SAFETY DATA SHEET

DATE PREPARED : 12 NOV 2014

DATE OF REVISION:

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name : WB-INK BLACK 810-1

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : White board maker ink

Details of the supplier of the safety data sheet

Company : ASAI BUSSAN CO.,LTD.

6-22-3, FUKAEMINAMI, HIGASHINARI-KU, OSAKA,

537-0002 JAPAN

Telephone : 0081-6-6976-2531 Fax : 0081-6-6976-2542

E-mail address : <u>asai-msds@asai-bussan.co.jp</u>

Emergency telephone number

Emergency Phone : 0081-6-6976-2531

2. HAZARD IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation(EC)No1272/2008[EU-GHS/CLP]

Flammable liquids : Category 2 Serious eye damage/irritation : Category 2

Specific target organ systemic toxicity

-single exposure : Category 3

Label Elements

Labelling according Regulation(EC)No1272/2008[CLP]

Pictogram





Signal word Danger

Hazard statement(S)

H225: Highly flammable liquid and vapour H319: Causes serious eye irritation H336: May cause drowsiness or dizziness

Precautionary statement(S)

P210: Keep away from heat/sparks/open flames/hot surfaces-No smoking

P233: Keep container tightly closed

P280: Wear protective gloves/protective clothing/eye protection/face protection

P264: Wash hands thoroughly after handling

P261 : Avoid breathing dust/fume/gas/mist/vapours/spray

P271: Use only outdoors or in a well-ventilated area

3. Composition Information on Ingredients

Chemical characterization : Mixtures

INGREDIENT	CAS#	EINECS / ELINCS #	CONTENT (%)	EU Risk Phrase	CLP/GHS Classification
Pigment	N/D	N/D	3.5-4.5	_	_
Polyvinyl Butyral	63148-65-2	Not assigned	3.5-4.5	_	_
Remover	N/D	N/D	4.5-7.5	_	_
Anti drying agent	N/D	Not assigned	0.5-1.5	_	-
Ethanol	64-17-5	200-578-6	50.0-60.0	R11	H225
2-propanol	67-63-0	200-661-7	25.0-35.0	R11,R36.R67	H225,H319,H336

4. First Aid Measures

Eye : Causes serious eye damage. Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an oculist.

Skin : Causes skin irritation. Wash with plenty of soap and water. Consult a physician.

Ingestion : If swallowed, do not induce vomiting. Dilute with water or salt water and call

a physician immediately.

Inhalation : May cause drowsiness or dizziness. If breathing difficulty should occur, remove

person to fresh air and consult aphysician.

5. Fire Fighting Measures

Extinguishing Media:

Use water spray(fog),foam,dry powder,or carbon dioxide,as appropriate for surrounding fire and materials.

Specific hazards arising from substance or mixture

May emit toxic fumes of carbon monooxides.

Flammability/Explosivity:

Move containers to safety place. If it is unable to move it, cool containers with water spray.

Advice for Firefighters:

Firefighters should be equipped with protective apparatus and never do it under the lee.

Hazardous Decomposition Products:

See Section 10.

6. Accidental Release Measures

Shut off all sources of ignition; No flares, smoking or flames in area.

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container with covers for disposal, using no sparking tools and wash off with a plenty of water.

Wear a protective clothes and gloves while working and never do it under the lee.

Exercise reasonable care and attention not to drain waste water into the river.

7. Handling and Storage

HANDLING:

No flares, smoking or flames in area. Avoid spark and contact with strong acid.

Sufficient ventilation should be done in the working zone, should close the container tightly after working. Avoid to leaking, flooding, scattering and evaporation.

Take precautionary measures against static discharge. Wear an electric conductor type clothe and shoes. Don't handle the containers roughly.

STORAGE:

The protective type electrical appliances should be used and appliances should be earthed.

It should be stored in a cool place and be kept in a tightly closed container, protected from physical damage, and away from oxidizing materials and sources of ignition.

OTHERS:

Follow all federal, provincial and local requirements and regulations.

8. Exposure Controls/Personal Protection

Occupational Expsure Limits Compound <u>Type</u> <u>Limit</u> Ethanol ACGIH(TWA) 1000ppm

ACGIH(TWA) 200ppm 2-propanol ACGIH(TLV) 200ppm ACGIH(SEL) 400ppm

Close the container tightly in case of using in room or doing **Engineering Measures**

> sufficient ventilation. Install the safety shower, hand washing apparatus and eves washable apparatus near to working area.

