       UN3239         UN-Wurdberg, IATA       ITATASPORT hazard classifies         UN-Wurdberg, IATA       Environmental hazards:         UN-Wurdberg, IATA       Environmental hazards:         UN-Wurdberg, IATA       ITATASPORT hazard classifies         UN-Wurdberg, IATA       Itata         Image: Intervention of the int   | Waste treatment methods  |   |  |
| 14 Transport Information         UNY439         UNY449         UNY449 <t< th=""><th colspan="3">Recommendation Consult state, local or national regulations to ensure proper disposal.<br/>Uncleaned packagings:</th></t<>   | Recommendation Consult state, local or national regulations to ensure proper disposal.<br>Uncleaned packagings:  |   |  |
| UN-Number<br>DOT, MAG, DATA         UNS459           UM proper shipping name<br>MMCG, IATA         Nithes, dold, toxic, p.a.s. (4-Acept/benzonitrile)           IMPO, IATA         NITRUES, SOLD, TOXIC, N.O.S. (4-Acept/benzonitrile)           Transport hazard class(es)         DOT           OC         Sold, TAX           Class         6,1 Toxic substances.           Labor         8,1 Toxic substances.           Labor         8,1 Toxic substances.           Labor         8,1 Toxic substances.           Labor         9,1 Toxic substances.           Labor         9,1 Toxic substances.           Labor         9,1 Toxic substances.           Labor         9,1 Toxic substances.           Labor         10           Proceentions barriers         Not applicable.           Tra   | <b>Recommendation:</b> Disposal must be made according to official regulations.  |   |  |
| DOT, MIDG, MTA     UN43439       UN process hipping name     Nitrice, 20, 47.4       MITCULES, SOLID, TOXIC, N.O.S. (4-Acetylbercontrine)       Transport hazard class(es)       DOT       Class       Statty health  | 14 Transport information   |   |  |
| UN groups shipping name<br>DOG ATA         Nitride, solid, toxic, n.o.s. (4-Acetylbenzonitrile)           Image: Construction of the second sec   | UN-Number  | 1110400   |  |
| DOT       Intrines_colid_toxic, n.o.s. (#Acetylbernzonithe)         MIDDe, INTA       Mithies_colid_toxic, n.o.s. (#Acetylbernzonithe)         Transport hazard class(es)       DOT         OC       Solution         Class       6.1 Toxic substances.         Labor       MIDEQ.NTA         OT momental hazards:       MID dop/lcable.         Transport in bulk seconding to Annex II of MARPOLT378 and the IBC Code Not suplicable.       Torimore substances.         Torim Politikant (DOT):       No         Minise Politikant (DOT):       No         Mode Regulation*:       UN3439, Nimies, solid, toxic, n.o.s. (4-Acetylbernzonitrile), 6.1, III         15 Regulatory information       Section preserve         Section preserve       Mid applicable.         Mode Regulation*:       Class </th <th></th> <th>UN3439</th>   |  | UN3439  |  |
| Transport hazard class(es)         DOT         Class       6.1 Toxic substances.         Label       6.1 Toxic substances         Class       6.1 Toxic substances         MIDG, IATA       6.1         Class       6.1 Toxic substances         Label       6.1         Class       6.1 Toxic substances         Label       6.1         DOT, IMOG, IATA       Ul         DOT, IMOG, IATA       Ul         Exercise       6.1         Special procup       Ul         DOT, IMOG, IATA       Ul         Exercise       0.1         Berking group       Ul         Exercise       0.1         Berking under the Ulk according to Anner II of MARPOLT378 and the IBC Code Not applicable.         Transport Additional information:       DOT         DOT       Mode Regulation ?         UN Mode Regulation ?       UN339. Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1. III         Steps, health and environmental regulations.Registation specific for the substance or mixture for the substance or m  | DOT  | Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile)                   |  |
| Dot       Image: Classing and the substances in the substance in the su  |  | NITRILES, SOLID, TOXIC, N.O.S. (4-Acetylbenzonitrile)                   |  |
| Class       6.1 Toxic substances.         Class       6.1 (72) Toxic substances.         Label       6.1         Dort, IMDG, IATA       III         Environmental hazards:       Not applicable.         Special proceations for user       Warning: Toxic substances         Transport/Additional information:       March (72) (72) (72) (72) (72) (72) (72) (72)  |  |   |  |
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| Label   | Toxe   |   |  |
| Label   | Class  | 6.1 Tavia substances  |  |
| Label<br>MDC, MTA       6.1         Class       6.1         Toxic substances.       6.1         Packing group<br>DOT, MCG, MTA       II         Environmental hazards:       Not applicable.         Special group call of the service substances.       III         Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.       IIII         Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII  |  |   |  |
| Int Co.       Interview         Classi       6.1 Toxic substances.         Packing group       6.1         Procking group       III         Procking group       Not applicable.         Special precations for user       Warning: Toxic substances         Transport/Additional Information:       000         OUT       No         UN: Model Regulation:       UN3439, Nitrides, solid, toxic, n.o.s. (4-Acetylbenzontinle), 6.1. III         UN: Model Regulation:       UN3439, Nitrides, solid, toxic, n.o.s. (4-Acetylbenzontinle), 6.1. III         15 Regulatory Information       No         GHS biol elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard pictograms       With the substance or mixture         GHS biol elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard pictograms       West product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         H331       Coxic in instance         H332       Coxic in instance         H333       Coxic in instance         H334       Coxic in instance         H335       Coxic in instance         H336       Coxic in instance         H337       Coxic in instance         H338       Coxic in insta  |  | 6.1 (T2) Toxic substances<br>6.1  |  |
