Date of issue: 08/08/2018

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Mixed organic solvent

Product code(SDS NO): SDS_sample_US_E-1

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

Relevant identified uses of the product: Industrial use

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Asahi Graphic Corporation

Address: KOHGA Bldg. 3F, 4-23-8 Ebisu, Shibuya-KU, Tokyo, 150-0013 Japan

Telephone number: +81-3-5424-3016

FAX: +81-3-5424-3018

Emergency telephone number (24h): +81-3-****-****

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

Physical and chemical hazards

Flammable liquids: Category 2

HEALTH HAZARDS

Acute toxicity Inhalation: Category 4

Skin corrosion/irritation: Category 2

Reproductive toxicity: Category 2

Specific target organ toxicity - single exposure: Narcosis Category 3

Specific target organ toxicity - repeated exposure: Category 2

Aspiration hazard: Category 1

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements

Signal word: Danger

HAZARD STATEMENT

H225 Highly flammable liquid and vapor

H332 Harmful if inhaled

H315 Causes skin irritation

H361 Suspected of damaging fertility or the unborn child

H336 May cause drowsiness or dizziness

H373 May cause damage to organs through prolonged or repeated exposure

H304 May be fatal if swallowed and enters airways

PRECAUTIONARY STATEMENT

Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

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P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash contaminated parts thoroughly after handling.
P280 Wear protective gloves and face protection.
P280 Use personal protective equipment as required.

Response

P370 + P378 In case of fire: Use appropriate media other than water for extinction.
P321 Specific treatment is required.
P314 Get medical advice/attention if you feel unwell.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P331 Do NOT induce vomiting.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Storage

P403 Store in a well-ventilated place. P233 Keep container tightly closed. P235 Keep cool.
P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/national regulation.

Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Ingredient name	CAS No.	Content(%)
Xylene (Mixture of isomers)	1330-20-7	40 - 45
Ethylbenzene	100-41-4	40 - 45
Polar solvent	CBI	20 - 25

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Do NOT induce vomiting.

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Immediately call a POISON CENTER or doctor/physician.

Indication of any immediate medical attention and special treatment needed

Specific treatment is required.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2.

Unsuitable extinguishing media

Do not use direct water jet.

Specific hazards arising from the substance or mixture

Will form toxic carbon oxides upon combustion.

Advice for firefighters

Specific fire-fighting measures

Eliminate all ignition sources if safe to do so.

Cool container with water spray.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Evacuate area.

Keep unauthorized personnel away.

Wear an air-supplied respirator for a poor/non ventilated spill.

Wear proper protective equipment.

Eliminate all sources of ignition and ventilate the area.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Fill the disposal into labelled, closable containers.

Preventive measures for secondary accident

Collect spillage.

Prepare extinguishers before catching fire.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe gas/mist/vapors/spray.

(Protective measures against fire and explosion)

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

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Safety treatments

Avoid contact with skin.

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Avoid contact with eyes.

Safety Measures/Incompatibility

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves and face protection.

Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

8. Exposure controls/personal protection

Control parameters

Adopted value

(Ethylbenzene)

ACGIH(2010) TWA: 20ppm

(URT irr; kidney dam; nephropathy; cochlear impair)

(Polar solvent)

ACGIH(2006) TWA: 20ppm (Visual impair; female repro; pregnancy loss)

(Xylene (Mixture of isomers))

ACGIH(1992) TWA: 100ppm

STEL: 150ppm (URT & eye irr; CNS impair)

OSHA-PEL

(Polar solvent)

TWA: 200ppm; STEL: C 300ppm

Acceptable maximum peak: 500ppm; Maximum Duration: 10min

(Xylene (Mixture of isomers))

TWA: 100ppm, 435mg/m3

(Ethylbenzene)

TWA: 100ppm, 435mg/m3

NIOSH-REL

(Polar solvent)

TWA: 100ppm; STEL: 150ppm

(Ethylbenzene)

TWA: 100ppm; STEL:125ppm

(Xylene (Mixture of isomers))

TWA: 100ppm; STEL: 150ppm

California proposition 65

cancer NSRL

(Ethylbenzene)

NSRL=(inhalation) 54 μg/day ; (oral) 41 μg/day

developmental MADL

(Polar solvent)

MADL=7000 μg/day

Exposure controls

Appropriate engineering controls

Exhaust/ventilator should be available.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Wear protective gloves. Recommended material(s): impermeable or chemical resistant rubber

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

Skin and body protection

Wear protective clothing.

