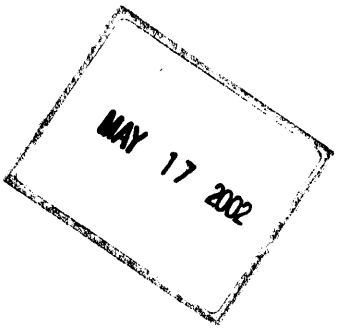
ALGEA

National Organic Standards Board
C/O Robert Pooler
Agricultural Marketing Specialist
USDA/AMS/TM/NOP
Room 2510-S0.
Ag Stop 0268
PO Box 96456
Washington DC 20090-6456
United States of America



27th February 2002

Dear Mr Pooler,

Petition for the use of Potassium carbonate as an non organic substance for use in the processing of kelp extract, and petition for use of Acticide AS as a non-organic biocide to prevent fermentation of liquid organic Norwegian kelp products

I am writing to you in my capacity as technical manager of Algea as, one of the largest producers of seaweed extract for use in agriculture world wide.

Recently, our distributor in USA informed us there may be some confusion relating to the status of our products for use in organic agriculture in USA. The confusion arises because we usually produce our extract from *Ascophyllum nodosum* using Potassium carbonate.
Our distributors believe that only extraction using the more caustic potassium hydroxide is approved.

I have checked with Cindy Douglas of OMRI, who informs me that extraction using Potassium carbonate is allowed by OMRI to extract kelp. Their reasoning is 'it is basically the same thing in solution as KOH and performs the same function.' She however does not think this was written into the final ruling

I think perhaps this is where we have some confusion between OMRI and our distributor, and perhaps more importantly with our customers who have successfully been using our product for many years.

The products manufactured by us, and currently approved on the National List are:
Maxicrop Liquid
Maxicrop Soluble Seaweed Powder
Both supplied by Maxicrop USA with OMRI status 'A'

Could you please clarify the situation to me, and explain how this affects us.

I have also included a petition for the use of Potassium carbonate incase this process becomes a necessity.

On a second issue, Ms Douglas informs me 'GRAS or list 4 synthetic preservatives are no longer allowed. OMRI will be reviewing listed products in the next 2-3 months to determine if these are allowed'. Our solid seaweed extract products do not contain preservatives, however some liquid products may. Could you please also clarify this issue? Again I have included a petition for the currant preservative, in the event it should be required

I hope that you will keep me informed with progress in this issue

Yours sincerely

Dr. D Pattison
Technical Manager
Algea / Maxicrop
Oslo, Norway

Petition process for the use of Acticide AS as a non-organic biocide to prevent fermentation of liquid organic Norwegian kelp products.

1. Category for inclusion on National List

Non organic (non-agricultural) substance allowed in processing

2. Common Name

Acticide AS (Formerly Acticide SR911). A water based formulation of 1,2-benzisothiazolin-3-0ne and a thiazolin derivative.

3. Manufacturer Name and Address

Thor Chemie GmgH
Landwehrstasse 1
D-67346 Speyer
Germany

Thor Chemicals (UK) Limited
Commercial Avenue
Cheadle Hulme
Cheshire
England SK8 6QH

Telephone +44 161 486 1051
Fax +44 161 488 4125

4. List of uses, rates and applications for crops and livestock uses, mode of action for handling uses

Low toxicity biocide with excellent alkali stability specifically developed for the complete protection of water based products against bacterial and fungal spoilage in the wet state. Specific use in this petition is for the protection of liquid kelp products.

Formulation concentration is in the range 0.05% - 0.40% based on total product weight

Acticide AS is a broad spectrum biocide against bacteria, moulds and yeast, that may cause deterioration of water based products.

5. Sources and detailed description of manufacturing procedures.

To be supplied by manufacturer.

6. Summaries of any previous review by state or private certification agencies.

Accepted for use as a preservative in kelp products by the Norwegian organic association DEBIO and used in seaweed extract products approved by UK soil association. Previously accepted in USA in OMRI accepted kelp products.

