

# Safety Data Sheet per OSHA HazCom 2012

Review	wed on 01/29/2013
1 Identification	
Product identifier	
Product name: <u>5-[3-(Dimethylamino)propylidene]dibenzosuberane hydrochloride</u>	
Stock number: J65596 CAS Number:	
549-18-8 <b>EC number:</b>	
208-964-6 Relevant identified uses of the substance or mixture and uses advised against.	
Identified use: SU24 Scientific research and development	
Details of the supplier of the safety data sheet Manufacturer/Supplier:	
Alfa Aesar The	
30 Bond Street Ward Hill, MA 01835-8099	
Tel: 800-343-0660 Fax: 800-322-4757	
Email: tech@alfa.com www.alfa.com	
Information Department: Health, Safety and Environmental Department Emergency telephone number:	
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 H301 Toxic if swallowed.	
Acute Tox. 3 H311 Toxic in contact with skin. Acute Tox. 3 H331 Toxic if inhaled.	
GHS08 Health hazard	
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Repr. 2 H361 Suspected of damaging fertility or the unborn child.	
GHS07	
Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.	
Śkin Sens. 1 H317 May cause an allergic skin reaction.	
STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known.	
Label elements	
GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms	
GHS06 GHS08	
Signal word Danger	
Hazard statements H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.	
H315 Causes skin irritation. H319 Causes serious eye irritation.	
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction.	
H361 Suspected of damaging fertility or the unborn child. H355 May cause respiratory irritation.	
Precautionary statements	
P284 In case of inadequate ventilation wear respiratory protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/	
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsin P361 Take off immediately all contaminated clothing.	g.
P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.	
WHMIS classification D1A - Very toxic material causing immediate and serious toxic effects D2A - Very toxic material causing other toxic effects	
Classification system	
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH 2 Health (acute effects) = 2	
FIRE     I       REACTIVITY     Physical Hazard = 1	
	(Contd. on page 2)

# Product name: 5-[3-(Dimethylamino)propylidene]dibenzosuberane hydrochloride

Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

# 3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 549-18-8 5-[3-(Dimethylamino)propylidene]dibenzosuberane hydrochloride Identification number(s): Commber: 200 064 6

EC number: 208-964-6

## 4 First-aid measures

# Description of first aid measures

General information

General information Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration. 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 ex contact Rinse opened eve for several minutes under running water. Then consult a

Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Do not induce vomiting; immediately call for medical help. 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

Nitrogen oxides (NOx) Hydrogen chloride (HCl) 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 Enviro adequate ventuation 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. Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation. **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 Keep container tightly sealed. Ensure good ventilation at the workplace. Open and handle container with care. Prevent formation of dust.

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: Refrigerate Information about storage in one common storage facility: Protect from heat. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Refrigerate

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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

### Exposure controls

Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.

(Contd. of page 1)