Safety and Health measures

Wash ･･･ thoroughly after handling.

Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash it before reuse.

Wash hands thoroughly after handling.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Liquid

Color: Clear

Odor: Solvent odor

Phase change temperature

Initial Boiling Point/Boiling point: 115℃

Flash point: (Tag closed cup)5℃

Specific gravity/Density: 0.91(20℃)

Kinematic viscosity: 15.1mm2/s(20℃)

Solubility

Solubility in water: Insoluble

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

Incompatible materials

Oxidizing agents

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

No Acute toxicity data available

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

Carcinogenicity

(Ethylbenzene)

IARC-Gr.2B : Possibly carcinogenic to humans

(Polar solvent)

IARC-Gr.3 : Not Classifiable as a Human Carcinogen

(Xylene (Mixture of isomers))

IARC-Gr.3 : Not Classifiable as a Human Carcinogen

(Ethylbenzene)

ACGIH-A3(2010) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

(Polar solvent)

ACGIH-A4(2006) : Not Classifiable as a Human Carcinogen

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(Xylene (Mixture of isomers))

ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen

No Teratogenic effects data available

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-repeated exposure

[cat.2]

[EU CLP name of STOT]

(Ethylbenzene)

hearing organs

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

No Aquatic toxicity data available

Water solubility

(Ethylbenzene)

0.015 g/100 ml (20℃) (ICSC, 2007)

(Polar solvent)

none (ICSC, 2002)

Persistence and degradability

(Ethylbenzene)

Not degrade rapidly (BOD_Degradation : 0% (MITI official bulletin, 1990))

(Polar solvent)

BOD_Degradation : 123% (Registered chemicals data check & review, Japan)

(Xylene (Mixture of isomers))

Not degrade rapidly (BOD_Degradation : 39% (NITE risk primary assessment, 2005))

Bioaccumulative potential

(Ethylbenzene)

log Kow=3.15 (PHYSPROP Database, 2005)

(Polar solvent)

log Kow=2.73 (PHYSPROP Database, 2008)

(Xylene (Mixture of isomers))

log Pow=3.16 (PHYSPROP Database, 2005)

No Mobility in soil data available

Ozone depleting chemical data not available

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

Dispose to an authorized waste collection point.

14. Transport Information

UN No, UN CLASS

UN number: 1993

UN proper shipping name:

FLAMMABLE LIQUID, N.O.S.

Transport hazard class(es): 3

Packing group: II

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ERG GUIDE NO.: 128

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Y

Ethylbenzene; Xylene (Mixture of isomers); Polar solvent

15. Regulatory Information

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

US major regulations

TSCA

Ethylbenzene; Polar solvent; Xylene (Mixture of isomers)

California proposition 65

cancer

Ethylbenzene

developmental

Polar solvent

Other regulatory information

We are not able to check up other regulatory information in regard to the substances in your country or region, therefore we request this matter would be filled by your responsibility.

16. Other information

GHS classification and labelling

Flam. Liq. 2: H225 Highly flammable liquid and vapor

Acute Tox. 4: H332 Harmful if inhaled

Skin Irrit. 2: H315 Causes skin irritation

Repr. 2: H361 Suspected of damaging fertility or the unborn child

STOT SE 3: H336 May cause drowsiness or dizziness

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2018 TLVs and BEIs. (ACGIH)

http://monographs.iarc.fr/ENG/Classification/index.php

Supplier's data/information

Hazard Communication Standard - 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Asahi Graphic Corporation

GESTIS-Stoffdatenbank

Pub Chem (OPEN CHEMISTRY DATABASE)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The GHS classification data given here is based on EU CLP - 2018 & US Hazard Communication Standard - 2012.