

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2147

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **Accepta 2147**

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 : **01/05/2008**

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

2. 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	SYMBOL	R-PHRASES / NOTAS	% (w/w)
Sodium Nitrate	231-554-3	O	R08	10 - 30
Magnesium Nitrate	233-826-7	O	R08	1 - 5
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	T, N	R23/24/25, R34, R43, R50/53	3 - 10

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

3. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION :

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Harmful by inhalation, in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

HUMAN HEALTH HAZARDS - ACUTE :

INHALATION :

Not a likely route of exposure. Elevated temperatures or mechanical action may form vapors, mists or fumes which may be irritating to the eyes, nose, throat and lungs. Harmful by inhalation.

SKIN CONTACT :

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

EYE CONTACT :

Corrosive. Will cause eye burns and permanent tissue damage.

INGESTION :

Not a likely route of exposure. Corrosive; causes chemical burns to the mouth, throat and stomach. Harmful if swallowed.

HUMAN HEALTH HAZARDS - CHRONIC :

No adverse effects expected other than those mentioned above.

ENVIRONMENTAL HAZARDS :

Keep out of waterways. Spilled product may pose a risk to the aquatic ecosystem if released.

PHYSICAL AND CHEMICAL HAZARDS :

Dried product residue can act as an oxidizer.

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.

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.

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5. FIRE FIGHTING MEASURES

FLASH POINT : Not applicable

EXTINGUISHING MEDIA :

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

FIRE AND EXPLOSION HAZARD :

Strong oxidizer when water is removed. Combustibles may catch fire more easily after being wetted by product and dried. May intensify combustion of other materials. Not flammable or combustible.

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. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Ventilate spill area if possible. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP :

SMALL SPILLS: Dike and absorb with inert material (e.g. dry earth, sand), shovel all contaminated solids into a pail or drum and then treat with enough deactivation solution to wet the solids thoroughly. Let these containers stand open for 48 hours to prevent pressure build up and then seal for disposal. Equipment containing residues should be decontaminated before carrying out maintenance or repair work or using for other service. Contaminated surfaces should be swabbed with deactivation solution, wait for the reaction to subside and rinse thoroughly with clean water. **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. 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 :

Prevent material from entering sewers or waterways. Spilled product may pose a risk to the aquatic ecosystem if released. 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. Do not breathe vapors/gases/dust. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled.

STORAGE CONDITIONS :

Protect product from freezing. Store in suitable labeled containers. Store the containers tightly closed.

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SUITABLE CONSTRUCTION MATERIAL :

Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

SPECIFIC USE(S) :

BIOCIDE

For specific dosages and customized applications please contact your representative.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

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	MAK Skin*		0.05
	2-Methyl-4-Isothiazolin-3-one	MAK Skin*		0.05
NETHERLANDS	5-Chloro-2-Methyl-4-Isothiazolin-3-one	MAC TGG		0.2
	2-Methyl-4-Isothiazolin-3-one	MAC TGG		0.2
SWITZERLAND	5-Chloro-2-Methyl-4-Isothiazolin-3-one (Inhalable dust)	TWA STEL		0.2 0.4
	2-Methyl-4-Isothiazolin-3-one (Inhalable dust)	TWA STEL		0.2 0.4
SLOVENIA	5-Chloro-2-Methyl-4-Isothiazolin-3-one	TWA Skin*		0.05
	2-Methyl-4-Isothiazolin-3-one	TWA Skin*		0.05

* 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
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5-Chloro-2-Methyl-4-Isothiazolin-3-one No method identified

2-Methyl-4-Isothiazolin-3-one No method identified

ENGINEERING MEASURES :

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

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-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 PVC. 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 overalls, a chemical resistant apron 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.

ENVIRONMENTAL EXPOSURE CONTROL PRECAUTIONS :

Consider the provision of containment around storage vessels.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Clear
ODOR	Mild
FLASH POINT :	Not applicable
SPECIFIC GRAVITY	1.2 (20 °C)
SOLUBILITY IN WATER	Complete
pH (100 %)	3 - 5
MELTING POINT	-4 °C

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 :

Avoid extremes of temperature. Do not allow product to evaporate to dryness. Dried product residue can act as an oxidizer.