7. Registration status with EPA, FDA or state authorities

FDA 21 CFR 175.105	Adhesives
FDA 21 CFR 176.300	Slimicides
BGA Chapter 36	Preservatives for paper cartons in contact with food
Warenwet Chapter 2	Adhesives

8. Chemical abstract service (CAS) number

CAS No. 2492-26-4

9 Physical Properties of the substance and chemical mode of action

Form:	Liquid
Colour:	Brown
Odour:	Mild
Change in condition	not determined

Melting point	not determined
Boiling point	ca. 100 °C
Flash point	not applicable
Inflammability (solid, gaseous)	Product is not flammable
Danger of explosion	Product is not explosive
Dencity at 20 °C	1.125+/- 0.025 g/cm3
Solubility in / Miscibility with Water	Fully miscible
pH value at 20 °C	>13

10. Safety information, including MSDS and NIEHS

MSDS enclosed and states 'as when handling any chemical, it is recommended that normal protective clothing, including overalls, gloves, goggles and face protection should be worn when handling Acticide AS, and skin contact should be avoided at all times.

Designation according to EC guidelines:

C Corrosive

Safety phrases:

36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
24	Avoid contact with skin.
25	In cases of contact with eyes, rinse immediately with plenty of water and seek medical advice.
45	In case of accident or if you feel unwell, seek medical advice immediately.

11. Research information including research and bibliographies

Efficacy details against a wide range of contaminants as detailed in 'Product information sheet' enclosed.

12. Petition justification, that states why the synthetic substance is necessary, alternatives that could be used, beneficial effects to the environment etc.

Liquid seaweed extracts require a suitable preservative to prevent fermentation in the packing material. Without a preservative, products quickly ferment, degrade and become unusable. Acticide AS has been used as a preservative in liquid Norwegian kelp products used in the organic market for many years.

This product was approved as a replacement for formaldehyde which was deemed unacceptable to the organic market

Various products available and approved in USA (e.g. Algamin) have used this product as a safe alternative to formaldehyde for many years and it continues to be used for products approved for organic use in Europe.

Alternative acceptable products have been proposed, (e.g. citric acid), however we believe that these products do not give sufficient preservative life to biostimulant products, and will not prevent fermentation.

It is for this reason that the continued use of a safe alternative, Acticide AS is petitioned.

THOR

Material Safety Data Sheet
According to 91/155 EC

Printing date 04.07.97 Reviewed on 07.01.97

1 Identification of substance

· **Product details**

· **Trade name: ACTICIDE AS**

· **Article number:** A 2040

· **Manufacturer/Supplier:**

THOR CHEMIE GmbH
Landwehrstraße 1
D-67346 Speyer
-Germany-

THOR CHEMICALS (UK) LTD
Commercial Avenue
Cheadle Hulme
GB-Cheshire SK8 6QH
-Great Britain-

· **Informing department:**
Product Management Biocides, Tel.: (GB) +44 161 486 1051
Fax: (GB) +44 161 488 4125

· **Emergency information:** (GB) 012 35 83 48 00

*

2 Composition/Data on components

· **Chemical characterization**
· **Description:**
microbiocide based on sodium mercaptobenzothiazole (CAS No. 2492-26-4) and 1,2-benzisothiazol-3(2H)-one salts

Dangerous components:

1310-58-3	potassium hydroxide C; R 35	< 10 %
2634-33-5	1,2-benzisothiazol-3(2H)-one Xn; R 22-38-43	< 10 %
1310-73-2	sodium hydroxide C; R 35	≤ 2.5 %
149-30-4	2-Mercaptobenzthiazole Xi, N; R 43-50/53	< 10 %

· **Additional information**
EINECS No. 215-181-3 (KOH)
EINECS No. 220-120-9 (benzisothiazolone)
EINECS No. 215-185-5 (NaOH)
EINECS No. 205-736-8 (MBT)

3 Hazards identification

· **Hazard designation:**

C Corrosive

· **Information pertaining to particular dangers for man and environment**
R 35 Causes severe burns.
R 43 May cause sensitization by skin contact.
· **Classification system**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

Material Safety Data Sheet
According to 91/155 EC

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

4 First aid measures

· **General information**
Immediately remove any clothing soiled by the product.
· **After inhalation** Supply fresh air; consult doctor in case of symptoms.
· **After skin contact**
Clean with water and soap. Then also wash with polyethylene glycol 400, if available.
If skin irritation occurs, get medical attention.
· **After eye contact**
Rinse opened eye for several minutes under running water. Get medical attention.
· **After swallowing**
Rinse out mouth and then drink plenty of water.
Administer activated charcoal.
Do not induce vomiting. Call for medical help.
· **Information for doctor**
· **The following symptoms may occur:** Allergic skin reactions.

