

Safety Data Sheets

1. Product and Company Identification

Product name :Sealer #555(Tube)

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

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Product code(SDS NO) :EN770280-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

PHYSICAL HAZARDS

Flammable solid

HEALTH HAZARDS

Acute toxicity Oral : Category 5

Acute toxicity inhalation : Category 5

Skin corrosion/irritation : Category 2

Eye damage /eye irritation : Category 2A

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

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment-acute toxicity : Category 2

Hazardous to the aquatic environment-chronic toxicity : Category 3



Signal word : Danger

HAZARD STATEMENT

Flammable solid

May be Harmful if swallowed.

May be Harmful if inhaled.

Causes skin irritation.

Causes serious 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.

Toxic to aquatic life

Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Use explosion-proof electrical/ventilating/lighting equipment.
 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.
 Take off contaminated clothing and wash before reuse.
 IF ON SKIN: Wash with plenty of soap and water.
 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.

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
Urethan prepolymer	25-30	Non Public	-
Plasticizer	15-25	Non Public	-
Filler,Pigment	25-35	Non Public	-
Titanium dioxide	4-5	13463-67-7	-
Xylene (Mixture of isomers)	12	1330-20-7	-
Ethylbenzene	8	100-41-4	-
Solvent(Others)	1.0	Non Public	-
Additive,Catalyst	1.0	Non Public	-

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)

Never use solvent or thinner.
 Wash with plenty of soap and water.
 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.

Keep container dry.

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

(Ethylbenzene)

Japan control value (2012) <= 20ppm

Adopted value

(Xylene (Mixture of isomers))

JSOH(2001) 50ppm; 217mg/m3

(Ethylbenzene)

JSOH(2001) 50ppm; 217mg/m3

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

(Xylene (Mixture of isomers))
 ACGIH(1992) TWA: 100ppm
 STEL: 150ppm (URT & eye irr; CNS impair)

(Titanium dioxide)
 ACGIH(1992) TWA: 10mg/m3 (LRT 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

9. Physical and Chemical Properties

Physical properties
 Appearance :paste
 Color :white
 Flash point :33
 Specific gravity :ca1.19

10. Stability and Reactivity

Stability
 Stable under normal storage/handling conditions.
 Conditions to avoid
 If product reacts with water within the sealed container,form CO2 and pressure may rise.
 Incompatible materials
 Reactions possible with : amines, alcohol, water
 Hazardous decomposition products
 In the event of fire the following can be released:
 Carbon monoxide(CO), Carbon dioxide(CO2), Nitrogen oxides(NOx)

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=3500 mg/kg (EPA_J assessment vol.1, 2002)
 Inhalation toxicity component(s) data
 (Ethylbenzene)
 vapor : rat LC50=4000 ppm (ATSDR, 1999)
 Labor standard law, Japan; Toxic
 Xylene (Mixture of isomers)
 Irritant properties
 Skin corrosion/Irritation component(s) data

- (Ethylbenzene)
- rabbit 15 mg/24H open ; MILD
- (Xylene (Mixture of isomers))
- rabbit 500 mg/24H ; MODERATE
- (Titanium dioxide)
- human 0.3mg/3D-I ; 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.
- (Titanium dioxide)
- IARC-Gr.2B ; Possibly carcinogenic to humans.
- (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
- (Titanium dioxide)
- 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)) IRIS, 2003
- (Ethylbenzene) SIDS, 2005
- 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)
- 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)
- Specific target organ toxicity (repeated exposure cat.1)
- (Xylene (Mixture of isomers)) respiratory apparatus/system; nerve/nervous system (CERI/NITE hazard assessment, 2004)
- Aspiration hazard
- (Xylene (Mixture of isomers)) ICSC (J), 2002

12. Ecological Information

Ecotoxicity

Aquatic toxicity

- Toxic to aquatic life
- Harmful 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)
- (Titanium dioxide)

Crustacea(Daphnia magna) EC50 > 1000mg/L/48hr (AQUIRE, 2003)

Water solubility

(Ethylbenzene)

0.015 g/100 ml (20 C) (ICSC, 2007)

(Titanium dioxide)

none(HSDB, 2004)

Persistence and degradability

(Ethylbenzene)

Easily degrade and rapidly vaporize (SIDS, 2005)

(Xylene (Mixture of isomers))

BOD_Degradation : 39% (CERI hazard data book,2005)

Bioaccumulative potential

(Ethylbenzene)

log Kow=3.15(PHYSPROP Database, 2005)

(Xylene (Mixture of isomers))

log Pow=3.16(PHYSPROP Database, 2005)

13. Disposal Considerations

Disposal methods

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 :1325

UN CLASS :4.1

PG :III

Proper shipping name :FLAMMABLE SOLID, ORGANIC, N.O.S.

ERG GUIDE NO :133

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 : Ethylbenzene; Xylene (Mixture of isomers)

Chemical name et al should be informed : Ethylbenzene; Xylene (Mixture of isomers); Titanium dioxide

PRTR law, Japan

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

Fire protection law, Japan

Petroleums Gr.2, (Class III)

Ship cargo control law, Japan

Flammable solids, self-reactive substances and solid desensitised explosives

Air cargo control law, Japan

Flammable solids, self-reactive substances and solid desensitised explosives

Chemical Substances Control Law, Japan

Priority Assessment Chemical Substances :Ethylbenzene

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

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