

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **ACCEPTA 2051**

APPLICATION : REVERSE OSMOSIS ANTISCALANT

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. COMPOSITION/INFORMATION ON INGREDIENTS

This product is not classified as dangerous in accordance with Directives 67/548/EEC or 1999/45/EC.

3. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION :

This product is not classified as dangerous in accordance with Directives 67/548/EEC or 1999/45/EC.

HUMAN HEALTH HAZARDS - ACUTE :

INHALATION :
Not a likely route of exposure. No adverse effects expected.

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

SKIN CONTACT :

No adverse effects expected.

EYE CONTACT :

No adverse effects expected.

INGESTION :

Not a likely route of exposure. No adverse effects expected.

4. FIRST AID MEASURES

INHALATION :

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

SKIN CONTACT :

Remove contaminated clothing. Wash off affected area immediately with plenty of water. If symptoms develop, seek medical advice.

EYE CONTACT :

Immediately flush eye with water for at least 15 minutes while holding eyelids open. If symptoms persist, call a physician.

INGESTION :

Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. If symptoms develop, seek medical advice.

Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. If symptoms develop, seek medical advice. Contact the Poison's Information Centre (eg Australia 13 1126; New Zealand 0800 764 766).

NOTE TO PHYSICIAN :

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 :

Will not burn: inorganic or water-based product

EXTINGUISHING MEDIA :

Use extinguishing media appropriate for surrounding fire. This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable.

FIRE AND EXPLOSION HAZARD :

May evolve oxides of carbon (COx) under fire conditions. May evolve oxides of nitrogen (NOx) 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.

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

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.

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:** Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Clean contaminated surfaces with water or aqueous cleaning agents. 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 :

Do not contaminate surface water. Do not allow material to contaminate ground water system. Prevent material from entering sewers or waterways.

7. HANDLING AND STORAGE

HANDLING :

Do not take internally. Ensure all containers are labeled. Keep the containers closed when not in use. Avoid eye and skin contact. Keep away from acids and oxidizing agents.

STORAGE CONDITIONS :

Store in suitable labeled containers. Store the containers tightly closed.

SUITABLE CONSTRUCTION MATERIAL :

PVC, Polypropylene, Polyethylene, Stainless Steel 304, HDPE (high density polyethylene), Epoxy phenolic resin, 100% phenolic resin liner

UNSUITABLE CONSTRUCTION MATERIAL :

Brass, Buna-N, Hypalon, Viton, Neoprene, EPDM, Polyurethane

SPECIFIC USE(S) :

REVERSE OSMOSIS ANTISCALANT

For specific dosages and customized applications please contact your representative.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

This product does not contain any substance that has an established exposure limit.

ENGINEERING MEASURES :

General ventilation is recommended. Local exhaust ventilation may be necessary when dusts or mists are generated.

PERSONAL PROTECTION

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

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 :

If significant mists, vapors or aerosols are generated an approved respirator is recommended.

HAND PROTECTION :

Nitrile gloves Butyl gloves PVC gloves Neoprene gloves

SKIN PROTECTION :

Wear standard protective clothing.

EYE PROTECTION :

Wear safety glasses with side-shields. The applicable European standard can be found in EN 166.

HYGIENE RECOMMENDATIONS :

Use good work and personal hygiene practices to avoid exposure. Consider the provision in the work area of a safety shower and eyewash. Always wash thoroughly after handling chemicals. When handling this product never eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Colorless - Pale amber
ODOR	Ammoniacal
FLASH POINT :	Will not burn: inorganic or water-based product
SPECIFIC GRAVITY	1.36
SOLUBILITY IN WATER	Complete
pH (100 %)	10.5
VISCOSITY	15 cps (25 °C)
FREEZING POINT	-15 °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 :

Extremes of temperature

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

MATERIALS TO AVOID :

Strong oxidizing agents, Strong acids

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: Oxides of carbon, Oxides of nitrogen, Oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

The following results are for a similar product.

ACUTE ORAL TOXICITY :

Species	LD50	Test Descriptor
Rat	> 17,800 mg/kg	Similar Product

ACUTE DERMAL TOXICITY :

Species	LD50	Test Descriptor
Rabbit	> 15,800 mg/kg	Similar Product

PRIMARY SKIN IRRITATION :

Draize Score	Test Descriptor
0.3 / 8.0	Similar Product

PRIMARY EYE IRRITATION :

Draize Score	Test Descriptor
3.7 / 110.0	Similar Product

SENSITIZATION :

This product is not expected to be a sensitizer.

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 results are for a similar product.

ACUTE FISH RESULTS :

Species	Exposure	LC50	NOEC	Method	Test Descriptor
Rainbow Trout	96 hrs	> 330 mg/l			Similar Product
Bluegill Sunfish	96 hrs	> 330 mg/l			Similar Product
Channel Catfish	96 hrs	1,212 mg/l			Similar Product
Sheepshead Minnow	96 hrs	8,132 mg/l			Similar Product

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

ACUTE INVERTEBRATE RESULTS :

Species	Exposure	LC50	EC50	Method	Test Descriptor
Daphnia magna	48 hrs		297 mg/l		Similar Product
Grass Shrimp	96 hrs	4,575 mg/l			Similar Product

AQUATIC PLANT RESULTS :

Species	Exposure	EC50/LC50	Method	Test Descriptor
Green Algae (Selenastrum capricornutum)	96 hrs	20 mg/l		Active Substance

CHRONIC FISH RESULTS :

Species	Exposure	EC25 / IC25	LOEC	Method	Test Descriptor
Rainbow Trout	60 Days		47.6 mg/l		Similar Product

AVIAN RESULTS :

Species	Exposure	LC50	Method	Test Descriptor
Bobwhite Quail	14 Days	> 2,510 mg/kg		Similar Product
Mallard Duck	14 Days	> 2,510 mg/kg		Similar Product

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.

PERSISTENCY AND DEGRADATION :

Chemical Oxygen Demand (COD) : 0.23mg O₂/mg product

The organic portion of this preparation is expected to be inherently biodegradable.

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.

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

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 is ashless and 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 06 - OFF SPECIFICATION BATCHES AND UNUSED PRODUCTS - Organic wastes other than those mentioned in 16 03 05. 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 :

PRODUCT IS NOT REGULATED DURING TRANSPORTATION

AIR TRANSPORT (ICAO/IATA)

Proper Shipping Name :

PRODUCT IS NOT REGULATED DURING TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO)

Proper Shipping Name :

PRODUCT IS NOT REGULATED DURING TRANSPORTATION

15. REGULATORY INFORMATION

CLASSIFICATION AND LABELLING :

This preparation is not regulated, however, we recommend the following safety precautions:

SAFETY PHRASES

S24/25 - Avoid contact with skin and eyes.

S37/39 - Wear suitable gloves and eye/face protection.

NATIONAL REGULATIONS GERMANY

WGK 1 (Annex 4)

NATIONAL REGULATIONS HOLLAND

ABM RESULT

ABM RESULT	Substance(s)	% (w/w)
9 B		

MATERIAL SAFETY DATA SHEET

PRODUCT

ACCEPTA 2051

EMERGENCY TELEPHONE NUMBER(S)

See section 16, for Emergency Telephone Numbers.

INTERNATIONAL CHEMICAL CONTROL LAWS

EUROPE

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

Accepta is committed to and fully supports the Registration, Evaluation, Authorization and restriction of CHemicals (REACH) regulation. It is our intention to pre-register all chemical substances that we manufacture or import into European Union and to work with our suppliers to ensure a smooth transition to this new regulatory environment. Should you require any further information on Accepta's REACH programme please contact us at reach@accepta.com or visit our website.

UNITED STATES

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

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. 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

- REVISED INFORMATION: section(s):

- 7

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