| Label       6.1         Packing group<br>DOT, IMDG, IATA       III         Environment In hazards:       Not applicable.         Special precautions for user       Warning: Toxic substances         Transport In bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.         Transport In bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.         Transport Information         OOT<br>Marine Pollutant (DOT):       No         UN "Model Regulation".       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture<br>Of a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Will a product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)   |  |   |  |
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| Pecking group<br>DOT, INGO, KAA       III         Environmental hazards:       Not applicable.         Special precautions for user       Warning: Toxic substances         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport/Additional information:         DOT         Morian (DOT):       No         UN "Model Regulation?:       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture<br>GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)<br>Hazard pictograms         Voice       GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)<br>Hazard statements         P301 F031 for Cont in huled.       H311         H311 Cock if Inhield.       H311         H313 Cock if huled.       H314         H314 Cock if huled.       H314         H315 Causes server to first and keep confloctable for breaking.         F201 Acod breaking dustlume/gas/misl/sapours/spray.         F201 Acod breaking dustlume/gas/misl/sapours/spray.         F201 Acod breaking dustlume/gas/misl/sapours/spray.         F203 Acod breaking dustlume/gas/misl/sapours/spray.  |  |   |  |
| Environmental hazards:       Not applicable.         Special precutions for user       Waming: Toxic substances         Transport in bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable.         Transport/Additional information:         DOT         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III <b>15</b> Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         Gastard to elements       The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard plot elements       The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard for lements       The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard statements       Toxic II healed.         H310       Causes skin intation.         H331       Causes skin intation.         H333       Causes skin intation.         H334       Causes skin intation.         H335       Causes skin intation.         H336       Causes skin intation.         H337       Causes skin intation.         H336       Causes skin intation.         H337       Causes skin intation.   |  | 0.7   |  |
| Special precautions for user       Warning: Toxic substances         Transport in bulk according to Annex II of MARPOLT378 and the IBC Code Not applicable.         Transport Additional Information:         DOT         Marine Pollutant (DOT):         No         UN*Model Regulation*:         UN339, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III <b>15</b> Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS06         Signal word Danger         Hazard pictograms         Cover Statements         History Information         Assistence of the substance or mixture         GHS06         Signal word Danger         Hazard pictograms   | DOT, IMDG, IATA  | III   |  |
| Transport in bulk according to Annex II of MARPOLT378 and the IBC Code Not applicable.         Transport/Additional information:         DOT         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III <b>15</b> Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard pictograms         Giffs label elements The product is classified and sheled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard statements         H323       Hazard pictograms         Giffs label and only constrained in minuton         H33       Toxic if Instead.         H33       Causes Skin Intellon:         H33       Causes Skin Intellon:         H33       Hazard pictograms         P201       Avoid breathing dust/fume/gas/mist/vapours/spray.         P304+P334       File File File File State Protective gloves/pictolive distributions file minutes.         P304+P334       File File File File File State Protective gloves/pictolive distributions.         P304+P340       File MHALED: Remove person to fresh air and keep comfortable for breathing.         P304+P340       Stone do contensite on Agency Toxic Sustances   | Environmental hazards:   | Not applicable.   |  |
| Transport/Additional information:       Dot         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard pictograms         GHS06         Signal word Danger         Hazard statements         Hazard statements         Coll SOC         Coll SOC         GHS06         Signal word Danger         Hazard statements         Hazard statements         Coll SOC         Coll SOC         Coll SOC         GHS06         Signal word Danger         Hazard statements         Hazard statements         Coll Socie         Coll Socie         Socie         P261         Coll Socie         Marking Socie         P261         Maxing Socie         Socie         P261         Socie         P261         Socie         P   |  | 0   |  |