5 Fire fighting measures

· **Suitable extinguishing agents**
Water spray jet, extinguishing powder, CO2, foam.
· **Unsuitable extinguishing agents for reasons of safety:** None
· **Special hazards caused by the material, its products of combustion or flue gases:**
Can be released in case of fire:
Sulphur dioxide (SO2)
· **Protective equipment:** Wear self-contained breathing apparatus.

6 Accidental release measures

· **Personal safety precautions:**
Wear protective equipment. Keep unprotected persons away.
· **Measures for environmental protection:**
Inform authorities in case of contamination of water or sewerage system.
As the product is hazardous for aquatic environment, it must be prevented from reaching surface water.
· **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

Material Safety Data Sheet
According to 91/155 EC

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

7 Handling and storage

· **Handling**
· **Information for safe handling:** Open and handle containers with care.
· **Information about protection against explosion and fire:**
No special measures required.

· **Storage**
· **Requirements to be met by storerooms and containers:**
Use polyolefine containers.
· **Information about storage in a common storage facility:**
Do not store together with acids.
· **Further information about storage conditions:**
At temperatures below 5°C, the product tends to crystallize. However, after warming up it again and thus dissolving it, the product can still be used without impairing the quality.
· **Storage class:**
· **Classification according to regulation on inflammable liquids (VbF):**
None

8 Exposure controls and personal protection:

· **Additional information about design of technical systems:**
No further data; see item 7.

· **Components with critical values that require monitoring at the workplace:**
1310-58-3 potassium hydroxide (2.5-10%)
OEL: 2 mg/m3

1310-73-2 sodium hydroxide (≤ 2.5%)
OEL: 2 mg/m3
· **CAS No. Designation of material % Type Value Unit**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:**
The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**
· **General protective and hygienic measures**
Avoid contact with the eyes and skin.
· **Respiratory protection:** Not required
· **Protection of hands:**

PVC or PE gloves

· **Eye protection:**

Tightly sealed safety glasses.

· **Body protection:** Alkaline resistant protective clothing

Material Safety Data Sheet
According to 91/155 EC

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

9 Physical and chemical properties:

· **Form:** liquid
· **Colour:** Brown
· **Odour:** Mild

	Value/Range	Unit	Method
· **Change in condition**			
· **Melting point/Melting range:**	not determined		
· **Boiling point/Boiling range:**	ca. 100 ° C		
· **Flash point:**	not applicable		
· **Inflammability (solid, gaseous)**	Product is not inflammable.		
· **Danger of explosion:**	Product is not explosive.		
· **Density** at 20 ° C	1.125 ± 0.025	g/cm3	
· **Solubility in / Miscibility with**			
· **Water:**	Fully miscible		
· **pH-value:** at 20 ° C	> 13		

10 Stability and reactivity

· **Conditions to be avoided:**
Protect from temperatures < 10°C.
sensitive to frost
· **Minimum shelf life:** 12 months from production date
· **Materials to be avoided:**
Acids
oxidizing agents
· **Dangerous products of decomposition:**
None, if storage and handling is done according to specification.

11 Toxicological information

· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:**

Components	Type	Value	Species
1,2-benzisothiazol-3(2H)-one	oral	1 020 mg/kg	rat
2-Mercaptobenzthiazole	oral	> 2 000 mg/kg	rat
	dermal	> 2 000 mg/kg	rat

· **Primary irritant effect:**
· **on the skin:** Strong caustic effect on skin and mucous membranes.
· **on the eye:** Strong caustic effect.
· **Sensitization:** Sensitization possible by skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

* 12 Ecological information:

· **Information about elimination (persistence and degradability):**
· **Other information:**
The active ingredient(s) is (are) biodegradable up to the MIC for bacteria.
· **Ecotoxiological effects:**
· **Remark:**
Fish toxicity (BIT): LC 50 1,4 mg/l, Oncorhynchus mykiss, 96 hr
Daphnia toxicity: EC 50 1,05 ppm, a.i., Daphnia magna, 96 hr
· **Behaviour in sewage processing plants:**
· **Type of test Effective concentration Method Assessment**
Bacteria toxicity: MIC 50 ppm BIT, Pseudomonas aeruginosa
· **Remark:**
Depending on concentration, toxic effects on activated sludge organisms are possible.
· **Additional ecological information:**
· **AOX-indication:**
The product does not contain substances, which can influence the AOX of waste water.
· **The formulation contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC:**
None
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water courses or sewerage system.

