



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product Name: ACCEPTA 2107
 Application: Closed circuit scale & corrosion inhibitor

Company Identification: Accepta Ltd.
 PO Box 339
 Macclesfield
 Cheshire
 SK10 2XU
 United Kingdom

Office telephone number: +44 (0) 1625 267581
 Office fax number: +44 (0) 870 135 6389
 Emergency Telephone Number: +44 (0) 1625 267581

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL DESCRIPTION:
 Disodium metasilicate, Sodium nitrite, Water, Sodium nitrate, Borate.

HAZARDOUS INGREDIENTS:

CAS NO.	EINECS NO.	CHEMICAL NAME	WT %	SYMBOL	R-PHRASES
7632-00-0	2315559	Sodium nitrite	4 - 6	O,T,N	8,25,50
6834-92-0	2299129	Disodium metasilicate	1 - 4	C	34,37
7631-99-4	2315543	Sodium nitrate	1 - 5	O	8

3. HAZARD IDENTIFICATION

This product is classified as dangerous (European Directive 1999/45/EC).

HUMAN HEALTH HAZARDS - ACUTE:

INHALATION: May cause irritation of mucous membranes.

SKIN CONTACT: Can cause moderate irritation.

EYE CONTACT: Can cause moderate irritation.

INGESTION: Harmful if swallowed. There may be irritation to the gastro-intestinal tract with nausea and vomiting. Components of the product create formation of methaemoglobin. Pregnant women are particularly sensitive to methemoglobinemia. May cause a decrease in blood pressure and cyanosis.

HUMAN HEALTH HAZARDS - CHRONIC:

Repeated ingestion of small amounts of sodium nitrite causes drops in blood pressure, rapid pulse, headaches and visual disturbances. It may also react with organic amines in the body to form carcinogenic nitrosamines

ENVIRONMENTAL HAZARDS Harmful to aquatic organisms.

PHYSICAL AND CHEMICAL HAZARDS: Contact with acids liberates toxic gas.

If product is allowed to dry, the sodium nitrite is an oxidising agent and can initiate the combustion of other materials.



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

4. FIRST AID MEASURES

INHALATION:
Remove to fresh air, rest, treat symptomatically. Obtain medical attention.

SKIN CONTACT:
Remove contaminated clothing. Wash off affected area immediately with plenty of water. If skin irritation persists, obtain medical attention.

EYE CONTACT:
Obtain medical attention immediately. Immediately gently irrigate with clean water for at least 15 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigating.

INGESTION:
Seek medical advice immediately, showing the label and/or SDS. **Do not induce vomiting without medical advice.** If conscious washout mouth and give one glass of water to drink.

ADDITIONAL INFORMATION
If unconscious do not give anything by mouth, place in the recovery position, check breathing and pulse. If necessary give artificial respiration.

5. FIRE FIGHTING MEASURES

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

FIRE AND EXPLOSION HAZARD
May evolve oxides of nitrogen under fire conditions.
If product is allowed to dry, the sodium nitrite is an oxidising agent and can initiate the combustion of other materials.

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:
Do not breathe vapour. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Ensure adequate ventilation. Use personal protective equipment recommended in Section 8.

ENVIRONMENTAL PRECAUTIONS:
Do not allow to enter sewers or water courses. If spillage does enter sewers or water courses, immediately inform the appropriate water authorities.

METHODS FOR CLEANING UP:
Contain and absorb with sand or vermiculite and mix well. Collect up and remove to a safe place until disposal. Wash site of spillage thoroughly with water. Assistance can be obtained from waste disposal companies. Do not use cotton waste, sawdust or other combustible substances as absorbent materials, these may ignite when dried out.
Please refer to Section 13 for disposal considerations.



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

7. HANDLING AND STORAGE

HANDLING:
 Avoid contact with skin and eyes. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Use personal protective equipment recommended in Section 8.

STORAGE CONDITIONS:
 Protect from freezing. Keep container tightly closed in a cool, well-ventilated place. Store separately from acids, Organic materials and reducing agents. Storage for more than two years is not recommended.

CONSTRUCTION MATERIAL COMPATIBILITY. Compatible with:
 Equipment for storage and application should be constructed from stainless steel, polypropylene, polyethylene, PVC, acrylic resin, polyvinylidene difluoride, butyl rubber, nitrile rubber, natural rubber, neoprene or ethylene propylene rubber. Avoid use of aluminium, copper, Zinc and their alloys, brass and galvanized metals.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS None.

ENGINEERING MEASURES Use general ventilation with local exhaust ventilation.