Product name: 5-[3-(Dimethylamino)propylidene]dibenzosuberane hydrochloride       (C         Remove disciel and containated clothing immediately.       (C         Remove disciel and containated clothing immediately.       (C         Avoid contained with the ayes and show.       (C         Avoid contained with the ayes and show.       (C         Avoid contained on long of a short be esch use for their proper condition.       (C         The selection of longs:       (C         Body protection:       (C         Protection of longs:       (C         Body protection:       (C         Protection of longs:       (C         Body protection:       (C         Color       With to oflowing (C         Color       With to oflowing (C         Oto threshold:       Not determined         Information on basic physical and chemical properties       (C         General Information       (C         Color       With to oflowing (C         Odo threshold:       Not determined         Definition appro	
Keep away from foodulfs, beverages and feed.           Kenope also biolical and continuated colling immediately.           Renope also biolical and continuated colling immediately.           Store protective colling separately.           Avoid contact.           Breaking equipment: Use self-contained respiratory protective device in emergency situations.           Protection of subble gloces and only depends on the material, but also on quality.           Quality will vary from manufacturer to manufacturer.           Presention of subble gloces on ton hy depends on the material, but also on quality.           Quality will vary from manufacturer to manufacturer.           Preprint on or also busing block on the chain is the section of subble gloces on the chain and properties.           Body protection:         Powder           Gody of threshold:         Not determined.           Appearation:         Powder           Gody:         Weil and contributing and the properties.           Information on basic physical and chemical properties.         More and the properties of the properties.           Appearation:         Powder           Gody:         Weil and contributing and the properties.           Information on basic physical and chemical properties.         Not determined.           Phrvalice:         Not adplicable.           Change in condition         Not determined.	
Information on basic physical and chemical properties General Information Appearance: Form: Form	ontd. of page
General Information  Appearance:  Public of white of white  Appearance:  Public of white  Appearance:  Public of threshold:  Pitwate:  Not determined  Addition temperature:  Not determined  Attermined  Attermin	
Appearance:         Powder           Color:         White to of-white           Color:         White to of-white           Odor         Not determined           Odor         Mot determined           Odor         Not determined           Other threshold:         Not determined           Ph-value:         Not applicable.           Change in condition         Heling point/Boiling range: and the determined           Paramability (solid, gassous)         Not determined.           Paramability (solid, gassous)         Not determined.           Decomposition temperature:         Not determined.           Decomposition temperature:         Not determined.           Decomposition temperature:         Not determined.           Explosion limits:         Explosion:           Lower:         Not determined.           Vapor density         Not determined.      <	
Color:       White to df-white         Odor:       Not determined         Odor:       Not determined         Odor:       Not determined         Other threshold:       Not determined         Change in condition       Metting point/Boiling range:         Metting point/Boiling range:       Not determined         Sublimation temperature is start:       Not determined         Parametric       Not determined         Decomposition temperature is start:       Not determined         Decomposition temperature:       Not determined         Auto igniting:       Not determined         Danger of explosion:       Not determined         Vapor pressure:       Not determined         Vapor density       Not applicable.         Vapor density       Not applicable.	
Odor:         Not determined           ph-value:         Not determined.           ph-value:         Not determined.           Change in condition         Meding point/Melling range:         196-197 °C (385-387 °F)           Boiling point/Melling range:         Not determined           Sublimation temperature / start:         Not determined           Flammability (solid, gascous)         Not determined           Decomposition temperature:         Not determined           Decomposition temperature:         Not determined           Action transportance         Not determined           Danger of explosion:         Not determined           Decomposition temperature:         Not determined           Upper:         Not determined           Decomposition temperature:         Not determined           Partition temperature:         Not determined           Upper:         Not determined           Vapor pressure:         Not determined           Vapor pressure:         Not applicable.           Solubility in / Miscibility with         Solubile           Partition coefficient (n-octanol/water): Not determined.           Viscosity:         Not applicable.           Other information         No tapplicable.           Other information	
pH-value:         Not applicable.           Change in condition Meding point/Boiling range:         196-197 °C (385-387 °F) Boiling point/Boiling range:         Not determined Subinistion temperature / start:           Boiling point/Boiling range:         Not determined Boiling point/Boiling range:         Not determined Boiling point/Boiling range:           Provide:         Not determined Boiling point/Boiling range:         Not determined Boiling point/Boiling range:           Pare of explosion:         Not determined Boiling point/Boiling range:         Not determined Boiling point/Boiling range:           Danger of explosion:         Not determined Boiling point/Boiling range:         Not determined Boiling point/Boiling range:           Vapor pressure:         Not determined Wapor pressure:         Not determined Boiling point/Boiling range:           Density:         Not determined.           Vapor pressure:         Not determined.           Vapor density         Not determined.           Vapor density         Not determined.           Water:         Solubili           Partition coefficient (n-octanol/water):         Not applicable.           Water:         Not applicable.           Viscosity:         Not applicable.           Other information known.         Not further relevant information available.           Information contoration known.         Conditions to avoid	
Melling point/Belling range:       196-197 °C (385-387 °F)         Bolling point/Bolling range:       Not determined         Sublimation temperature / start:       Not determined         Ignition temperature:       Not determined         Decomposition temperature:       Not determined         Decomposition temperature:       Not determined         Danger of explosion:       Not determined         Danger of explosion:       Not determined         Lower:       Not determined         Lower:       Not determined         Vapor density       Not determined         Vater:       Solubility Notif <td></td>	
Auto igniting:       Not determined.         Danger of explosion:       Not determined.         Explosion limits:       Not determined         Upper:       Not determined         Vapor pressure:       Not determined         Density:       Not determined         Persity:       Not determined         Persity:       Not determined.         Vapor pressure:       Not applicable.         Evaporation rate       Not applicable.         Solubility in / Miscibility with       Water         Water       Soluble         Partition coefficient (n-octanol/water): Not determined.         Viscosity:       Not further relevant information available.         Ofter information       No further relevant information available.         Other information known.       Not further relevant information available.         Condition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.         Possibility of hazardous reactions Reacts with strong oxidizing agents         Conditions to avoid No further relevant information available.         Notical end carbon dioxide         Nitrogen childe (HCI)         11 Toxicological information         Information on toxicological effects         Actue toxiciff:         Toxic i	
Lower:       Not determined         Upper:       Not applicable.         Density:       Not determined         Relative density       Not determined         Report pressure:       Not determined         Relative density       Not determined         Report pressure:       Not applicable.         Evaporation rate       Not applicable.         Solubility in / Miscibility with       Soluble         Partition coefficient (n-octanol/water): Not determined.       Yiscosity:         dynamic:       Not applicable.         kinematic:       Not applicable.         other information       Not applicable.         Viscosity:       Mot applicable.         dynamic:       Not applicable.         kinematic:       Not applicable.         other information       Not uther relevant information available.         10 Stability and reactivity       Reactivity No information known.         Chemical stability Stable under recommended storage conditions.       Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.         Possibility of hazardous reactions.       Reactivity No information known.         Chemical stability Stable under recommended storage conditions.       Conditions to avoid No further relevant information available.	
Relative density       Not determined.         Vapor density       Not applicable.         Evaporation rate       Not applicable.         Solubility in / Miscibility with       Soluble         Water:       Soluble         Partition coefficient (n-octanol/water): Not determined.         Viscosity:       dynamic:         dynamic:       Not applicable.         kinematic:       Not applicable.         Other information       No further relevant information available.         Other information known.       Reactivity No information known.         Chemical stability Stable under recommended storage conditions.       Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.         Possibility of hazardous reactions Reacts with strong oxidizing agents       Conditions to avoid No further relevant information available.         Incompatible materials:       Oxidizing agents       Coxidizing agents         Heat       Hazardous decomposition products:       Carbon monoxide and carbon dioxide         Witrgen oxides       Hydrogen chindred (HCI)       Information         Information on toxicological effects       Acute toxicity:       Toxic if inhaled.         Toxic if inhaled.       Toxic if wallowed.       Toxic if wallowed.	
Water:       Soluble         Partition coefficient (n-octanol/water): Not determined.         Viscosity:       Not applicable.         dynamic:       Not applicable.         Other information       No further relevant information available.         0       Stability and reactivity         Reactivity No information known.       Reactivity Stable under recommended storage conditions.         Chemical stability Stable under recommended storage conditions.       Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.         Possibility of hazardous reactions Reacts with strong oxidizing agents       Conditions to avoid No further relevant information available.         Incompatible materials:       Oxidizing agents         Heat       Hazardous decomposition products:         Carbon monoxide and carbon dioxide       Nitrogen chloride (HCl)         1       Toxicological information         Information on toxicological effects       Acute toxicity:         Toxic if inhaled.       Toxic of iswallowed.	
kinematic:       Not applicable. No further relevant information available.         O Stability and reactivity         Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heat         Heat Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen chloride (HCI)       Not applicable. Noticity in contact with skin. Toxic in contact with skin. Toxic if inhaled.	
Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heat Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen chloride (HCl) 11 Toxicological information Information on toxicological effects Acute toxicity: Toxic in contact with skin. Toxic if swallowed.	
Information on toxicological effects Acute toxicity: Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed.	
Acute toxicity: Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed.	
The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product. LD/LC50 values that are relevant for classification:	
Oral LD50 240 mg/kg (rat) Skin irritation or corrosion: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation.	
Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.	
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: Suspected of damaging fertility or the unborn child. The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.	
Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known.	
Subacute to chronic toxicity: No effects known.	ontd. on page

Safety Data Sheet per OSHA HazCom 2012	
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Product name: 5-[3-(Dimethylamino)propylidene]dibe		viewed on 01/29/2013
	wledge the acute and chronic toxicity of this substance is not fully known.	(Contd. of page 3)
•	wedge the actue 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 Bioaccumulative potential No further relevant information available. Additional ecological information: General notes: Do not allow product to reach ground water, water course or see Do not allow material to be released to the environment withou Danger to drinking water if even small quantities leak into the g 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.	ewage system. It proper governmental permits. ground.	
13 Disposal considerations		
Waste treatment methods Recommendation Consult state, local or national regulations a Uncleaned packagings: Recommendation: Disposal must be made according to officia Recommended cleansing agent: Water, if necessary with clean	al regulations.	
14 Transport information		
UN-Number DOT, IMDG, IATA	UN2811	
UN proper shipping name DOT	Toxic solids, organic, n.o.s. (5-[3-(Dimethylamino)propylidene] hydrochloride)	
IMDG, IATA	TOXIC SOLID, ORGANIC, N.O.S. (5-[3-(Dimethylamino)propy dibenzosuberane hydrochloride)	(lidenej
DOT Class Label Class Label IMDG, IATA Class	6.1 Toxic substances. 6.1 6.1 (T2) Toxic substances 6.1	
Class	6.1 Toxic substances.	
Label	6.1	
Packing group DOT, IMDG, IATA	111	
Environmental hazards:	Not applicable.	
Special precautions for user EMS Number:	Warning: Toxic substances F-A,S-A	
Transport in bulk according to Annex II of MARPOL73/78 a	and the IBC Code Not applicable.	
Transport/Additional information: DOT		
Marine Pollutant (DOT):	No	
UN "Model Regulation":	UN2811, Toxic solids, organic, n.o.s. (5-[3-(Dimethylamino)pro dibenzosuberane hydrochloride), 6.1, III	ppylidene]
15 Regulatory information         Safety, health and environmental regulations/legislation spectrol         GHS label elements The product is classified and labeled in a Hazard pictograms         Image: Second Secon	accordance with 29 CFR 1910 (OSHA HCS) <sup>r</sup> inhaled. breathing difficulties if inhaled. m child.	
P284 In case of inadequate ventilation wear respi P301+P310 IF SWALLOWED: Immediately call a POIS0	ON CENTER/ doctor/	(Contd. on page 5)