13 Disposal considerations

· **Product:**
· **Recommendation**
Product must be disposed of according to local regulations pertaining to the disposal of hazardous waste.

· **Contaminated packaging:**
· **Recommendation:**
Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.
· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

* **14 Transport information:**

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
· **ADR/RID-GGVS/E Class:** 8 Corrosive materials
· **Number/Letter:** 42b
· **Kemler Number:** 80
· **UN-Number:** 1719
· **Label** 8
· **Designation of goods:** UN 1719 Ätzender alkalischer flüssiger Stoff, n.a.g. (Kaliumhydroxid), Gemisch, ACTICIDE AS
Caustic alkali liquid, n.o.s., (potassium hydroxide), mixture

· **Maritime transport IMDG/GGVSea:**
· **IMDG Class:** 8
· **Page:** 8136
· **UN Number:** 1719
· **Packaging group:** II
· **EMS Number:** 8-06
· **MFAG:** 705
· **Marine pollutant:** no
· **Correct technical name:** Caustic alkali liquid, n.o.s., (potassium hydroxide), mixture, UN 1719
· **Remarks:** Flash point: n.a.

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** 8
· **UN/ID Number:** 1719
· **Packaging group:** II
· **Correct technical name:** Caustic alkali liquid, n.o.s., (potassium hydroxide), mixture, UN 1719
· **Remarks:**
Packing Instructions/Max. net weight
Passenger aircraft: 809 / 1 l
Cargo aircraft: 813 / 30 l

Printing date 04.07.97 Reviewed on 07.01.97

Trade name: ACTICIDE AS

15 Regulatory information

· **Designation according to EC guidelines:**

· **Code letter and hazard designation of product:** C Corrosive
· **Hazard-determining components of labelling:**
1,2-benzisothiazol-3(2H)-one
potassium hydroxide
sodium hydroxide

· **Risk phrases:**
35 Causes severe burns.
43 May cause sensitization by skin contact.

· **Safety phrases:**
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
45 In case of accident or if you feel unwell, seek medical advice immediately.

· **National regulations**

· **Classification according to VbF:** None

· **Water hazard class:**
Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

This data is based on our present knowledge. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

May we draw your attention to the changes made since the previous edition of this safety data sheet. The paragraphs changed are marked with "*".

· **Department issuing data specification sheet:** Biocides Department
· **Contact:** Mr. David K. Wood

ACTICIDE® AS

Product Information

THOR

A biocide for the preservation of alkaline aqueous systems, **ACTICIDE® AS** contains no organic solvents or formaldehyde.

Chemical and Physical Characteristics

Composition:	A water based formulation of 1,2-benzisothiazolin-3-one and a thiazole derivative
Appearance:	Clear brown liquid
Colour (Gardner):	<20
Odour:	Mild
Density;	1.100 - 1.150
pH (20°C):	12.0 - 14.0
Refractive Index (20°C):	1.3940 - 1.4140
Solubility:	Miscible with water and most lower alcohols and glycols
Stability in application *:	Stable in the presence of light, over the pH range 3 - 13 and up to 80°C

Biocidal Properties

ACTICIDE® AS has a very broad activity spectrum against the bacteria, moulds and yeasts that may cause infection and deterioration of water based products, including the following organisms:

Typical Spoilage Organisms

Bacteria	Moulds	Yeasts
Achromobacter sp.	Aspergillus sp.	Candida albicans
Aeromonas sp.	Cephalosporium sp.	Rhodotorula sp.
Alcaligenes sp.	Cladosporium sp.	Saccharomyces cerevisiae
Bacillus sp.	Fusarium sp.	
Escherichia coli	Paecilomyces variotii	
Flavobacterium sp.	Penicillium funiculosum	
Klebsiella sp.		
Proteus sp.		
Pseudomonas sp.		
Streptomyces sp.		

Applications / Use Levels

ACTICIDE® AS is suitable for the wet-state preservation of a wide range of aqueous products including paints, polymer emulsions, adhesives, ceramic glazes, fillers and sealants. **ACTICIDE® AS** is specifically designed for products having an alkaline pH above 8.5.

Normal use concentrations are in the range 0.05 - 0.40%, depending on the product to be protected and the environmental conditions to which it will be exposed. The precise level required by a specific formulation can be determined by the local **Thor Microbiological Technical Centre**.

Addition / Compatibility

ACTICIDE® AS can be added at any time during production. However, it is advised to add it as early as possible to give protection throughout the production process. Care should be taken to ensure that temperature and pH at the point of addition are suitable for stability of the product.

ACTICIDE® AS is compatible with most formulations in which its application is recommended and it may be used in formaldehyde sensitive systems. Nevertheless, users are advised to carry out their own tests or seek further advice from **Thor** prior to initial application.

Packaging / Storage / Transport / Regulatory Approvals

Packaging:	30 and 200 kg plastic drums and 1,000 kg intermediate bulk containers
Shelf Life:	12 months from production date when stored at approximately 20° C
Availability:	Ex stock in the above packaging
Storage:	Store in the original containers and protect from extremes of temperature.
Transportation:	**ACTICIDE® AS** is classified as hazardous for transport
Regulatory Approvals:	The active-substances of **ACTICIDE® AS** have BgVV chapter 36, FDA 21 CFRs 175.105, 176.300, Warenwet Chapter 2 and a wide range of other regulatory approvals.

Safety / Labelling / Toxicology**

Protective Clothing: Normal precautions should be applied including the wearing of protective clothing, rubber gloves and eye protection. Contact with the skin, eyes and mucous membranes must be avoided.

R and S Phrases: R: 35, 43, S: 24, 26, 36/37/39, 45

Labelling: C Corrosive: Finished products containing **ACTICIDE® AS** within the recommended concentration range require no special labelling.

Toxicology:

1,2-benzisothiazolin-3-one:

Acute oral toxicity:	LD_{50}: >1,020 mg/kg (rat)

2-mercaptobenzothiazole:

Acute oral toxicity:	LD_{50}: >2,000 mg/kg (rat)
Acute dermal toxicity:	LD_{50}: >2,000 mg/kg (rabbit)

Product:

Primary skin irritation:	Strong caustic on the skin and the mucous membranes.
Primary eye irritation:	Strong caustic effect
Sensitisation:	Sensitisation possible by skin contact.

The above values relate to the active substances giving rise to the hazard classification and to the product as supplied.

* The data given are time and system dependant
** Further details are given in the separate Material Safety Data Sheet.

The information contained in this leaflet is intended to be of assistance to users but is without guarantee. Variations can occur in application and users are advised to conduct their own tests. Suggestions for use neither give nor imply any freedom from patent infringement.

Version1/02.99/JWG-ip

THOR NORDIC MÖLNDALSVÄGEN 24, 412 63 GÖTEBORG, SWEDEN
TEL:+ 46 (0) 31 40 41 46 FAX: + 46 (0) 31 40 41 25

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

* **1 Namnet på produkten och företaget**

· **Produktuppgifter**

· **Handelsnamn: ACTICIDE AS**

· **Artikelnummer:** A 2040

· **Tillverkare / leverantör:**
THOR CHEMIE GMBH
Landwehrstraße 1
D-67346 Speyer
Tyskland

THOR NORDIC
Mölndalsvägen 24
412 63 Göteborg
Sweden

· **Område där upplysningar kan inhämtas:**
Avdelning Biocider, Tel.: 0049-6232-636-0
Fax: 0049-6232-636-179
· **Upplysningar i nödfall:** Telefonnummer vid nödfall: 0049-621-60-43333

* **2 Sammansättning / ämnenas klassificering**

· **Kemisk karakterisering**
· **Beskrivning:**
mikrobiocid baserad på natriummerkaptabenzothiazol (CAS nr. 149-30-4) och 1.2-benzisothiazol-3(2H9-on salter

Farliga ingredienser:

1310-58-3	Kaliumhydroxid C; R 22-35	< 10 %
2634-33-5	1,2-benzisotiazol-3(2H)-on Xn, N; R 22-38-41-43-50/53	< 10 %
1310-73-2	Natriumhydroxid C; R 35	< 2,5 %
149-30-4	benzotiazol-2-tiol Xi, N; R 43-50/53	< 10 %

· **Ytterligare hänvisningar:**
EINECS Nr. 215-181-3 (KOH)
EINECS No. 220-120-9 (BIT)
EINECS Nr. 215-185-5 (NaOH)
EINECS Nr. 205-736-8 (MBT)

3 Farliga egenskaper

· **Riskbeteckning:**

C Frätande

· **Speciella hänvisningar beträffande risker för människa och miljö:**
R 35 Starkt frätande
R 43 Kan ge allergi vid hudkontakt
· **Klassificeringssystem:**
Klassificeringen motsvarar aktuella EC bestämmelserna, men har

(Fortsättning på sida 2)

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

Handelsnamn: ACTICIDE AS

(Fortsättning från sida 1)
kompletterats med uppgifter ur facklitteratur och med firmauppgifter.

4 Första hjälpen

· **Allmänna hänvisningar:**
Klädesplagg som förorenats med produkten skall omedelbart avlägsnas.
· **Efter inandning:** Tillförsel av friskluft, vid besvär kontakta läkare.
· **Efter kontakt med huden:**
Rengör med vatten och tvål, om möjligt även med polyetylenglykol 400.
Vid ihållande retning av huden kontakta läkare.
· **Efter kontakt med ögonen:**
Skölj ögonen öppna i flera minuter under rinnande vatten och kontakta läkare.
· **Efter förtäring:**
Skölj munnen och drick rikligt med vatten.
Ge aktivkol.
Framkalla ej kräkning, tillkalla omedelbart läkarhjälp.
· **Hänvisningar för läkaren:**
· **Följande symptom kan uppträda:** Allergiska symptom

*

5 Åtgärder vid brand

· **Lämpliga släckningsmedel:**
Vattenspraystråle, släckningspulver, CO2, skum.
· **Släckningsmedel som är olämpliga av säkerhetsskäl:** Inga
· **Speciella risker som uppstår genom ämnet, dess förbränningsprodukter eller gaser som bildas:**
Vid brand kan frisättas:
Svaveldioxid (SO2)
Kolmonoxid (CO)
Kväveoxid (NOx)
· **Speciell skyddsutrustning:**
Bär andningsskyddsapparat som är oberoende av omgivningsluften.

6 Åtgärder vid spill / oavsiktliga utsläpp

· **Personrelaterade försiktighetsåtgärder:**
Ta på personlig skyddsutrustning. Håll oskyddade personer på avstånd.
· **Miljöskyddsåtgärder:**
När produkten har trängt ner i avloppsnätet eller vattendrag skall ansvariga myndigheter underrättas.
Produkten orsakar skador i den akvatiska miljön och får därför inte komma i kontakt med ytvatten.
· **Förfarandet vid rengöring/upptagning:**
Sug upp med vätskebindande material (sand, kiselgur, syrabindare, universalbindare, sågspån).
Skaffa bort förorenat material som avfall enligt punkt 13.

*

7 Hantering och lagring

· **Hantering:**
· **Hänvisningar beträffande säker skötsel:**
Öppna behållaren försiktigt och hantera den varsamt.
· **Hänvisningar beträffande brand- och explosionsskydd:**
Det erfordras inga speciella åtgärder.

· **Lagring:**
· **Krav på lagerutrymmen och behållare:** Använd behållare av polyolefiner.

(Fortsättning på sida 3)

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

Handelsnamn: ACTICIDE AS

(Fortsättning från sida 2)

· **Hänvisningar beträffande sammanlagring:** Lagras ej ihop med syror.
· **Ytterligare uppgifter till lagringsvillkoren:**
Produkten har en tendens att kristalliseras vid temperaturer lägre än 5°C. Kristallerna kan lösas genom långsam uppvärmning, varefter produkten åter kan användas. Detta förfarande påverkar inte produktens kvalitet.
· **Lagringsklass:**
· **VbF-klass (Förordning om brännbara ämnen):** Bortfaller

* **8 Begränsning av exponeringen/personliga skyddsåtgärder**

· **Ytterligare hänvisningar beträffande utformning av tekniska anläggningar:**
Inga vidare uppgifter, se punkt 7.

Beståndsdelar med arbetsplatsrelaterade gränsvärden som bör övervakas:
· **CAS-nr. beteckning på ämnet % art värde enhet**
Produkten innehåller inga relevanta mängder av ämnen med arbetsplatsrelaterade gränsvärden som skall övervakas.
· **Ytterligare hänvisningar:**
Som basis tjänade de vid utarbetningen gällande listorna.

· **Personlig skyddsutrustning:**
· **Allmänna skydds- och hygienåtgärder:**
Undvik kontakt med ögonen och huden.
· **Andningsskydd:** Erfordras ej.
· **Handskydd:** Handskar tillverkade av nitril-indiagummi.
· **Ögonskydd** Tätt slutande skyddsglasögon.
· **Kroppsskydd:** Lutbeständig skyddsdräkt.

* **9 Fysikaliska och kemiska egenskaper**

· **Form:** Flytande
· **Färg:** Brun
· **Lukt:**
Lätt
svag
·

		värde/område	enhet	metod
· **Ändring av tillstånd**				
· **Smältpunkt / smältområde:**		ej bestämd		
· **Kokpunkt / kokområde:**		ca. 100 ° C		
· **Flampunkt:**		Ej användbar		
· **Lättantändlighet (fast, gasformig):**		produkt kan inte antändas		
· **Explosionsfara:**		produkten är inte explosiv		
· **Densitet:**	Vid 20 ° C	1,125 ± 0,025	g/cm3	
· **Löslighet i / blandbarhet med**				
· **Vatten:**		Fullständigt blandbar		
· **pH-värde:**	Vid 20 ° C	> 13		

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

Handelsnamn: ACTICIDE AS

10 Stabilitet och reaktivitet

· **Konditioner som bör undvikas:**
bör skyddas mot temperaturen < 10 °C
känslig för frost
· **Minimihållbarhet:** 12 månader efter produktionsdatum
· **Ämnen som bör undvikas:**
syren
oxideringsmedel
· **Farliga upplösningsprodukter:**
inga, vid ändamålsenlig användning och lagring

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11 Toxikologisk information

· **Akut toxicitet:**
Klassificeringsrelevanta LD/LC50-värden:
149-30-4 benzotiazol-2-tiol
Oral: LD50: >2000 mg/kg
LD50: > 2 000 mg/kg (råtta)
Dermal: LD50: > 2 000 mg/kg (rab)

2634-33-5 1,2-benzisotiazol-3(2H)-on
Oral: LD50: 1020 mg/kg (råtta)
Dermal: LD50: > 2000 mg/kg (råtta)
· **Primär retningseffekt:**
· **På huden:** Starkt frätande effekt på hud och slemhinnor.
· **På ögat:** Starkt frätande effekt
· **Sensibilisering:** Möjlig sensibilisering genom hudkontakt
· **Ytterligare toxikologiska hänvisningar:**
Med hänsyn till beräkningsförfarandet av EG's Allmänna Klassificeringsriktlinjer för tillredningar i den slutgiltiga versionen uppvisar produkten följande risker:
Frätande
Vid förtäring starkt frätande effekt i munhålan och svalget. Risk för perforering av matstrupen och magen.

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12 Ekotoxikologisk information

· **Uppgifter beträffande eliminering (fortvarighetsförhållande och nedbrytbar):**
· **Övriga hänvisningar:**
Produkten är biologisk nedbrytbar upp till MHK-värdet.
Den är inte svårnedbrytbar.
· **Ekotoxiska effekter:**
Akvatisk toxicitet:
149-30-4 benzotiazol-2-tiol
EC50/48 h: 7 mg/l (Daphnia magna)
LC50/48 h: 3,2 mg/l

2634-33-5 1,2-benzisotiazol-3(2H)-on
EC0/48 h: 1,0 mg/l (Daphnia magna)
EC50/16 h: 0,4 mg/l (Pseudomonas putida)
EC50/48 h: 2,1 mg/l (Daphnia magna)
EC50/96 h: 0,055 mg/l (Pseudokirchneriella subcapitata)
LC50/96 h: 2,18 mg/l (Oncorhynchus mykiss)
NOEC: 0,092 mg/l (Algae)

(Fortsättning på sida 5)

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

Handelsnamn: ACTICIDE AS

(Fortsättning från sida 4)

· **Kommentar:**
Toxiska effekter på organismer i aktivt slam kan förekomma över en viss koncentration
· **Ytterligare ekologiska hänvisningar:**
· **AOX-hänvisning:**
Produkten innehåller inqa föreningar som kan påverka AOX-värdet i avloppsvatten.
· **Innehåller recepturenligt följande tungmetaller och föreningar enligt EG-riktlinje nr. 76/464 EEG:**
Inga
· **Allmänna hänvisningar:**
Låt ej tränga ner i grundvatten, vattendrag eller i avloppsnätet.