RESPIRATORY PROTECTION: If significant mists, vapours or aerosols are generated an approved respirator is recommended, filter-type AP.

HAND PROTECTION: PVC gloves, Nitrile gloves, Neoprene gloves. Most glove materials are of low chemical resistance. Replace gloves regularly

SKIN PROTECTION: Standard protective clothing.

EYE PROTECTION: Chemical splash goggles.

HYGIENE RECOMMENDATIONS: Keep an eye wash fountain available. Keep a safety shower available. Wash hands during breaks and at end of the shift. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

NOTE: These physical properties are typical values for this product

FORM: Liquid

COLOUR: Dark red

ODOUR: Slight

VALUE UNIT TEST METHOD

BOILING POINT: 100 °C

FLASH POINT: NA

VAPOUR PRESSURE same as water

RELATIVE DENSITY: 1.095 - 1.125 (20 °C)

SOLUBILITY IN WATER: Complete

pH 11.3 - 11.8



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

10. STABILITY AND REACTIVITY

STABILITY:
 Stable under ambient conditions
 CONDITIONS TO AVOID:
 Freezing temperatures.
 MATERIALS TO AVOID:
 Acids, Organic materials and reducing agents.
 HAZARDOUS DECOMPOSITION PRODUCTS:
 May evolve oxides of nitrogen under fire conditions.

11. TOXICOLOGICAL INFORMATION

Please refer to section 3 for hazards identification.
 ACUTE TOXICITY DATA:
 ACUTE LETHALITY VALUES:
 Oral (rat) LD50 = > 2000 mg/kg (OECD 423)
 PRIMARY (DRAIZE TEST) SKIN/EYE
 Primary skin irritation: 0.5 /8.0
 Primary eye irritation: 16.7 /110.0
 CHRONIC TOXICITY DATA:
 Repeated ingestion of small amounts of sodium nitrite causes drops in blood pressure, rapid pulse, headaches and visual disturbances. It may also react with organic amines in the body to form carcinogenic nitrosamines.

12. ECOLOGICAL INFORMATION

PERSISTENCY AND DEGRADATION:
 Biological Oxygen Demand (BOD 5) = 703 mg/l
 Chemical Oxygen Demand (COD) = 23300 mg/l.
 ECOTOXICOLOGICAL EFFECTS:
 EC50/48H/Daphnia magna (Water Flea) = 670 mg/l
 NOEC/48H/Daphnia magna (Water Flea) = 400 mg/l
 LC50/96H/Oncorhynchus Mykiss (Rainbow Trout)= 57 mg/l
 NOEC/96H/Oncorhynchus mykiss (Rainbow Trout) = < 40 mg/l
 LC50/96H/Scophthalmus maximus = > 2000 mg/l (PARCOM)
 NOEC/96H/Scophthalmus maximus = 2000 mg/l (PARCOM)



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

13. DISPOSAL CONSIDERATIONS

Via authorized contractor. If this product becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code. Ensure compliance with EC, national and local regulations.
 Empty uncleaned packages of this product should be treated as hazardous waste.
NATIONAL REGULATIONS UK
 In accordance with the Environmental Protection (Duty of Care) Regulations 1991. Special Waste Regulations 1996 apply.
NATIONAL REGULATIONS AUSTRIA
 Waste Code: 59305

14. TRANSPORT INFORMATION

Class: Not regulated

15. REGULATORY INFORMATION

CLASSIFICATION:
 HAZARD SYMBOL: HARMFUL

Xn, HARMFUL
 Contains: Sodium nitrite
RISK PHRASES:
 R22 Harmful if swallowed. R52 Harmful to aquatic organisms.
SAFETY PHRASES:
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 After contact with skin, wash immediately with plenty of water. 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.
NATIONAL REGULATIONS GERMANY
 VbF-Klasse: None
 WHG-WGK: 2 Classification according VwVwS v. 17.05.99, Anhang 4
 StörfallV: /12.BImSchV.Liste d. Anh. II): -
 TA-Luft: -
 Berufsgenossensch. Vorschriften: Take notice of UVV-Chemie.
 Hinweise zur Beschäftigungsbeschränkung: Observe § 15 of regulations for hazardous substances.
NATIONAL REGULATIONS UK COSHH regulations apply.



Material Safety Data Sheet

Accepta 2107

Date issued: 01-01-2003

16. OTHER INFORMATION

Emergency Telephone Number +44 (0) 1625 267581

RELEVANT RISK PHRASES:

R8 Contact with combustible material may cause fire. R25 Toxic if swallowed. R50 Very toxic to aquatic organisms. R34 Causes burns. R37 Irritating to respiratory system.