

Material Safety Data Sheet. No: SD3160-R00

Summary Sheet

This product is a formulation of a number of components some or all of which may have hazard risks. The Material Safety Data Sheet (MSDS) provided is a combination of the MSDS for the individual components.

Product Identification

| | | | |
|-----------------------|-----------|--------------|---------------|
| Catalogue No.: | 3160-XXXX | Name: | BTT Activator |
|-----------------------|-----------|--------------|---------------|

Components and Composition

| Chemical Name | Composition | CAS No. | EINECS No. |
|----------------------------------|-------------|----------|------------|
| Acetonitrile | | 75-05-8 | 200-835-2 |
| Benzylthiotetrazole (BTT) | O.3M | 21871-47 | |
| | | | |
| | | | |

Number of MSDS attached: 2

**SD4050
SD0234**

Total Number of pages including summary sheet: 5

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|--------------------------|--------|---------------------------|--------|---------------------|-----|
| MSDS First Issued | Mar 07 | MSDS Last Revision | Mar 07 | MSDS Version | R00 |
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Material Safety Data Sheet. No: SD4050-R00

Section 1 : Chemical Identification

| | | | |
|-----------------------|-----------|--------------|-------------------------------|
| Catalogue No.: | 4050-XXXX | Name: | Anhydrous Wash (Acetonitrile) |
|-----------------------|-----------|--------------|-------------------------------|

Section 2 : Composition/information on Ingredients

| Chemical Name | CAS No. | EINECS No. |
|---------------|---------|------------|
| Acetonitrile | 75-05-8 | 200-835-2 |

Section 3 : Hazards Identification

| | |
|-------------------------------|------------------|
| Main Hazard | Highly Flammable |
| Other Specific Hazards | Toxic |

Section 4 : First Aid Measures

| | |
|-------------------|---|
| Eyes | In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. OBTAIN MEDICAL ATTENTION |
| Skin | In case of contact, remove contaminated clothing, immediately wash skin with soap and copious amounts of water. OBTAIN MEDICAL ATTENTION |
| Ingestion | Induce vomiting and washout mouth with water provided the person is conscious. Trained persons may administer amyl nitrate by inhalation in cases of stupor or unconsciousness OBTAIN MEDICAL ATTENTION |
| Inhalation | Immediately remove to fresh air. If not breathing, give artificial respiration. OBTAIN MEDICAL ATTENTION |

Section 5 : Fire Fighting Measures

| | |
|---|--|
| Extinguishing Media | Carbon dioxide, dry chemical powder or appropriate foam |
| Special Hazards of Product | Volatile and flammable liquid. Heat will build up pressure in closed storage containers. Vapour may travel some distance to points of ignition and cause flash back. |
| Protective Equipment for Fire Fighting | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. |

Section 6 : Accidental Release Measures

| | |
|----------------------------|--|
| Personal Protection | Protective gloves, goggles or laboratory spectacles and clothing are recommended. See also sections 6 and 7 above. |
| Leaks and Spills | Spillages will create a fire hazard. Small spills should be allowed to evaporate and the area well ventilated. Large spills should be contained and absorbed with a suitable inert material then removed for disposal. Take precautions against static discharge |

Section 7 : Handling and Storage

| | |
|-----------------|--|
| Handling | Wear protective clothing, gloves and safety goggles. Use in a fume extraction cabinet. Avoid contact with eyes, skin and clothing. Avoid inhalation. Wash thoroughly after handling. Avoid heat, sparks and open flames. Keep containers closed when not in use. Earth metal containers when in use. |
| Storage | Protect from extremes of temperature and direct sunlight. Store in sealed containers in an appropriately protected and secure flammable liquid store. Proper storage should be determined based on other materials stored and their hazards and chemical incompatibilities |

Section 8 : Exposure controls/Personal Protection

| | |
|----------------------------|---|
| Exposure Controls | Always use adequate fume extraction and keep storage vessels closed when not in use. See also sections 6 and 7 above. |
| Personal Protection | Protective gloves, goggles or laboratory spectacles and clothing are recommended. See also sections 6 and 7 above. |