| DOT       No         Marine Pollutant (DOT):       No         UN "Model Regulation":       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III <b>15 Regulatory information</b> Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) HAzard pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) HAZard pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) HAZARD pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) HAZARD pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) HAZARD pictograms <i>Web</i> GHS label elements The product is classified and labeled in accordance with skin. <i>H302</i> Causes serious seve initiation. <i>H314</i> Causes classified and labeled in accordance with local/regional/national/intermational regulations. <i>H302</i> FS Cabel Discon contan   | • • •  |   |  |
| No       No         UN "Model Regulation":       UN3439, Nitriles, solid, toxic, n.o.s. (4-Acety/benzonitrile), 6.1, III         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard prictograms         GHS06         Signal word Danger         Hazard prictograms         H302+H312         H315         Causes skin initiation         H316         Causes skin initiation         H315         Causes skin initiation         H316         Causes skin initiation         H317         P261         Avait breathing dust/tume/gas/mist/vapours/spray.         P261         Avait breathing dust/tume/gas/mist/vapours/spray.         P261         Avait breathing dust/tume/gas/mist/vapours/spray.         P261       Avait breathing dust/tume/gas/mist/vapours/spray.         P261       Avait breathing dust/tume/gas/mist/vapours/spray.         P263       Store locked up move person to fresh air and keep comfortable for breathin/lational/internal/internal.         P403/24/30       Store locked up move person to fresh air and keep comfortable for breathin/lational/int  |  |   |  |
| 15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)         Hazard pictograms         GHS06         Signal word Danger         Hazard pictograms         Hazard pictograms         GHS06         Signal word Danger         Hazard pictograms         Hazard pictograms <td< th=""><th></th><th>No</th></td<>   |  | No  |  |
| Safety, health and environmental regulations/legislation specific for the substance or mixture<br>GHS label elements: The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)<br>Hazard pictograms<br>GHS06<br>Signal word Danger<br>Hazard statements<br>H302+H312 Harmful if swallowed or in contact with skin.<br>H311 Toxic if inhaled.<br>H315 Causes skin initiation.<br>H316 Causes skin initiation.<br>H317 Causes skin initiation.<br>H318 Causes skin initiation.<br>H319 Causes serious eye irritation.<br>H319 Causes serious eye irritation.<br>H319 Causes skin initiation.<br>H319 Causes skin initiation and particulation in accordance with local/regional/international regulations.<br>National regulations<br>This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted<br>to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This<br>prop 65 Chemical sknown to cause cancer Substance is not listed.<br>Prop 65 Chemicals Known to cause cancer Substance is not listed.<br>Prop 65 Chevelopmental toxicity, female Substance is not listed.<br>Prop 65 Chevelopmental toxicity, female Substance is not listed.<br>Prop 65 Chevelopmental toxicity, male Substance is not listed.<br>Prop | UN "Model Regulation":   | UN3439, Nitriles, solid, toxic, n.o.s. (4-Acetylbenzonitrile), 6.1, III |  |
| Prop 65 - Developmental toxicity, male Substance is not listed.<br>Information about limitation of use: For use only by technically qualified individuals.<br>Other regulations, limitations and prohibitive regulations<br>Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.<br>The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the<br>market and use must be observed.<br>Substance is not listed.<br>Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.<br>Chemical safety assessment: A Chemical Safety Assessment has not been carried out.<br>USA-   | Hazard pictograms         View         GHS06         Signal word Danger         Hazard statements         H302+H312 Harmful if swallowed or in contact with skin.         H31         Toxic if inhaled.         H315       Causes skin irritation.         H316       Causes skin irritation.         H317       Causes skin irritation.         H318       May cause respiratory irritation.         Precautionary statements       P261         Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P261       Avoid breathing dust/fume/gas/mist/vapours/spray.         P305+P351+P330       FINHALED: Remove person to fresh air and keep comfortable for breathing.         P405       Store locked up.         P501       Dispose of contents/container in accordance with local/regional/national/international regulations.         Mational regulations       This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Cont |   |  |
| USA   | Prop 65 - Developmental toxicity, male Substance is not listed.<br>Information about limitation of use: For use only by technically qualified individuals.<br>Other regulations, limitations and prohibitive regulations<br>Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.<br>The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the<br>market and use must be observed.<br>Substance is not listed.<br>Annex XIV of the REACH Regulations (reguiring Authorisation for use) Substance is not listed.  |   |  |
| (Contd. on page 5   | Chemical safety assessment: A Chemical Safety Assessment has not been  |   |  |
|   |  | (Contd. on page 5)  |  |

# Product name: 4-Acetylbenzonitrile

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(Contd. of page 4)

### 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/23/2015 / 
Abbreviations and acronyms:

RID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Civil Aviation Organization" (IATA)
ICAO: The retinational Civil Aviation Organization
ICAO: Thermational Maritime Code for Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport Association
IATA: International Air Transp

USA