

# **SAFETY DATA SHEET**

### Intersmooth 360 SPC Dark Brown

### **Section 1. Identification**

Intersmooth 360 SPC Dark Brown : GHS product identifier

BEA368 : Product code

Identified uses			
Professional application of coatings and inks			
Uses advised against Reason			
All Other Uses			

AkzoNobel Saudi Arabia Ltd.

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+966 55 388 0087

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+966 3 812 1044 : **Emergency telephone** 

number (with hours of

: Supplier's details

operation)

: National advisory body/ Poison Centre (For use only

by licensed medical professionals.)

sdsfellinguk@akzonobel.com : e-mail address of person responsible for this SDS

## **Section 2. Hazards identification**

FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (oral) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2
ACUTE AQUATIC HAZARD - Category 1
LONG-TERM AQUATIC HAZARD - Category 1

: Classification of the substance or mixture

#### **GHS label elements**











: Hazard pictograms

Danger : Signal word

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: Hazard statements

### Section 2. Hazards identification

Highly flammable liquid and vapour.

Harmful if swallowed.

Causes serious eye damage.

Causes skin irritation.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure. (hearing organs)

Very toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapour. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Collect spillage. Get medical attention if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Store locked up. Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Wear appropriate respirator when ventilation is inadequate.

: Response

: Prevention

StorageDisposal

: Supplemental label

elements

None known.

: Other hazards which do not result in classification

## Section 3. Composition/information on ingredients

Mixture : Substance/mixture

Classification	CAS number	% by weight	Ingredient name
Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	1317-39-1	≥25 - ≤50	dicopper oxide
Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Asp. Tox. 1, H304	1330-20-7	≥10 - ≤22	xylene
Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	71-36-3	≤10	butan-1-ol
Aquatic Acute 1, H400	1314-13-2	≤10	zinc oxide

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# Section 3. Composition/information on ingredients

Aquatic Chronic 1, H410			
Flam. Liq. 2, H225 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	100-41-4	≤5	ethylbenzene
Acute Tox. 3, H301 Acute Tox. 3, H331 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	13463-41-7	≤5	pyrithione zinc
Flam. Liq. 2, H225 Acute Tox. 5, H303 Acute Tox. 4, H332 Skin Irrit. 3, H316 Eye Irrit. 2A, H319 STOT SE 3, H335	108-10-1	≤5	4-methylpentan-2-one

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### **Description of necessary first aid measures**

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

: Eye contact

: Inhalation

: Skin contact

: Ingestion

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### Section 4. First aid measures

If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Causes serious eye damage. : Eye contact May cause respiratory irritation. Exposure to decomposition products may cause a : Inhalation

health hazard. Serious effects may be delayed following exposure.

: Skin contact Causes skin irritation.

Harmful if swallowed. Irritating to mouth, throat and stomach. : Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following: : Eye contact

pain watering redness

: Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness

Adverse symptoms may include the following: : Skin contact

pain or irritation

redness

blistering may occur

Adverse symptoms may include the following: : Ingestion

stomach pains

#### Indication of immediate medical attention and special treatment needed, if necessary

In case of inhalation of decomposition products in a fire, symptoms may be delayed. : Notes to physician The exposed person may need to be kept under medical surveillance for 48 hours.

: Specific treatments No specific treatment.

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

: Protection of first-aiders

#### See toxicological information (Section 11)

# Section 5. Firefighting measures

#### **Extinguishing media**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

: Suitable extinguishing

media

Do not use water jet. : Unsuitable extinguishing media

Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

: Specific hazards arising from the chemical

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# Section 5. Firefighting measures

Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides carbonyl halides metal oxide/oxides

: Hazardous thermal decomposition products

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

: Special protective actions for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

: Special protective equipment for fire-fighters

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

: For non-emergency personnel

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

: For emergency responders

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

: Environmental precautions

#### Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Small spill explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and : Large spill explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

Precautions for safe handling

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## Section 7. Handling and storage

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Protective measures

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

: Advice on general occupational hygiene

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Vapours are heavier than air and may spread along floors. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

