

SAFETY DATA SHEET
PRODUCT
ACCEPTA 2327

EMERGENCY TELEPHONE NUMBER(S)
See section 16, for Emergency Telephone Numbers.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **ACCEPTA 2327**

APPLICATION : **BIOCIDE**

COMPANY IDENTIFICATION : **ACCEPTA LTD**
Statham House Talbot Road.
Manchester M32 0FP. United Kingdom.

EMERGENCY TELEPHONE NUMBER(S) : See section 16, for Emergency Telephone Numbers.

Date issued : 20/11/2008

COMPANY CONTACT TELEPHONE NUMBERS. +44 (0) 161 877 2334

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION :

This product is classified as dangerous in accordance with the Preparations Directive 1999/45/EC.

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Causes burns. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

HUMAN HEALTH HAZARDS - ACUTE :

INHALATION :

Corrosive to respiratory system.

SKIN CONTACT :

Corrosive; causes permanent skin damage. May cause sensitization by skin contact. Skin irritation effects can be delayed for hours.

EYE CONTACT :

Corrosive. Will cause eye burns and permanent tissue damage.

INGESTION :

Corrosive; causes chemical burns to the mouth, throat and stomach.

ENVIRONMENTAL HAZARDS :

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Keep out of waterways. This product may pose a risk to the aquatic ecosystem if released.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is classified as dangerous in accordance with the Preparations Directive 1999/45/EC.

Hazardous Substance(s)	EINECS / ELINCS NO	CAS NO	SYMBOL	R-PHRASES / NOTAS	% (w/w)
A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	247-500-7, 220-239-6	55965-84-9	T,N	R23/24/25, R34, R43, R50/53	1.5 - 1.9

Refer to Section 16 for descriptions of relevant risk phrases and Notas.

4. FIRST AID MEASURES

INHALATION :

Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

SKIN CONTACT :

Get immediate medical attention. Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Remove contaminated clothing. Wash off affected area immediately with plenty of water. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

EYE CONTACT :

Get immediate medical attention. PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT. Immediately flush eye with water for at least 15 minutes while holding eyelids open.

INGESTION :

Get immediate medical attention. DO NOT INDUCE VOMITING. If conscious, washout mouth and give water to drink.

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NOTE TO PHYSICIAN :

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT : Not flammable

EXTINGUISHING MEDIA :

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :

May evolve oxides of carbon (COx) under fire conditions. May evolve HCl under fire conditions. May evolve oxides of nitrogen (NOx) and sulfur (SOx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Ventilate spill area if possible. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP :

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. **LARGE SPILLS:** Soak up with inert absorbent material. Transfer contaminated material to suitable containers for disposal. Contaminated surfaces should be swabbed with deactivation solution, let stand for 30 minutes and rinse thoroughly with clean water. **DO NOT** add deactivation solution to the waste container to deactivate the absorbed material. ***DEACTIVATION SOLUTION** - prepare fresh a solution of 5% Sodium bicarbonate and 5% Sodium hypochlorite in water. Use a ratio of 10 volumes decontamination solution per estimated volume of residual spill. Wash site of spillage thoroughly with water. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS :

This product may pose a risk to the aquatic ecosystem if released. In the event of a spill, prevent material from entering sewers or waterways. If drains, streams, soil or sewers become contaminated, notify local authority.

7. HANDLING AND STORAGE

HANDLING :

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE CONDITIONS :

Store in suitable labeled containers. Store the containers tightly closed. Protect product from freezing. Keep container in a well-ventilated place.

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SUITABLE CONSTRUCTION MATERIAL :
 Stainless Steel 316L, Hastelloy C-276, Viton, Polypropylene, Teflon, Nylon

UNSUITABLE CONSTRUCTION MATERIAL :
 Carbon steel, Stainless Steel 304, PVC, Buna-N, Neoprene, Butyl rubber

SPECIFIC USE(S) :
 BIOCIDES

For specific dosages and customized applications please contact your representative.

8. | EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

This product contains the following component(s) with a recognised or recommended OEL value:

Country/Source	Substance(s)	Category:	ppm	mg/m3
Manufacturer's Recommendation	5-Chloro-2-Methyl-4-Isothiazolin-3-one	TWA		0.076
		STEL		0.23
Manufacturer's Recommendation	2-Methyl-4-Isothiazolin-3-one	TWA		1.5
		STEL		4.5
AUSTRIA	5-Chloro-2-Methyl-4-Isothiazolin-3-one	MAK Skin*		0.05
	2-Methyl-4-Isothiazolin-3-one	MAK Skin*		0.05
GERMANY	5-Chloro-2-Methyl-4-Isothiazolin-3-one (Inhalable fraction.)	MAK		0.2
	2-Methyl-4-Isothiazolin-3-one (Inhalable fraction.)	MAK		0.2
SWITZERLAND	5-Chloro-2-Methyl-4-Isothiazolin-3-one (Inhalable dust)	TWA		0.2
		STEL		0.4
	2-Methyl-4-Isothiazolin-3-one (Inhalable dust)	TWA STEL		0.2 0.4
SLOVENIA	A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	TWA		0.05
		Skin*		

* A skin notation refers to the potential significant contribution to overall exposure by the cutaneous route, including mucous membranes and the eyes.

MONITORING MEASURES :

A small volume of air is drawn through an absorbant or barrier to trap the substance(s) which can then be desorbed or removed and analyzed as referenced below:

Substance(s)	Method	Analysis	Absorbant
5-Chloro-2-Methyl-4-Isothiazolin-3-one	No method identified		

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2-Methyl-4-Isothiazolin-3-one

No method identified

ENGINEERING MEASURES :

Use general ventilation with local exhaust ventilation. Use a closed dosing system.

PERSONAL PROTECTION

GENERAL ADVICE :

The use and choice of personal protection equipment is related to the hazard of the product, the workplace and the way the product is handled. In general, we recommend as a minimum precaution that safety glasses with side-shields and workclothes protecting arms, legs and body be used. In addition any person visiting an area where this product is handled should at least wear safety glasses with side-shields. The applicable European standard can be found in EN 166.

RESPIRATORY PROTECTION :

Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: A-B-E-K-P The applicable European standard can be found in EN 140, EN 137, EN 143 and EN 14387. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION :

When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled, but we have positive experience under light handling conditions using gloves made from Nitrile Butyl rubber PVC Viton Gloves should be replaced immediately if signs of degradation are observed. Breakthrough time not determined as preparation, consult PPE manufacturers. The applicable European standard can be found in EN 374.

SKIN PROTECTION :

When handling this product, the use of a chemical resistant suit and rubber boots is recommended. The applicable European standard can be found in EN ISO 20345.

EYE PROTECTION :

Wear a face shield with chemical splash goggles. The applicable European standard can be found in EN 166.

HYGIENE RECOMMENDATIONS :

Use good work and personal hygiene practices to avoid exposure. Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

9. | PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Light yellow Green
ODOR	Mild

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FLASH POINT : Not flammable
SPECIFIC GRAVITY 1.026 (25 °C)
SOLUBILITY IN WATER Complete
pH (100 %) 3.0 - 5.0 ASTM E-70
VISCOSITY 3 cst (25 °C)
MELTING POINT -3 °C
BOILING POINT 100 °C ASTM D-86

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY :

Stable under normal conditions.

HAZARDOUS POLYMERIZATION :

Hazardous polymerization will not occur.

CONDITIONS TO AVOID :

Freezing temperatures.

MATERIALS TO AVOID :

Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: Oxides of carbon, Oxides of nitrogen, Oxides of sulfur, HCl

11. TOXICOLOGICAL INFORMATION

The following results are for the product.

ACUTE ORAL TOXICITY :

Species	LD50	Test Descriptor
Rat	3,810 mg/kg	Product

ACUTE DERMAL TOXICITY :

Species	LD50	Test Descriptor
Rabbit	> 5,000 mg/kg	Product

ACUTE INHALATION TOXICITY :

Species	LC50	Test Descriptor
Rat	13.7 mg/l (4 hrs)	Product

PRIMARY SKIN IRRITATION : Causes burns.

PRIMARY EYE IRRITATION : Causes burns.

SENSITIZATION :

Repeated or prolonged contact may cause sensitization in some individuals. A Guinea pig (Buehler Technique) sensitization study with an induction dosage of 90 ppm of active ingredients followed by an insult of 429 ppm of active ingredients was positive. A human repeated insult patch study of 28 ppm active ingredients followed by an insult of 56 ppm of active ingredients resulted in no effect to the subjects tested.

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CHRONIC TOXICITY DATA :

A 90-day dietary study in dogs of 840 ppm of isothiazolinone resulted in no mortalities or pathological findings. A 90-day dermal study in rabbits of 0.4 mg/kg/day of isothiazolinone resulted in irritation but no pathological effects. A 30-month skin painting study with mice using 400 ppm isothiazolinone three times per week showed no increased tumor frequency over control. A teratology study with rabbits and rats was negative using dosages of 1.5 to 15 mg/kg isothiazolinone. Mutagenicity results have been equivocal.