13 Avfallshantering

· **Produkt:**
· **Rekommendation:**
Måste transporteras till en särskilt för detta ändamål godkänd avfallskonverteringsanläggning för specialavfall, under iaktagande av nödvändiga tekniska föreskrifter.

· **Ej rengjorda förpackningar:**
· **Rekommendation:**
Kontaminerade förpackninger skall tömmas noggrant. Efter motsvarande rengöring kan de tillföras återanvändningen.
· **Rekommenderat rengöringsmedel:**
Vatten, i förekommande fall med tillsats av rengöringsmedel.

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14 Transport bestämmelser

· **Landsvägstransport ADR/RID och GGVS/GGVE (transport över gränsen/inland):**
· **ADR/RID-GGVS/E klass:** 8
· **Siffra/bokstav:** 42b
· **Kemler-tal:** 80
· **FN-nummer:** 1719
· **Beteckning på godset:** UN 1719 Caustic alkali liquid, n.o.s., (Potassium hydroxide), mixture

· **Havstransport IMDG/GGVSee:**
· **IMDG/GGVSee-klass:** 8
· **Sida:** 8136
· **FN-nummer:** 1719
· **Förpackningsgrupp:** II
· **EMS-nummer:** 8-06
· **MFAG:** 705
· **Marine pollutant:** no
· **Rätt tekniskt namn:** Caustic alkali liquid, n.o.s., (potassium hydroxide), mixture, UN 1719
· **Kommentarer:** Flashpoint: n.a.

· **Lufttransport ICAO-TI och IATA-DGR:**
· **ICAO/IATA-klass:** 8
· **FN/ID-nummer:** 1719
· **Förpackningsgrupp:** II
· **Rätt tekniskt namn:** Caustic alkali liquid, n.o.s., (potassium hydroxide), mixture, UN 1719

(Fortsättning på sida 6)

Varuinformationsblad
Enligt 91/155/EEG

Datum för utskriften: 04.04.2000 Omarbetat: 14.12.1999

Handelsnamn: ACTICIDE AS

(Fortsättning från sida 5)

· **Kommentarer:**
Förpackningsföreskrifter/max. netto per styck:
Passagerarsflygplan: 809 / 1 l
Transportflygplan: 813 / 30 l

15 Gällande bestämmelser

· **Klassificering enligt EG-föreskrifterna:**

· **Farosymbol och farobeteckning:** C Frätande
· **Farobestämmande komponent för märkning:**
1,2-benzisotiazol-3(2H)-on
Kaliumhydroxid
Natriumhydroxid

· **Riskfraser**
35 Starkt frätande
43 Kan ge allergi vid hudkontakt

· **Skyddsfraser**
36/37/39 Använd lämpliga skyddskläder, skyddshandskar samt skyddsglasögon eller ansiktsskydd
24 Undvik kontakt med huden
26 Vid kontakt med ögonen, spola genast med mycket vatten och kontakta läkare
45 Vid olycksfall, illamående eller annan påverkan, kontakta omedelbart läkare. Visa om möjligt etiketten

· **Nationella föreskrifter:**

· **Klassificering enligt VbF (Förordning om brännbara ämnen):** Bortfaller

· **Vattenförorening - riskklass:**
WGK 2 (Självklassificering): risk för vattenförorening.

16 Övrig information

Uppgifterna stödjer sig på våra aktuella kunskaper. De representerar emellertid ingen som helst garanti beträffande produktegenskaper och utgör ingen grund för ett avtalat rättsförhållande.

· **Område som utfärdar datainstruktionsblad:**
Avdelningen Miljövård och Arbetssäkerhet
· **Tilltalspartner:** Hr. G. Brauch