MATERIALS TO AVOID :

Bases, Contact with strong alkalis (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS :

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

11. TOXICOLOGICAL INFORMATION

The following values are estimated based on known component toxicity.

ACUTE ORAL TOXICITY :

Species	LD50	Test Descriptor
Rat	> 2,000 mg/kg	Product (estimated)

ACUTE DERMAL TOXICITY :

Species	LD50	Test Descriptor
Rabbit	> 3,000 mg/kg	Product (estimated)

ACUTE INHALATION TOXICITY :

Species	LC50	Test Descriptor
Rat	7 mg/l (4 hrs)	Product (estimated)

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SENSITIZATION :

May cause sensitization by skin contact.

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 3 and 12.

12. ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL EFFECTS :**

The following values are estimated based on known component toxicity.

ACUTE FISH RESULTS :

Species	Exposure	LC50	NOEC	Method	Test Descriptor
Sheepshead Minnow	96 hrs	17 mg/l			Product (estimated)
Bluegill Sunfish	96 hrs	10 mg/l			Product (estimated)
Fathead Minnow	144 hrs	4.3 mg/l			Product (estimated)
Rainbow Trout	96 hrs	7 mg/l			Product (estimated)
Inland Silverside	96 hrs	9 mg/l			Product (estimated)

ACUTE INVERTEBRATE RESULTS :

Species	Exposure	LC50	EC50	Method	Test Descriptor
Daphnia magna	48 hrs	0.13 mg/l			Active Substance
Blue Mussel	96 hrs	1.9 mg/l			Active Substance
Blue Mussel	48 hrs	14 mg/l			Active Substance
American Oyster	48 hrs	28 mg/l			Active Substance

AVIAN RESULTS :

Species	Exposure	LC50	Method	Test Descriptor
Bobwhite Quail	21 Days	85 mg/kg		
Bobwhite Quail	8 Days	> 560 mg/kg		
Pekin Duck	8 Days	> 560 mg/kg		

MOBILITY :

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
<5%	30 - 50%	50 - 70%

The portion in water is expected to be soluble or dispersible.

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PERSISTENCY AND DEGRADATION :

Greater than 95% of this product consists of inorganic substances for which a biodegradation value is not applicable.

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.

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) :	A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
UN/ID No :	UN 3265
Hazard Class - Primary :	8
Packing Group :	II
ADR/RID H.I.n. :	80
CLASSIFICATION CODE :	C3

AIR TRANSPORT (ICAO/IATA)

Proper Shipping Name :	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name(s) :	A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
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)

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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) : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
UN/ID No : UN 3265
Hazard Class - Primary : 8
Packing Group : II

OTHER APPLICABLE INFORMATION

CEFIC 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 1999/45/EC.

HAZARD SYMBOLS



CORROSIVE



DANGEROUS FOR THE ENVIRONMENT

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

RISK PHRASES

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
R34 - Causes burns.
R43 - May cause sensitization by skin contact.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S23 - Do not breathe vapor.
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).
S60 - This material and/or its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/Safety Data sheets.

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NATIONAL REGULATIONS FRANCE

Table of occupational diseases, Article L461-4. Social Security Code- Decree 11/2/2003: Not-applicable.
Classified Industrial Sites (ICPE): Relevant. Headings: 1173

NATIONAL REGULATIONS GERMANY

WGK 3 (Annex 4)

INTERNATIONAL CHEMICAL CONTROL LAWS

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

UNITED STATES

This product has not been evaluated for TSCA and may contain substances not found on the TSCA 8(b) Inventory List. This product may be used under the TSCA 5(h)(3) Research Exemption if all requirements are met.

CANADA :

The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Ministry of International Trade & Industry List (MITI).

16. OTHER INFORMATION

LIST OF RELEVANT R-PHRASES AND NOTAS IN SECTION 2

R08 - Contact with combustible material may cause fire.

R22 - Harmful if swallowed.

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

R34 - Causes burns.

R36/38 - Irritating to eyes and skin.

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.

EMERGENCY TELEPHONE NUMBER(S) +44 (0) 161 877 2334