: Conditions for safe storage, including any incompatibilities

## Section 8. Exposure controls/personal protection

#### **Control parameters**

### Occupational exposure limits

Exposure limits	Ingredient name
ACGIH TLV (United States, 3/2015).	xylene
STEL: 651 mg/m³ 15 minutes.	
STEL: 150 ppm 15 minutes.	
TWA: 434 mg/m³ 8 hours.	
TWA: 100 ppm 8 hours.	
ACGIH TLV (United States, 3/2015).	butan-1-ol
TWA: 20 ppm 8 hours.	
ACGIH TLV (United States, 3/2015).	zinc oxide
STEL: 10 mg/m³ 15 minutes. Form:	
Respirable fraction	
TWA: 2 mg/m³ 8 hours. Form: Respirable	
fraction	office the common
ACGIH TLV (United States, 3/2015).	ethylbenzene
TWA: 20 ppm 8 hours.	4 methylperten 2 ene
ACGIH TLV (United States, 3/2015).	4-methylpentan-2-one
STEL: 75 ppm 15 minutes. TWA: 20 ppm 8 hours.	
I WA. 20 ppill o flouis.	

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

: Appropriate engineering controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

: Environmental exposure controls

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## Section 8. Exposure controls/personal protection

#### Individual protection measures

Wash hands, forearms and face thoroughly after handling chemical products, before : Hygiene measures eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

: Eye/face protection

#### **Skin protection**

Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

: Hand protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

: Body protection

: Other skin protection

: Respiratory protection

## Section 9. Physical and chemical properties

### <u>Appearance</u>

: Physical state Liquid.

: Colour Brown. : Odour Solvent.

Not available. Odour threshold

Not applicable. pН

Not available. : Melting point

Lowest known value: 136.16°C (277.1°F) (xylene). : Boiling point

Closed cup: 22°C (71.6°F) : Flash point Not available. : Evaporation rate

Not available. : Flammability (solid, gas)

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## Section 9. Physical and chemical properties

Greatest known range: Lower: 1.4% Upper: 11.3% (butan-1-ol)

(flammable) limits

: Lower and upper explosive

Not available.

: Vapour pressure

Not available.

: Vapour density

1.53

: Relative density

Insoluble in the following materials: cold water.

: Solubility

Not available.

: Partition coefficient: n-

octanol/water

Not available.

: Auto-ignition temperature

Not available.

: Decomposition temperature

Kinematic (room temperature): 237 mm<sup>2</sup>/s (237 cSt)

: Viscosity

## Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients. : Reactivity

The product is stable. : Chemical stability

Under normal conditions of storage and use, hazardous reactions will not occur. : Possibility of hazardous

reactions

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

: Conditions to avoid

Reactive or incompatible with the following materials:

oxidizing materials

: Incompatible materials

Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

: Hazardous decomposition products

# **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Exposure	Dose	Species	Result	Product/ingredient name
-	470 mg/kg	Rat	LD50 Oral	dicopper oxide
-	4300 mg/kg	Rat	LD50 Oral	xylene
4 hours	24 mg/l	Rat	LC50 Inhalation Vapour	butan-1-ol
_	3400 mg/kg	Rabbit	LD50 Dermal	
-	790 mg/kg	Rat	LD50 Oral	
4 hours	4000 ppm	Rabbit	LC50 Inhalation Gas.	ethylbenzene
-	17800 mg/kg	Rabbit	LD50 Dermal	
-	3500 mg/kg	Rat	LD50 Oral	
4 hours	1.03 mg/l	Rat	LC50 Inhalation Dusts and mists	pyrithione zinc
_	>2000 mg/kg	Rat	LD50 Dermal	
_	269 mg/kg	Rat	LD50 Oral	
-	2080 mg/kg	Rat	LD50 Oral	4-methylpentan-2-one

#### Irritation/Corrosion

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# **Section 11. Toxicological information**