CARCINOGENICITY :

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

For additional information on the hazard of the preparation, please consult section 2 and 12.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS :

The following results are for the product along with results on the active substances. The following results are for the product.

ACUTE FISH RESULTS :

Species	Exposure	LC50	NOEC	Method	Test Descriptor
Sheepshead Minnow	96.00 hrs	32.000 mg/l	18.000 mg/l		Product
Bluegill Sunfish	96 hrs	18.67 mg/l			Product
Rainbow Trout	96 hrs	12.67 mg/l			Product
Inland Silverside	96 hrs	16.62 mg/l	12.5 mg/l		Product
Bluegill Sunfish	96 hrs	0.28 mg/l			Active Substance
Rainbow Trout	96 hrs	0.19 mg/l			Active Substance

ACUTE INVERTEBRATE RESULTS :

Species	Exposure	LC50	EC50	Method	Test Descriptor
Ceriodaphnia dubia	48 hrs	15 mg/l			Product
Mysid Shrimp (Mysidopsis bahia)	96.00 hrs	18.000 mg/l		Static	Product
Daphnia magna	48 hrs	8.7 - 12 mg/l			Product (estimated)
Daphnia magna	48 hrs	0.16 mg/l			Active Substance

AQUATIC PLANT RESULTS :

Species	Exposure	EC50/LC50	Method	Test Descriptor
Marine Algae (Skeletonema costatum)		0.003 mg/l		Active Substance
Green Algae (Selenastrum capricornutum)		0.018 mg/l		Active Substance

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ADDITIONAL ECOLOGICAL DATA

Product contains organic halogens, may contribute to AOX. Discharge in minor quantity into adapted biological units of sewage treatment plants is not expected to affect the efficiency of the activated sludge process.

PERSISTENCY AND DEGRADATION :

Total Organic Carbon (TOC) : 7,850 mg/l

Chemical Oxygen Demand (COD) : 20,000 mg/l

The product may be degraded via abiotic processes.

BIOACCUMULATION POTENTIAL

This preparation or material is not expected to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

If this preparation becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code. Use only authorized contractors. Ensure compliance with EC, national and local regulations.

Dispose of wastes in an approved incinerator or waste treatment/disposal site, in accordance with all applicable regulations. Do not dispose of wastes in local sewer or with normal garbage. This product will generate an ash if burned. It can be burned directly in appropriate equipment. Any chemical waste is a potential environmental pollutant and is NOT suitable for disposal via ground, municipal sewers, drains, natural streams or rivers.

Empty drums should be taken for recycling, recovery, or disposal through a suitably qualified or licensed contractor.

EUROPE WASTE CODE :

16 03 03* - OFF SPECIFICATION BATCHES AND UNUSED PRODUCTS - Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code.

NATIONAL REGULATIONS AUSTRIA :

Waste Code :53103

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II
ADR/RID H.I.n. :	80
CLASSIFICATION CODE :	C3

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AIR TRANSPORT (ICAO/IATA)

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II
IATA Cargo Packing Instructions :	812
IATA Cargo Aircraft Limit :	30 L (Max net quantity per package)
IATA Passenger Packing Instructions :	Y808 / 808
IATA Passenger Aircraft Limit :	0.5 L / 1 L

MARINE TRANSPORT (IMDG/IMO)

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	5-Chloro-2-Methyl-4-Isothiazolin-3-one
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II

OTHER APPLICABLE INFORMATION

CEPIC TREMCARD REFERENCE :	80GC3-II+III
EMERGENCY ACTION CODE :	2X

15. REGULATORY INFORMATION

CLASSIFICATION AND LABELLING :

GOVERNING DIRECTIVE(S): Dangerous Substances Directive 67/548/EEC and Dangerous Preparations Directive 1 999/45/EC.

HAZARD SYMBOLS



CORROSIVE

Contains...A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

RISK PHRASES

R34 - Causes burns.
R43 - May cause sensitization by skin contact.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S24/25 - Avoid contact with skin and eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 - Avoid release to the environment. Refer to special instructions/Safety Data sheets.

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16. | OTHER INFORMATION

LIST OF RELEVANT R-PHRASES AND NOTAS IN SECTION 3

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R34 - Causes burns.

R43 - May cause sensitization by skin contact.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- REVISED INFORMATION: section(s):

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This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

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