Respiratory Protection gas mask

Eve Protection Wear safety glasses with side shields or chemical splash goggles. Skin Protection gloves, coveralls, apron and boots with chemical resistance.

9. Physical and Chemical Properties

Appearance Black liquid Odor Alcohol odor

Нα N/A Melting point N/A

78°C (Ethanol) Boiling point 13°C (Ethanol) Flash point 422.78°C (Ethanol) Auto-ignition Temperature

Upper/Lower Flammability

or Explosive Limits 3.3% lower, 19% upper (Ethanol)

Vaper Pressure 5.878 kpa (at 20°C) Vaper Density 1.59 (air = 1)

Relative Density 0.820 Water Solubility Mixed

Partition Coefficient N-octanol/water iog KoW=0.31 (Ethanol)

Decomposition Temperature No information identified.

Viscosity 6~9 mPa·s/25°C

10. Stability and Reactive

Reactivity No information identified.

Chemical Stability Stable under ordinary conditions of use and strage.

Possibility of Hazardous

Reactions Ethanol and 2-propanol may form explosive mixture in air.

Conditions to Avoid Heat, flames, sparks. Incompatible Materials Strong acid, oxidizing agent.

HazardousDecomposition

Products: Carbon monooxide.

Hazardous Polymerization Will not occur.

11. Toxicological Information

Acute Toxicity (Oral) 7060 mg/kg (rat) Ethanol 5040 mg/kg (rat) 2-propanol

Irritation/Sentization : 2-propanol Causes serious eye irritation

Repeated Dose Toxicity Reproductive(Fertility) and Developmental

: NO data identified on ingredients.

(birth Defects) Toxicity :

No data identified. None of the ingredients are considered

reproductive or devwlopmental toxicants.

Mutagenicity and

Carcinogenicity : No data identified on mutagenicity. None of the ingredients

are listed by NTP,IARC or OSHA as carcinogens.

12. Ecological Information

Ecotoxicity : No data identified.
Persistence and Degradability : No data identified.
Bio accumulative Potential : No data identified.
Mobility in Soil : No data identified.
Other Adverse Effects : No data identified.

13. Disposal Considerations

Treatment should be done in accordance with the method noted on Chapter 6.

When discarding, in accordance with an industrial-waste-treatment standard, it destroys by fire. In outsourcing, it specifies that it is waste oil (flammable), and it commissions it to the industrial waste treatment company who obtained permission of authorities.

14. Transport Information

On the occasion of transportation, it confirms that there is no leak in a container and package, it loads that there may not be a fall, drop, and damage, and collapse-of-cargo-piles prevention is ensured. In addition, the place set to statutes, such as labor security and hygiene law and Fire Service Law, is followed.

UN Number : UN 1263

UN Proper Shipping Name : Paint related material

Hazard Label(s) : Flamm. Liquid
Hazard Classes : Hazard Classes 3
Packing Group : Packing Group II
Environmental Hazard : Marine pollutant : No

15. Regulatory Informmation

Safty,Health and Environmental Regulations/Legislation Specific for the substance or Mixture This SDS complies with the requirements under US,EU and GHS(EU CLP-Regulation EC No 1272/2008) guidelines. Labeling information under CLP including signai word and hazard/precautionary statements are included in this SDS. ExemptionS for including some of this information on product label are pursuant to CLP Article 1(5)(d) and 29 CER 1910.1200 (g)(2)(i)©(1)&(2).

National Fire Protection

Agency(NFPA)Rating : Ethanol 2-propanol

Product Label

DANGER



Hazard Statement

Highly flamable liquid and vaper.

Causes serious eye irritation.

May cause drowsiness or dizziness.



Prevention precautionary statements

Keep away from heat/sparks/open flames/hot surfaces-No smoking.

Keep container tightly closed.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands thoroughly after handling.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Response Precautionary statements

IF ON SKIN(or hair):Remove/Take off immediately all contaminated clothing. rince skin with water/shower.

In case of fire: Use suitable extinguishing media for extinction.

IF IN EYES: Rince cautiously with water for several minutes. Remove contact lenses if present and easy to do – cintinue rinsing.

If eye irritation persists get medical advice/attention.

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.

Storage precautionary statements

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal precautionary statements

Dispose of contents/container to waste treatment company who obtained permission of authorities.

