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 GREEN 410-2L

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	2.5-3.5	_	_
Polyvinyl Butyral	63148-65-2	Not assigned	3.0-4.0	_	_
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	70.0-80.0	R11	H225
2-propanol	67-63-0	200-661-7	10.0-15.0	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

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

> 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 Green liquid Odor Alcohol odor

Нα N/A N/A Melting point

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 0.810 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 NO data identified on ingredients. Reproductive(Fertility)

and Developmental

(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