Section 9 : Physical and Chemical Properties

| | | | |
|---------------------------|---------------------------------|-----------------------------------|--------------------------------|
| Physical State | Colourless liquid | | |
| Melting Point | -45.7°C | Boiling Point | 81.6°C |
| Flash Point | 2°C | Explosion Limits | Lower: 3% vol. upper: 17% vol. |
| Solubility (Water) | Complete | Solubility (Org. Solvents) | Miscible |
| Chemical Formula | C ₂ H ₃ N | Molecular Weight | 41.05 |
| Other Information | Autoignition temperature: 524°C | | |

Section 10 : Stability and Reactivity

| | |
|---|---|
| Chemical Stability | Stable |
| Incompatibilities | Strong acids and bases and oxidising agents |
| Hazardous Decomposition or Combustion Products | Formation of toxic gasses is possible during heating or in case of fire |
| Hazardous Polymerisation | Does not occur |

Section 11 : Toxicological Data

| | |
|---------------------------------|--|
| Toxic Effects | Inhalation: May cause irritation of the nose and throat, flushing of the face and bronchial tightness. Prolonged exposure may cause nausea, dizziness headache vomiting, chest or abdominal pain, respiratory depression extreme weakness stupor or convulsions. In extreme cases can be fatal Ingestion: systemic effects Eye: contact may cause irritation, Lachrymator Skin contact: causes irritation and systemic effects. Chronic exposure effects: can produce damage to liver and kidneys. |
| Other Toxicological Data | ORL -RAT LD50: 2730-3800mg/kg |

Section 12 : Ecological Information

Data not yet available. In use, caution should be exercised to minimise release into the environment by using appropriate containment procedures

Section 13 : Disposal Information

Dispose by incineration at high temperature in an approved incinerator fitted with appropriate environmental protection equipment. Dispose of in accordance with all applicable Local, National, State and Federal regulations. Labels should not be removed from containers until they have been thoroughly cleaned in an appropriate manner. Containers should not be treated as domestic waste and disposed of appropriately. Always use an approved disposal company.

Section 14 : Transport Information

| | | | | | |
|---------------------|---|-----------------|---|-----------------------|----|
| UN No. | 1648 | UN Class | 3 | UN Packing Gp. | II |
| Road Freight | ADR/RID Item No. 11(b) Class 3 Hazard No. 336 | | | | |
| Sea Freight | IMDG Group II Class 3.2 Ems No. 3-06 | | | | |
| Air Freight | IATA Class 3 | | | | |

Section 15 : Regulatory Information

European Information:

| | |
|------------------|---|
| R Phrases | R11 - Highly flammable |
| S Phrases | S7 - Keep container tightly closed S16 - Keep away from sources of ignition - No smoking |

Section 16 : Other information

| | | | | | |
|--------------------------|-------|---------------------------|-------|---------------------|-----|
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Material Safety Data Sheet. No: SD0234-R00

Section 1 : Chemical Identification

| | | | |
|-----------------------|-----------|--------------|---------------|
| Catalogue No.: | 0234-XXXX | Name: | BTT Activator |
|-----------------------|-----------|--------------|---------------|

Section 2 : Composition/information on Ingredients

| Chemical Name | CAS No. | EINECS No. |
|---------------------------|------------|------------|
| 5-Benzylthio-1H-Tetrazole | 21871-47-6 | N/A |

Section 3 : Hazards Identification

| | |
|-------------------------------|----------|
| Main Hazard | Irritant |
| Other Specific Hazards | N/A |

Section 4 : First Aid Measures

| | |
|-------------------|--|
| Eyes | In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. OBTAIN MEDICAL ATTENTION |
| Skin | In case of contact, remove contaminated clothing, immediately wash skin with soap and copious amounts of water. OBTAIN MEDICAL ATTENTION |
| Ingestion | Induce vomiting and washout mouth with water provided the person is conscious. OBTAIN MEDICAL ATTENTION |
| Inhalation | Immediately remove to fresh air. If not breathing, give artificial respiration. OBTAIN MEDICAL ATTENTION |

