date of issue : 22/01/2013

Safety Data Sheet

1. Product and Company Identification

Product name :Additive for safe painting X-9
Name of supplier :SOLAR CO., LTD.
Address :1-7, Nunobiki-cho-2-chome, Chuo-ku, Kobe, Hyogo-Pref. 651-0097 JAPAN
Division :R & D DEPT.
Phone :+81-790-49-2366
FAX :+81-790-49-1588
Product code(SDS NO) :EN300371-3

2. Hazards identification

GHS classification and label elements of the product
GHS classification
PHYSICAL HAZARDS
Flammable liquids : Category 3
HEALTH HAZARDS
Skin corrosion/irritation : Category 2
Eye damage /eye irritation : Category 2
Carcinogenicity : Category 2
Reproductive toxicity : Category 1B
Specific target organ toxicity-single exposure : Category 1
Specific target organ toxicity - single exposure; Respiratory tract irritation Category 3
Specific target organ toxicity - single exposure; Narcosis Category 3
Specific target organ toxicity-repeated exposure : Category 1
Aspiration hazard : Category 1
ENVIRONMENT HAZARDS
Hazardous to the aquatic environment-acute toxicity : Category 1
Hazardous to the aquatic environment-chronic toxicity : Category 2

Signal word : Danger
HAZARD STATEMENT
Flammable liquid and Vapor
Causes skin irritation.
Causes eye irritation
Suspected of causing cancer
May damage fertility or the unborn child
Causes damage to organs after single exposure.
May cause respiratory irritation
May cause drowsiness and dizziness
Causes damage to organs following repeated exposure.
May be fatal if swallowed and enters airways.
Very toxic to aquatic life
Toxic to aquatic life with long lasting effects
PRECAUTIONARY STATEMENT
Prevention
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/eye protection/face protection.
Use personal protective equipment as required.

Response

Get medical advice/attention if you feel unwell.
Do NOT induce vomiting.
Take off contaminated clothing and wash before reuse.
Collect spillage.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use appropriate media other than water for extinction.

Storage

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

Disposal

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

3. Composition/Information on Ingredients

Substance/Preparation :Preparation

Ingredient name	content(%)	CAS No.	PRTR law No, Japan
Non Public	0.1 - 1	Non Public	-
Xylene (Mixture of isomers)	54.9	1330-20-7	1-080
Ethylbenzene	44.9	100-41-4	1-053

4. First-aid measures

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair)

Wash with plenty of soap and water. Never use solvent or thinner.
If you observe unusual symptom, have irritation/pain and/or feel unwell, seek medical advice.

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

Rinse mouth.
Do NOT induce vomiting.
Immediately call a POISON CENTER or doctor/physician.

5. Fire-fighting measures

Suitable extinguishing media

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

Specific fire-fighting measures

Use appointed fire extinguisher.
Remove flammable matters quickly from nearby.
Apply water from a safe distance to cool and protect surrounding area.

Special protective equipment and precautions for fire-fighters

Fire extinguishing work has to be done from windward.
Wear proper protective equipment.

6. Accidental Release Measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.
Wear proper protective equipment.
Keep unauthorized personnel away.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for neutralization, containment and cleaning up

Place in a covered container.
Use non-sparking tools to collect absorbed material.

Preventive measures for secondary accident

Prepare extinguishers before catching fire.

7. Handling and Storage

Precautions for safe handling

Preventive measures

Use personal protective equipment as required.
Take precautionary measures against static discharge.

Safety Measures/Incompatibility

Handle in good ventilation.
Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

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

8. Exposure Controls/Personal Protection

Control parameters e.g. occupational exposure limit values or biological limit values

Control value

(Xylene (Mixture of isomers))
Japan control value (2004) <= 50ppm

Adopted value

(Xylene (Mixture of isomers))
JSOH(2001) 50ppm; 217mg/m3
(Ethylbenzene)
JSOH(2001) 50ppm; 217mg/m3
(Xylene (Mixture of isomers))
ACGIH(1992) TWA: 100ppm
STEL: 150ppm (URT & eye irr; CNS impair)

(Ethylbenzene)
ACGIH(1998) TWA: 100ppm
STEL: 125ppm (URT irr; CNS impair; eye irr)

Appropriate engineering controls
Do not use in areas without adequate ventilation.
Exhaust/ventilator should be available.

Protective equipment

Respiratory protection
Wear respiratory protection.

Hand protection
Wear protective gloves.

Eye protection
Wear eye/face protection.

Skin and body protection
Wear protective gloves/clothing

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9. Physical and Chemical Properties

Physical properties

Appearance :liquid
Color :clear

Flash point :27-32°C (Closed style) (ref.value/Xylene)
Specific gravity :ca 0.88

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10. Stability and Reactivity

Stability
Stable under normal storage/handling conditions.

Possibility of hazardous reactions (Xylene)
May react violently with strong oxidizing agents.
May react with oxidizing agents, Aluminium to form Hydrogen gas.

Conditions to avoid (Xylene)
Heating.

Incompatible materials (Xylene)
Oxidizing agents, Aluminium.