16. Other Information (R-phrases)

Ethanol R11 : Highly flammable 2-propanol R11 : Highly flammable

R36 : Irritating to eyes

R67 : Vapours may cause drowsinness and dizziness

Disclaimer

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our contorol and with whith we may be unfamiliar we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties, protections and disposal which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for aparticular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material. The above information is offered in good faith and with the belief that it is accurate. As of the data of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a subustitute for consultation with appropriately trained personnel.

N/A= Not applicable N/D=Not description



www.accobrands.com

Safety Data Sheet

Version 2.0 Revision Date 07/17/2015

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Board Cleaner (Mini bottle – kit version)

Product number : Quartet® Board Cleaner (Kit version) 52-180042Q (1.68 OZ)

Made in China (TY)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : White board Cleaning

1.3 Details of the supplier of the safety data sheet

Company : ACCO Brands Corporation

Four Corporate Drive Lake Zurich, IL 60047-8997

Telephone : 800.222.6462

1.4 Emergency telephone number

Rocky Mountain Poison : 877.740.5015 (Toll free) and Drug Center 303.739.1110 (Outside US)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243	Take precautionary measures against static discharge.
P264	Wash skin thoroughly after handling.
P280	Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water/shower.
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.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to
	extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Component		Classification	Concentration
Ethanol			
CAS-No. EC-No. Index-No.	64-17-5 200-578-6 603-002-00-5	Flam. Liq. 2; Eye Irrit. 2A; H225, H319	>= 90 - <= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans		

TWA	1,000 ppm 1,900 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
The value	The value in mg/m3 is approximate.		
TWA	1,000 ppm 1,900 mg/m3	USA. NIOSH Recommended Exposure Limits	

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid
b) Odour No data available
c) Odour Threshold No data available

d) pH 3

e) Melting point/freezing No data available point

f) Initial boiling point and 78.3 °C (172.9 °F) boiling range

g) Flash point
h) Evaporation rate
i) Flammability (solid, qas)
12 °C (54 °F)
No data available
No data available

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j) Upper/lower Upper explosion limit: 19 %(V) flammability or Lower explosion limit: 3 %(V)

explosive limits

k) Vapour pressure No data available
 l) Vapour density No data available
 m) Relative density No data available

n) Water solubility soluble

o) Partition coefficient: n- No data available

octanol/water

p) Auto-ignition No data available temperature

q) Decomposition No data available temperature

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Alkali metals, Oxidizing agents, Peroxides

10.6 Hazardous decomposition products

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Central nervous system depression, narcosis, Damage to the heart., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1993 Class: 3 Packing group: II

Proper shipping name: Flammable liquids, n.o.s.

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 1993 Class: 3 Packing group: II EMS-No: F-E, S-E

Proper shipping name: FLAMMABLE LIQUID, N.O.S.

IATA

UN number: 1993 Class: 3 Packing group: II

Proper shipping name: Flammable liquid, n.o.s.

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Ethanol	64-17-5	2007-03-01

Pennsylvania Right To Know Components

Ethanol CAS-No. Revision Date 64-17-5 2007-03-01

Fatty Acid Ester & Surface Additive -

New Jersey Right To Know Components

Ethanol CAS-No. Revision Date 64-17-5 2007-03-01

Fatty Acid Ester & Surface Additive

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Consumer Product Labeling

The labeling for this consumer product is regulated by the U.S. Consumer Product Safety Commission, and complies with the Federal Hazardous Substances Act (FHSA) as amended by the Federal Labeling of Hazardous Art Materials Act (LHAMA)/ASTM D-4236.

The information contained in this SDS is provided for information only. Nothing in this SDS is intended to imply that this product is covered by the HCS

Art & Creative Materials Institute, Inc. (ACMI)

ACCO Brands is a member of the Art & Creative Materials Institute, Inc. (ACMI). This product is certified by ACMI to use the CL seal. Products bearing the CL (Cautionary Labeling) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the Federal Hazardous Substances Act as amended by the Labeling of Hazardous Art Materials Act, and ASTM D 4236.—Products that bear the CL Seal cannot be marketed for use by children in grades K (or younger) through 6.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

HMIS Rating

Health hazard: 2
Chronic Health Hazard: *
Flammability: 3
Physical Hazard 0

NFPA Rating

Health hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0

Further information

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Print Date: 7/17/2015