# Product name: 5-[3-(Dimethylamino)propylidene]dibenzosuberane hydrochloride

(Contd. of page 4) P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P361 Take off immediately all contaminated clothing. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.
 National regulations
 All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
 All components of this product are listed on the Canadian Domestic Substances List (DSL).
 SARA Section 313 (specific toxic chemical listings) Substance is not listed.
 California Proposition 65
 Prop 65 - Chemicals known to cause cancer Substance is not listed.
 Prop 65 - Developmental toxicity, female Substance is not listed.
 Prop 65 - Developmental toxicity, male Substance is not listed.
 Information about limitation of use: For use only by technically qualified individuals.
 Other regulations, limitations and prohibitive regulations
 Although this chemical may sometimes be used as a food or drug or cosmetic, our products are not approved or suitable for such use or for human consumption.
 Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 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 use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Aritime Code for Dangerous Goods DOT: US Department of Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Substances LCSO: Lethal concentration, 50 percent LDSO: Lethal concentration, 50 percent LDSO: Lethal dose, 50 percent LDSO: Lethal dose, 50 percent CAGIH: American Conference of Governmental Industrial Hygienists (USA) WTP: National Toxicology Program (USA) MTP: National Toxicology Program (USA) MTP: Mania Toxicology Program (USA) MTP: Marianal Toxicology Program (USA) MTP: Marci and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) MTP: Marci and Substance (USA) MTP: Marci and Substance ACGIN: American Conference of Covernmental Industrial (USA) MTP: Marci and Substance ACGIN: American Conference of Covernmental Industrial (USA) MTP: Marci and Substance EPA: Environmental Protection Agency (USA)