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	24 hours 2 milligrams	-	Rabbit	Eyes - Severe irritant	butan-1-ol
-	0.005 Mililiters	-	Rabbit	Eyes - Severe irritant	
-	24 hours 20 milligrams	-	Rabbit	Skin - Moderate irritant	
-	24 hours 500 milligrams	-	Rabbit	Eyes - Mild irritant	zinc oxide
-	24 hours 500 milligrams	-	Rabbit	Skin - Mild irritant	
-	500 milligrams	-	Rabbit	Eyes - Severe irritant	ethylbenzene
-	24 hours 15 milligrams	-	Rabbit	Skin - Mild irritant	
-	24 hours 100 microliters	-	Rabbit	Eyes - Moderate irritant	4-methylpentan-2-one
-	40 milligrams 24 hours 500	-	Rabbit Rabbit	Eyes - Severe irritant Skin - Mild irritant	
	milligrams				

### **Sensitisation**

Not available.

### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

### Reproductive toxicity

Not available.

### **Teratogenicity**

Not available.

### Specific target organ toxicity (single exposure)

Target organs	Route of exposure	Category	Name
Respiratory tract irritation	Not applicable.	Category 3	xylene
Respiratory tract irritation and Narcotic effects	Not applicable.	Category 3	butan-1-ol
Respiratory tract irritation	Not applicable.	Category 3	ethylbenzene
Respiratory tract irritation	Not applicable.	Category 3	4-methylpentan-2-one

### Specific target organ toxicity (repeated exposure)

Target organs	Route of exposure	Category	Name
hearing organs	Not determined	Category 2	ethylbenzene

### **Aspiration hazard**

Result	Name
ASPIRATION HAZARD - Category 1	xylene
ASPIRATION HAZARD - Category 1	ethylbenzene

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## **Section 11. Toxicological information**

Not available. : Information on likely routes

of exposure

: Inhalation

Potential acute health effects

Causes serious eye damage. : Eye contact

May cause respiratory irritation. Exposure to decomposition products may cause a

health hazard. Serious effects may be delayed following exposure.

Causes skin irritation. : Skin contact

Harmful if swallowed. Irritating to mouth, throat and stomach. : Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following: : Eye contact

pain watering redness

coughing

Adverse symptoms may include the following: : Inhalation

respiratory tract irritation

headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness

Adverse symptoms may include the following: : Skin contact

pain or irritation

redness

blistering may occur

Adverse symptoms may include the following: : Ingestion

stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

**Long term exposure** 

Not available. : Potential immediate

effects

Not available. : Potential delayed effects

Potential chronic health effects

Not available.

May cause damage to organs through prolonged or repeated exposure. : General

No known significant effects or critical hazards. : Carcinogenicity

No known significant effects or critical hazards. : Mutagenicity

No known significant effects or critical hazards. : Teratogenicity

No known significant effects or critical hazards. : Developmental effects

No known significant effects or critical hazards. : Fertility effects

**Numerical measures of toxicity** 

**Acute toxicity estimates** 

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# Section 11. Toxicological information

ATE value	Route	
1036.6 mg/kg	Oral	
5730 mg/kg	Dermal	
39.64 mg/l	Inhalation (vapours)	
11.76 mg/l	Inhalation (dusts and mists)	

