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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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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_2H_3N	**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

Section11 : 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	$C_8H_6N_4S$	**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

Section11 : 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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