

Material Safety Data Sheet

SAM-BCA(=2-(2-Butoxyethoxy)ethyl acetate)

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier	SAM-BCA(=2-(2-Butoxyethoxy)ethyl acetate); Butyl carbitol acetate
2. Recommended Use & Uses advised against	Uses for Laboratory and R&D only
3. Information of Supplier	SAMCHUN PURE CHEMICAL CO.,LTD ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea Emergency Phone; 82-31-668-0700/3 Department; Safety & Environment dep. Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1.GHS Classification· Identification	Skin Corrosion/Skin Irritation	Category2
	Serious Eye Damage/Eye Irritation	Category2
	Specific Target Organ Toxicity (Single Exposure)	Category3- Respiratory irritation

2. Label and Mark including Precautionary Statement

◦Label elements



◦Signal word

Warning

◦Hazard · Danger statement

H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

◦Precautionary statement

Precaution

P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.

Measures

P321 Specific treatment (see Section 4. on this label).
P302+P352 IF ON SKIN: Wash with plenty of water / (...)
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash before reuse
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 If eye irritation persists: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage

P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Dispose

P501 Dispose of contents/container under related law and regulations

3. Other Hazard-Risk which are not included in the classification criteria

NFPA index(0~4steps) : Health=2, Fire=1, Reaction=0

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
SAM-BCA(=2-(2-Butoxyethoxy)ethyl acetate)	Butyl carbitol acetate	124-17-4	100

Section 4 – FIRST AID MEASURES

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|---|---|
| 1. Eye Contact | Rinse with plenty of water for at least 15minutes and get medical attention immediately. |
| 2. Skin Contact | Take off contaminated cloths and shoes immediately, wash with plenty of water and soap for at least 15minutes. |
| 3. Inhalation | Move victim to fresh air. If breathing is difficult, give artificial respiration and get medical attention immediately. |
| 4. Ingestion | Do not induce vomiting. Get medical advice/attention immediately. |
| 5. Immediate medical attention and Notes for physician | Keep the medical personnel aware of the materials involved and take protective action. |

Section 5 – FIRE-FIGHT MEASURES

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| 1. Suitable extinguish media | Carbon dioxide, powdered fire extinguisher, alcohol-resistant foam extinguisher, water
Inappropriate Extinguishing Media: N/A |
| 2. Special hazards arising from the substance | Thermal decomposition products: Carbon oxides |
| 3. Special protective equipment and Precautions for fire-fighters | Move containers from fire area if you can do it without risk. When extinguishing a fire, be sure to wear personal protective equipment. If it is not possible to extinguish the fire, withdraw immediately. Keep containers cool by spraying with water for a long time, even after the fire is out. Isolate hazardous areas and deny access to people. |

Section 6 – ACCIDENTAL RELEASE MEASURES

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| 1. Personal precautions and Emergency procedures | Do not touch spilled material. Avoid inhalation and skin contact. In case of confined space, wear air respirator and ventilate and remove all sources of ignition. |
| 2. Environmental precautions | Minimize leak/spill, collect and keep leak/spill in container |
| 3. Methods and material for containment and cleaning up | Soak up with sand, clay and other inert absorbent material |

Section 7 – HANDLING AND STORAGE

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| 1. Precautions for safe Handling | Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. All containers should be grounded. |
| 2. Conditions for safe storage | Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from incompatible materials. |

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**1. Occupational exposure limit, biological exposure limit****National law of Safety management of**

N/A

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|--|---|
| 2. Appropriate Engineering controls | Ensure compliance with applicable exposure limits and operate local exhaust ventilation when working. |
| 3. Personal protective equipment | |
| ◦Respiratory protection | Because it is concerned about the harmfulness of human body due to chemical substances, it is recommended to wear respiratory protective equipment with dust mask or dust filter in consideration of physical and chemical characteristics when handling.
Respiratory protection should be certified by the Health and Safety Authority. |