# **Section 12. Ecological information**

### **Toxicity**

Exposure	Species	Result	Product/ingredient name
48 hours 96 hours	Daphnia - Daphnia similis Algae - Pseudokirchneriella subcapitata - Exponential growth phase	Acute EC50 0.042 mg/l Fresh water Acute IC50 0.71 mg/l Fresh water	dicopper oxide
96 hours 96 hours	Fish - Danio rerio Algae - Pseudokirchneriella subcapitata - Exponential growth phase	Acute LC50 0.075 mg/l Fresh water Chronic IC10 0.009 mg/l Fresh water	
48 hours	Crustaceans - Palaemonetes pugio	Acute LC50 8500 μg/l Marine water	xylene
96 hours 48 hours	Fish - Pimephales promelas Daphnia - Daphnia magna	Acute LC50 13400 µg/l Fresh water Acute EC50 1983 to 2072 mg/l Fresh water	butan-1-ol
96 hours	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	Acute LC50 1910 mg/l Fresh water	
72 hours	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	Acute EC50 0.042 mg/l Fresh water	zinc oxide
48 hours	Daphnia - Daphnia magna - Neonate	Acute EC50 1 mg/l Fresh water	
72 hours	Algae - Selenastrum capricornutum	Acute IC50 0.17 mg/l	
96 hours 72 hours	Fish - Oncorhynchus Mykiss Algae - Pseudokirchneriella subcapitata - Exponential growth phase	Acute LC50 1.1 mg/l Chronic NOEC 0.017 mg/l Fresh water	
96 hours	Algae - Pseudokirchneriella subcapitata	Acute EC50 3.6 mg/l Fresh water	ethylbenzene
48 hours	Daphnia - Daphnia magna - Neonate	Acute LC50 18.4 to 25.4 mg/l Fresh water	
96 hours	Fish - Menidia menidia	Acute LC50 5.1 to 5.7 mg/l Marine water	
120 hours 48 hours 96 hours	Algae - Skeletonema costatum Daphnia - Daphnia magna Fish - Pimephales Promelas	Acute EC50 0.0012 mg/l Acute EC50 0.0082 mg/l Acute LC50 0.0026 mg/l	pyrithione zinc
96 hours	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	Acute LC50 537000 to 557000 µg/l Fresh water	4-methylpentan-2-one
21 days	Daphnia - Daphnia magna	Chronic NOEC 78 mg/l Fresh water	

### Persistence and degradability

Biodegradability	Photolysis	Aquatic half-life	Product/ingredient name
Not readily	-	-	zinc oxide
Readily	-	_	ethylbenzene

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# **Section 12. Ecological information**

### **Bioaccumulative potential**

Potential	BCF	LogPow	Product/ingredient name
low	8.1 to 25.9	3.12	xylene
low	-	1	butan-1-ol
high	60960	-	zinc oxide
low	15	3.6	ethylbenzene
low	11	0.9	pyrithione zinc
low	-	1.9	4-methylpentan-2-one

#### **Mobility in soil**

Not available. : Soil/water partition coefficient (Koc)

No known significant effects or critical hazards.

: Other adverse effects

## Section 13. Disposal considerations

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

#### : Disposal methods

## **Section 14. Transport information**

IATA	IMDG	UN	
UN1263	UN1263	UN1263	UN number
PAINT	PAINT. Marine pollutant (dicopper oxide, zinc oxide)	PAINT	UN proper shipping name
3	3	3	Transport hazard class(es)
II	II	II	Packing group
No.	Yes.	No.	Environmental hazards
The environmentally hazardous substance mark may appear if required by other transportation regulations.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	-	Additional information

Not applicable.

: IMDG Code Segregation group

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## **Section 14. Transport information**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

: Special precautions for user

Not available.

: Transport in bulk according to Annex II of Marpol and the IBC Code

### **Section 15. Regulatory information**

No known specific national and/or regional regulations applicable to this product (including its ingredients).

: Safety, health and environmental regulations specific for the product

### Section 16. Other information

#### **Justification**

Justification	Classification	
On basis of test data	Flam. Liq. 2, H225	
Calculation method	Acute Tox. 4, H302	
Calculation method	Skin Irrit. 2, H315	
Calculation method	Eye Dam. 1, H318	
Calculation method	STOT SE 3, H335	
Calculation method	STOT RE 2, H373 (hearing organs)	
Calculation method	Aguatic Acute 1, H400	
Calculation method	Aquatic Chronic 1, H410	

#### **History**

31/03/2017 : Date of printing

31/03/2017 : Date of issue/Date of

revision

: Key to abbreviations

21/04/2015 : Date of previous issue

2 : Version

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

**UN = United Nations** 

Not available. : References

Indicates information that has changed from previously issued version.

#### Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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### Section 16. Other information

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