

SAFETY DATA SHEET

Revision Date 10-Feb-2015

Revision Number 1

| 1. Identification | | | | | |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Product Name | 4-Bromo-N,N-dimethylaniline | 4-Bromo-N,N-dimethylaniline | | | |
| Cat No. : | AC222210000; AC222210250; | AC222210000; AC222210250; AC222211000 | | | |
| Synonyms | P-Bromo (Dimethylamino) Benzene; P- | P-Bromo (Dimethylamino) Benzene; P-Dimethylaminobromobenzene.; Benzenamine | | | |
| Recommended Use | Laboratory chemicals. | Laboratory chemicals. | | | |
| Uses advised against Details of the supplier of the s | No Information available afety data sheet | | | | |
| Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 | Entity / Business Name 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 / | | | |

2. Hazard(s) identification

Classification

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

| Acute oral toxicity |
|--------------------------------------------------|
| Acute dermal toxicity |
| Acute Inhalation Toxicity - Dusts and Mists |
| Skin Corrosion/irritation |
| Serious Eye Damage/Eye Irritation |
| Specific target organ toxicity (single exposure) |
| Target Organs - Respiratory system. |
| |

Category 4 Category 4 Category 4 Category 2 Category 2 Category 3 Europe:001-703-527-3887

Label Elements

Signal Word Warning

Hazard Statements

Harmful if swallowed Harmful in contact with skin Causes skin irritation Causes serious eye irritation Harmful if inhaled May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

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

Call a POISON CENTER or doctor/physician if you feel unwell

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 and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

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 % |
|------------------------------------|----------|----------|
| Benzenamine, 4-bromo-N,N-dimethyl- | 586-77-6 | >95 |

| 4. 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 soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention. | | |
| Inhalation | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention. | | |
| Ingestion | Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water. Get medical attention. If possible drink milk afterwards. | | |
| Most important symptoms/effects | No information available. | | |

| Notes to Physician | Т |
|--------------------|---|
| | |

Freat symptomatically

| | Treat symptomatically | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------|---------------------------|
| | 5. Fire-fighti | ng measures | |
| Suitable Extinguishing Media | Water spray. Carbon diox | ide (CO2). Dry chemical. chemica | al foam. |
| Unsuitable Extinguishing Media | No information available | | |
| Flash Point | > 112 °C / > 233.6 °F | | |
| Method - | No information available | | |
| Autoignition Temperature Explosion Limits | Not applicable | | |
| Upper | No data available | | |
| Lower | No data available | | |
| Sensitivity to Mechanical Impac | t No information available | | |
| Sensitivity to Static Discharge | No information available | | |
| Hazardous Combustion Products Nitrogen oxides (NOx) Carbon monox Protective Equipment and Precaution As in any fire, wear self-contained bre protective gear. | ons for Firefighters | , , , , | d or equivalent) and full |
| NFPA Health 2 | Flammability 0 | Instability 0 | Physical hazards N/A |
| | 6. Accidental re | elease measures | |
| Personal Precautions Environmental Precautions | | on. Use personal protective equiponal ecological information. | oment. |
| Methods for Containment and Clea Up | n Sweep up or vacuum up s | spillage and collect in suitable cor | ntainer for disposal. |

| | 7. Handling and storage |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling | Avoid contact with skin and eyes. Do not breathe dust. |
| Storage | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. |
| 8. E | xposure controls / personal protection |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| Engineering Measures | Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. |
| 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 | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | |
| 9 | . Physical and chemical properties | |
| Physical State | Solid | |
| Appearance | Grey | |
| Odor | Odorless | |
| Odor Threshold | No information available | |
| рН | No information available | |
| Melting Point/Range | 53 - 56 °C / 127.4 - 132.8 °F | |
| Boiling Point/Range | 264 °C / 507.2 °F @ 760 mmHg | |
| Flash Point | > 112 °C / > 233.6 °F | |
| 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 | |
| Relative Density | No information available | |
| Solubility | No information available | |
| Partition coefficient; n-octanol/wate | | |
| Autoignition Temperature | Not applicable | |
| Decomposition Temperature | No information available | |
| Viscosity | Not applicable | |
| Molecular Formula | C8 H10 Br N | |
| Molecular Weight | 200.08 | |
| | | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available | |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--|
| Stability | Stable under normal conditions. | |
| Conditions to Avoid | Incompatible products. | |
| Incompatible Materials | Strong oxidizing agents, Strong acids, Strong bases, Metals | |
| Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO ₂), Fumes, Hydrogen halides | | |
| Hazardous Polymerization | No information available. | |
| Hazardous Reactions | None under normal processing. | |

11. Toxicological information

Acute Toxicity

| Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as w | No information available vell as chronic effects from short and long-term exposure |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Irritation | No information available |

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 |
|--------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|
| Benzenamine, 1-bromo-N,N-dimethyl- | 586-77-6 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Autagenic Effects | | No information ava | ailable | | | |
| Reproductive Effect | S | No information ava | ailable. | | | |
| Developmental Effe | cts | No information ava | ailable. | | | |
| Feratogenicity | | No information available. | | | | |
| STOT - single expos STOT - repeated exp | | Respiratory system None known | | | | |
| Aspiration hazard | | No information ava | ailable | | | |
| Symptoms / effects lelayed | ,both acute and | No information ava | ailable | | | |
| Endocrine Disrupto | r Information | No information available | | | | |
| Other Adverse Effect | cts | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information. | | | | |

12. Ecological information

Ecotoxicity Do not empty into drains.

Persistence and Degradability **Bioaccumulation/Accumulation**

Insoluble in water Persistence is unlikely No information available.

Mobility

Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|------------------------------------|---------|
| Benzenamine, 4-bromo-N,N-dimethyl- | 3.06 |

13. Disposal considerations

| Waste Disposal Methods | Chemical waste generators must determine whether a discarded chemical is classified as a |
|------------------------|------------------------------------------------------------------------------------------|
| | hazardous waste. Chemical waste generators must also consult local, regional, and |
| | national hazardous waste regulations to ensure complete and accurate classification. |

| 14. Transport information | | | | |
|---------------------------|-------------------------------|--|--|--|
| DOT | | | | |
| UN-No | UN2811 | | | |
| Hazard Class | 6.1 | | | |
| Packing Group | 111 | | | |
| TDG | | | | |
| UN-No | UN2811 | | | |
| Hazard Class | 6.1 | | | |
| Packing Group | 111 | | | |
| IATA | | | | |
| UN-No | 2811 | | | |
| Proper Shipping Name | TOXIC SOLID, ORGANIC, N.O.S.* | | | |
| Hazard Class | 6.1 | | | |
| Packing Group | 111 | | | |
| | | | | |

IMDG/IMO

| UN-No | 2811 |
|----------------------|------------------------------|
| Proper Shipping Name | TOXIC SOLID, ORGANIC, N.O.S. |
| Hazard Class | 6.1 |
| Packing Group | III |
| | 15 Degulatory infor |

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-----------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Benzenamine, | Х | - | Х | 209-582-2 | - | | - | - | - | Х | - |
| 4-bromo-N,N-dimethyl- | | | | | | | | | | | |

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 applicable | | |
|------------|----------------|--|--|
| SARA 313 | Not applicable | | |

SARA 311/312 Hazardous Categorization

| Acute Health Hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |
| | |

Clean Water Act

Clean Air Act

Not applicable

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

State Right-to-Know

Not applicable

U.S. Department of Transportation

| Reportable Quantity (RQ): | Ν |
|-----------------------------|---|
| DOT Marine Pollutant | Ν |
| DOT Severe Marine Pollutant | Ν |

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade

No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D1B Toxic materials D2B Toxic materials



16. Other information

Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com

Revision Date Print Date Revision Summary 10-Feb-2015 10-Feb-2015 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 Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

Prepared By

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 SDS