	It is concerned about the harmfulness of the human body depending on the working environment, it should wear respirator, air-purifying respirator
◦Eye-protection	Wear safety glasses when handling as they may cause human health hazards due to chemicals. Install eye wash facilities and emergency eyewash stations near chemical handling sites
◦Hand protection	Wear safety gloves when handling, as it is likely to harm human health due to chemicals
◦Skin and body protection	Wear chemical protective clothing when handling, as it is likely to harm human health due to chemicals

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1.Physical state and color	Liquid (Colorless to Yellow)	2.Odor	The smell of fruit
3.threshold	N/A	4. pH	N/A
5.Melting/Freezing point	-32°C	6.Boiling point/range	245°C
7. Flashing point	105°C	8. Evaporation speed	N/A
9. Flammability(solid,gas)	N/A	10. Flash or Explosion limit upper / lower	5.3%/1%
11. Vapor pressure	< 0.01mmHg@20°C	12. Solubility	65g/l@20°C
13. Vapor density	7.0	14.Gravity	0.98
15. n-octanol-water Partition coefficient	2.9	16. Self ignition temp(°C)	290°C
17. Cracking temp(°C)	자료없음	18. Viscosity	0.0356P
19. Molecular Weight	204.30		

Section 10 – STABILITY AND REACTIVITY

1.Chemical stability and Possibility of Hazardous Reactions	May form explosive peroxides Does not polymerize
2. Conditions to Avoid	Avoid heat, sparks, flames and other sources of ignition. Avoid contact with incompatible materials
3. Incompatible Materials	Acid, base, oxidant
4. Hazardous Decomposition Products	Thermal decomposition products: Carbon oxides

Section 11 – TOXICOLOGICAL INFORMATION

1. Information on the likely routes of exposure.

Short term exposure may include irritation, nausea, headache

Long-term exposure are nausea symptoms of drunkenness

Short-term exposure are irritation, prolonged exposure is kidney damage

2. Health hazard information

◦Acute toxic	Oral : LD50 6500mg/kg Rat Skin : LD50 5640mg/kg Rabbit Inhalation : Vapor LC50 73.7mg/l 4hr
◦Serious skin corrosive / irritation	Causes skin irritation
◦Serious eye damage / irritation	Causes severe eye irritation
◦Respiratory sensitization	N/A
◦Skin sensitization	N/A
◦Carcinogenicity	N/A
◦Germ cell Mutagenicity	N/A
◦Reproductive toxic	N/A
◦Specific target organ toxicity (single exposure)	May cause irritation to respiratory system

◦Specific target organ toxicity (repeated exposure)	N/A
◦Aspiration hazard	N/A

Section 12 – ECOLOGICAL INFORMATION

1.Acquatic and Terrestrial eco toxicity	Fish toxicity : LC50 100mg/l 96hr Invertebrate toxicity : LC50 665mg/l 48hr Sea algae : N/A
2.Persistence and degradability	Persistence : log Kow 2.9 Degradability : N/A
3.Bioaccumulative potential	Concentrations : N/A Bioaccumulative : 100% 28day
4.Mobility in soil	N/A
5.Other adverse effects	N/A

Section 13 – Disposable considerations

1.Waste methods	Dispose in accordance with local regulations.
2.Waste warning	Dispose prohibited substances and waste separately from others.

Section 14 – TRANSPORT INFORMATION

1. UN No.	N/A
2.Proper shipping Name	N/A
3.Hazard class	N/A
4.Packing group	N/A
5.Marine pollutant	N/A
6.Particular safety Measures for transportation	N/A

Section 15 – REGULATORY INFORMATION

1.Occupation safety and health acts	Non-described
2. Chemical Substances Control Act	Non-described
3. National law of Safety management of hazardous material	4 Class 3 Petroleum Water-insoluble liquid 2000L
4.National law of management of Wastes	Designated Waste
5.Other domestic and foreign law	Non-described

Section 16 – OTHER INFORMATION

1. Material source	A chemical information MSDS Safety and Health Agency National Institute of Environmental Research Chemical Information Systems Korea Industrial Technology National Fire Hazardous Materials Information System
1. The 1st edition	2002.07.30
2. Revision and The final revision	7 / 2019.01.03

. Other references

*** 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.**