Reviewed on 04/23/2013

Safety Data Sheet acc. to OSHA HCS

Printing date 01/22/2014

1 Identification

Product identifier Product name: <u>Bisphenol A</u>

Stock number: A10324
CAS Number:
80-05-7
EC number:
201-245-8
Index number:
604-030-00-0
Relevant identified uses of the substance or mixture and uses advised against.
No further relevant information available.
Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc. 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 hours the Health, Safety and Environmental Department at (800) 343-0660. After normal hours call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

GHS08 Health hazard

H361 Suspected of damaging fertility or the unborn child. Repr. 2 GHS05 Corrosion Eye Dam. 1 H318 Causes serious eye damage. GHS07 Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xn; Harmful Possible risk of impaired fertility. R62: Xi; Irritant R37-41 · Irritating to respiratory system. Risk of serious damage to eyes. X Xi; Sensitizing

R43: May cause sensitization by skin contact. R52: Harmful to aquatic organisms. Repr. Cat. 3 Information concerning particular hazards for human and environment: Not applicable Hazards not otherwise classified No information known. Label elements

Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labeled according to the CLP regulation.

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Hazard pictogr	(Contd. of page 1)
GHS05 GHS	07 GHS08
Signal word Da	nger
Hazard stateme	
	ríous eve damage.
	an allergic skin reaction.
	of damaging fertility or the unborn child.
	respiratory irritation.
Precautionary	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of water/
P321	Specific treatment (see on this label).
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulations.
WHMIS classifi	
D2A - Verv tox	ic material causing other toxic effects
$\overline{\mathbf{T}}$	
Classification HMIS ratings (
-	erials Identification System)
	•
HEALTH 2	Health (acute effects) = 2
FIRE 1	Flammability = 1
	Physical Hazard = 1
REACTIVITY 1	-

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

3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 80-05-7 Bisphenol A Identification number(s): EC number: 201-245-8 Index number: 604-030-00-0

4 First-aid measures

Description of first aid measures 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 eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. 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.

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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

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 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil. Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 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. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. 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: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. 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. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present.

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Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Eye protection: Tightly sealed goggles Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemic	cal properties
General Information	
Appearance:	
Form:	Granules
Color:	White
Odor:	Not determined
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	153-158 °C (307-316 °F)
Boiling point/Boiling range:	$200 \ ^{\circ}C \ (392 \ ^{\circ}F) \ (4mm \ Hq)$
Sublimation temperature / start:	Not determined
Flash point:	227 °C (441 °F)
-	
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	510 °C (950 °F)
Decomposition temperature:	Not determined Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not applicable.
Density:	Not determined
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water at 20 °C (68 °F):	0.12 g/l
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	No further 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 No dangerous reactions known Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance. LD/LC50 values that are relevant for classification:

LD/LC50 Val	ues that	are relevant for classification:	
Oral	LD50	4 gm/kg (guinea pig)	
		2400 mg/kg (mouse)	
		1200 mg/kg (rat)	
		2230 mg/kg (rabbit)	
Dermal	LD50	3000 mL/kg (rabbit)	
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Inhalative LC50 >170 mg/m3 (rat)
LC50/6H >170 mg/m3/6H (rat)
Skin irritation or corrosion: Irritant to skin and mucous membranes.
Eye irritation or corrosion: Causes serious eye damage.
Sensitization: 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.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or
carcinogenic and/or neoplastic data for this substance.
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 - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation.
Aspiration hazard: No effects known.
Additional toxicological information:
To the best of our knowledge the acute 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 available. Behavior in environmental systems: Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Ecotoxical effects: Remark: Harmful to aquatic organisms Additional ecological information: General notes: Do not allow product to reach ground water, water course or sewage system. Do not allow material to be released to the environment without proper governmental permits. Danger to drinking water if even small quantities leak into the ground. Avoid transfer into the environment. Harmful to aquatic organisms Results of PBT and vPvB assessment **PBT:** Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

14 Transport information

Not a hazardous material for transportation. UN-Number DOT, ADR, IMDG, IATA None UN proper shipping name DOT, ADR, IMDG, IATA None Transport hazard class(es) DOT, ADR, IMDG, IATA Class None Packing group DOT, ADR, IMDG, IATA None (Contd. on page 6) USA

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Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

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) 80-05-7 Bisphenol A California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity 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. This product is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372. Other regulations, limitations and prohibitive regulations Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed. REACH - Pre-registered substances Substance is 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.

Department issuing SDS: Health, Safety and Environmental Department. Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organization ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent