

SAFETY DATA SHEET

Creation Date 10-Sep-2009

Revision Date 23-Jan-2018

Revision Number 3

1. Identification

Product Name

2-Amino-4'-bromoacetophenone hydrochloride AC427060000, AC427060010, AC427060050

Cat No. :

CAS-No Synonyms 5467-72-1 No information available

Recommended Use Uses advised against Laboratory chemicals. Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

<u>Company</u> Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area **Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell **Skin** IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse **Eyes** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
2-Amino-1-(4-bromophenyl)ethan-1-one hydrochloride	5467-72-1	>95

	4. First-aid measures
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Get medical attention if symptoms occur.
Most important symptoms and	No information available.
effects Notes to Physician	Treat symptomatically

	5. Fire-fighting measures
Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	No information available
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impac	t No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂) Hydrogen chloride gas Nitrogen oxides (NOx) Hydrogen bromide **Protective Equipment and Precautions 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.

NFPA Health	Flommobility	Instability	Physical bazarda				
2	Flammability 1	Instability 1	Physical hazards N/A				
	6. Accidental release	e measures					
Personal Precautions Environmental Precautions	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Should not be released into the environment. See Section 12 for additional ecological information.						
Methods for Containment and Clea Up	n Sweep up or vacuum up spillage a formation.	and collect in suitable containe	er for disposal. Avoid dust				
	7. Handling and	storage					
Handling	Wear personal protective equipme skin, or on clothing. Avoid ingestion						
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Handle under nitrogen and protect from moisture.						
8. E.	xposure controls / per	sonal protection					
Exposure Guidelines	This product does not contain any limitsestablished by the region sp		upational exposure				
Engineering Measures	None under normal use conditions.						
Personal Protective Equipment							
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.						

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Solid
Appearance	White to off-white
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	280 - 285 °C / 536 - 545 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C8 H8 Br N O . H CI

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under recommended storage conditions. Hygroscopic.
Conditions to Avoid	Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.
Incompatible Materials	Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrogen chloride gas, Nitrogen oxides (NOx), Hydrogen bromide
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as y	Product does not present an acute toxicity hazard based on known or supplied information No information available vell as chronic effects from short and long-term exposure_
Irritation	Irritating to eyes, respiratory system and skin
Sensitization	No information available

Carcinogenicity

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico				
2-Amino-1-(4-bromoph enyl)ethan-1-one hydrochloride	5467-72-1	Not listed	Not listed	Not listed	Not listed	Not listed				
Mutagenic Effects		No information available								
Reproductive Effect	s	No information available.								
Developmental Effe	cts	No information ava	ailable.							
Teratogenicity		No information ava	ailable.							
STOT - single expos STOT - repeated exp		Respiratory syster None known	n							
Aspiration hazard		No information ava	ailable							
Symptoms / effects delayed	,both acute and	No information ava	ailable							
Endocrine Disrupto	r Information	No information ava	ailable							
Other Adverse Effect	cts	The toxicological properties have not been fully investigated.								
		12. Ecol	ogical infor	mation						
Ecotoxicity Do not empty into dra	ains.									
Persistence and De	gradability	Soluble in water P	ersistence is unlike	ely based on inforr	nation available.					
Bioaccumulation/ A	ccumulation	No information available.								
Mobility		Will likely be mobile in the environment due to its water solubility.								
		13. Dispo	sal conside	erations						
Waste Disposal Met	/aste Disposal Methods Chemical waste generators must determine whether a discarded chemical is class hazardous waste. Chemical waste generators must also consult local, regional, a national hazardous waste regulations to ensure complete and accurate classifica					gional, and				
		14. Trar	nsport inform	mation						
DOT		Not regulated								

	14. Transport information
DOT	Not regulated
DOT TDG	Not regulated
ΙΑΤΑ	Not regulated
IMDG/IMO	Not regulated
	15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
2-Amino-1-(4-bromophenyl)et	-	-	-	226-778-3	-		-	-	-	-	-
han-1-one hydrochloride											

Legend: X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA. F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated

polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)Not applicableSARA 313Not applicableSARA 311/312 Hazard CategorieSee section 2 for more informationCWA (Clean Water Act)Not applicableClean Air ActNot applicableOSHA Occupational Safety and HeatMinistrationOSHA Occupational Safety and HeatMinistrationOSHA Occupational Safety and HeatMinistrationOsta applicableNot applicableCERCLANot applicableCBRCLANot applicableCatifornia Proposition 65This product does not contain any Proposition 65 chemicaltsU.S. State Right-to-KnowNot applicablePoor Marine PollutantNot applicableNOT Severe Marine PollutantNot applicableVDT Marine PollutantNot applicableVS. Separtment of Homeland SecuriticationNot applicableVerter International RegulationsNot information availablePrepared ByRegulatory Affaris Thermo Fisher Scientific Email: EMDSD RAW thermofisher.comPrepared By10-Sep-2009 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 23-Jan-2018 Categorie Cleanse of C		
SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Not applicable Clean Air Act Not applicable OSHA Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Not applicable Reportable Quantity (RQ): N DOT Marine Pollutant N V.S. Department of Homeland Security Not information available U.S. Department of Homeland Security Not information available Other International Regulations: Not information available Verice - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date 10-Sep-2009 Revision Date 23-Jan-2018 Print Date 23-Jan-2018 <	TSCA 12(b)	Not applicable
CWA (Clean Water Act) Not applicable Clean Air Act Not applicable OSHA Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals U.S. State Right-to-Know Not applicable U.S. Department of Transportation Not applicable Regulations Not applicable U.S. Department of Transportation Not applicable Reportable Quantity (RQ): N DOT Severe Marine Pollutant N V.S. Department of Homeland Security Not information available U.S. Department of Homeland Security Not information available Other International Regulations Not information available Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS RA@ thermofisher.com Creation Date 10-Sep-2009 Revision Date Print Date 23-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally	SARA 313	Not applicable
Clean Air Act Not applicable OSHA Occupational Safety and Health Administration Not applicable Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Not applicable Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals. Other International Regulations No information available Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS RA@ thermofisher.com Creation Date 10-Sep-2009 Prevision Date 23-Jan-2018 Print Date 23-Jan-2018	SARA 311/312 Hazard Categories	See section 2 for more information
OSHA Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Not applicable Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals. Other International Regulations No information available Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date 10-Sep-2009 Revision Date Print Date 23-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally	CWA (Clean Water Act)	Not applicable
Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals U.S. State Right-to-Know Regulations Not applicable U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Not applicable Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals. Other International Regulations Not information available Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date 10-Sep-2009 Revision Date Print Date 23-Jan-2018 23-Jan-2018 Print Date 23-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally	Clean Air Act	Not applicable
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U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Reportable Quantity (RQ): N Reportable Quantity (RQ): N N DOT Marine Pollutant N N DOT Severe Marine Pollutant N N U.S. Department of Homeland Security This product does not contain any DHS chemicals. N Other International Regulations No information available Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date 10-Sep-2009 Revision Date Print Date 23-Jan-2018 23-Jan-2018 Print Date 23-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally	CERCLA	Not applicable
Regulations U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals. Other International Regulations Mexico - Grade Mexico - Grade No information available Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date Print Date 10-Sep-2009 23-Jan-2018 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally	California Proposition 65	This product does not contain any Proposition 65 chemicals
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Mexico - Grade No information available 16. Other information Prepared By Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com Creation Date 10-Sep-2009 Revision Date 23-Jan-2018 Print Date 23-Jan-2018 Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally		
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transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text