Hazardous decomposition products (Xylene)
Carbon oxides when heated.

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11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral toxicity component(s) data
(Ethylbenzene)
rat LD50=3500 mg/kg (EHC 186 (1996))
(Xylene (Mixture of isomers))
rat LD50=3,500 mg/kg (evaluated by EPA_JP vol.1 (2002))

Inhalation toxicity component(s) data
(Ethylbenzene)
vapor : rat LC50=17.2 mg/L(ATSDR (1999), EHC 186 (1996))=4,000 ppm

Labor standard law, Japan; Toxic
Xylene (Mixture of isomers)

Irritant properties

Skin corrosion/Irritation component(s) data
(Xylene (Mixture of isomers))
rabbit 500 mg/24H ; MODERATE
(Ethylbenzene)

rabbit 15 mg/24H open ; MILD
Serious eye damage /irritation
Eye damage/irritation component(s) data
(Xylene (Mixture of isomers))
rabbit 87 mg ; MILD rabbit 5 mg/24H ; SEVERE
Carcinogenic effects
(Ethylbenzene)
IARC-Gr.2B ; Possibly carcinogenic to humans.
(Xylene (Mixture of isomers))
IARC-Gr.3 ; Not Classifiable as a Human Carcinogen.
(Ethylbenzene)
ACGIH-A3(1998) : Confirmed Animal Carcinogen with Unknown Relevance to Humans
(Xylene (Mixture of isomers))
ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen
(Ethylbenzene)
JSOH-2B; Insufficient Evidence of Carcinogenicity for Humans
Toxicity for reproduction
(Xylene (Mixture of isomers)) EHC 190 (1997)
(Ethylbenzene) SIDS (2005) et al
Delayed and immediate effects and also chronic effects from short- and long-term exposure
Specific target organ toxicity (single exposure cat.1)
(Xylene (Mixture of isomers)) respiratory apparatus/system; liver; CNS; kidney (CERI/NITE hazard assessment (2004) et al)
Specific target organ toxicity (single exposure cat.2)
(Ethylbenzene) CNS (CERI hazard data book (1998))
Specific target organ toxicity (single exposure cat.3 respiratory irritation)
(Ethylbenzene) Respiratory tract irritation (CERI hazard data book (1998))
Specific target organ toxicity (single exposure cat.3 drowsiness/dizziness)
(Xylene (Mixture of isomers)) Narcosis (CERI/NITE hazard assessment (2004) et al)
Specific target organ toxicity (repeated exposure cat.1)
(Xylene (Mixture of isomers)) respiratory apparatus/system; nerve/nervous system (CERI/NITE hazard assessment (2004) et al)
Aspiration hazard
(Ethylbenzene) hydrocarbon, kinematic viscosity = 0.74 mm2/s (25 C)

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12. Ecological Information
Ecotoxicity
Acuatic toxicity
Very toxic to aquatic life
Toxic to aquatic life with long lasting effects
(Ethylbenzene)
Crustacea (Penaeus aztecus) LC50=0.4mg/L/96hr (CERI/NITE, 2006)
(Xylene (Mixture of isomers))
Fish (rainbow trout) LC50=3.3mg/L/96hr (CERI_NITE, 2005)
Water solubility
(Ethylbenzene)
0.015 g/100 ml (20 C) (ICSC, 2007)
Persistence and degradability
(Ethylbenzene)
Easily degrade and rapidly vaporize (SIDS, 2005)
Bioaccumulative potential
(Ethylbenzene)
log Pow=3.1 (ICSC, 2007)
(Xylene (Mixture of isomers))

log Pow=3.16 (PHYSPROP Database, 2005)

13. Disposal Considerations

Waste residues

Avoid release to the environment (- if this is not the intended use).
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN No :1307
UN CLASS :3
PG :III
Proper shipping name :XYLENES

ERG GUIDE NO :130

Sea pollutants control law

Noxious Liquid ; Cat. Y :Ethylbenzene; Xylene (Mixture of isomers)

Special precautions in connection with transport or conveyance

Follow instruction in Handling & Storage.

15. Regulatory Information

Industrial Safety and Health law, Japan

Specified chemical substances Gr.2 : Ethylbenzene
Organic Solvents Class II :Xylene (Mixture of isomers)
Harmful substances to be indicated :Xylene (Mixture of isomers); Ethylbenzene
Flammable
Chemical name et al should be informed :Xylene (Mixture of isomers); Ethylbenzene

PRTR law, Japan

Listed chemicals Gr.1 :Xylene (Mixture of isomers); Ethylbenzene

Fire protection law, Japan

Petroleums Gr.2, (Class III)

Ship cargo control law, Japan

Flammable liquids

Air cargo control law, Japan

Flammable liquids

Chemical Substances Control Law, Japan

Priority Assessment Chemical Substances : Ethylbenzene

Malodorants control law, Japan

TLVs at the border ; 1 - 5 ppm

Xylene (Mixture of isomers)

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 17th edit. UN
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2011 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/monoeval/grlist.html
Supplier's data/information
ezCric(Retrieval System/Japan Chemical Database Ltd.)

Other information

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 test