Section 5 : Fire Fighting Measures

| | |
|---|--|
| Extinguishing Media | Carbon dioxide, dry chemical powder or appropriate foam |
| Special Hazards of Product | Emits toxic fumes under fire conditions |
| Protective Equipment for Fire Fighting | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. |

Section 6 : Accidental Release Measures

| | |
|----------------------------|--|
| Personal Protection | Wear protective clothing, respirator, chemical safety goggles, rubber gloves and rubber boots |
| Leaks and Spills | Clean the contaminated area thoroughly with a suitable solvent and absorbent material taking care to avoid breathing fumes. Dispose of all cleaning materials with care (see section 13) |

Section 7 : Handling and Storage

| | |
|-----------------|--|
| Handling | Protective gloves, goggles or laboratory spectacles and clothing are recommended. See also sections 6 and 7 above. |
| Storage | Keep container closed. Store in a dry area, protected from moisture |

Section 8 : Exposure controls/Personal Protection

| | |
|----------------------------|---|
| Exposure Controls | Always use adequate fume extraction and keep storage vessels closed when not in use. See also sections 6 and 7 above. |
| Personal Protection | Protective gloves, goggles or laboratory spectacles and clothing are recommended. See also sections 6 and 7 above. |

Section 9 : Physical and Chemical Properties

| | | | |
|---------------------------|--|-----------------------------------|-----------------------------------|
| Physical State | White crystalline solid | | |
| Melting Point | 137°C (decomp.) | Boiling Point | N/A |
| Flash Point | N/A | Explosion Limits | N/A |
| Solubility (Water) | Practically insoluble | Solubility (Org. Solvents) | Partially soluble in acetonitrile |
| Chemical Formula | C ₈ H ₆ N ₄ S | Molecular Weight | 192.38 |
| Other Information | | | |

Section 10 : Stability and Reactivity

| | |
|---|------------------------------------|
| Chemical Stability | Stable |
| Incompatibilities | |
| Hazardous Decomposition or Combustion Products | Produces toxic fumes on combustion |
| Hazardous Polymerisation | Does not occur |

Section 11 : Toxicological Data

| | |
|---------------------------------|---|
| Toxic Effects | To the best of our knowledge the chemical, physical and toxicological properties of this substance have not been investigated. Known to be an irritant - handle with care to avoid all unnecessary exposure and release into the atmosphere. |
| Other Toxicological Data | |

Section 12 : Ecological Information

Data not yet available. In use, caution should be exercised to minimise release into the environment by using appropriate containment procedures

Section 13 : Disposal Information

Dispose by incineration at high temperature in an approved incinerator fitted with appropriate environmental protection equipment. Dispose of in accordance with all applicable Local, National, State and Federal regulations. Labels should not be removed from containers until they have been thoroughly cleaned in an appropriate manner. Containers should not be treated as domestic waste and disposed of appropriately. Always use an approved disposal company.

Section 14 : Transport Information

| | | | | | |
|---------------------|--------------------------------|-----------------|--|-----------------------|--|
| UN No. | | UN Class | | UN Packing Gp. | |
| Road Freight | Non-hazardous for road freight | | | | |
| Sea Freight | Non-hazardous for sea freight | | | | |
| Air Freight | Non-hazardous for air freight | | | | |

Section 15 : Regulatory Information

European Information:

| | |
|------------------|--|
| R Phrases | R36/37 - Irritating to eyes and respiratory system R38 - Irritating to skin |
| S Phrases | S26 In case of contact with eye, rinse immediately with plenty of water and seek medical advice S36 - Wear suitable protective clothing |

Section 16 : Other information

| | | | | | |
|--------------------------|-------|---------------------------|-------|---------------------|-----|
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