

GHS Precautionary Statement

P264 – Wash hands thoroughly after handling
P280 – Wear protective gloves/clothing.
P102 – Keep out of reach of children.
P101 – If medical advice is needed, have product container or label at hand.

INHALATION EXPOSURE	Corrosive to Lungs. Causes irritation to mucous membranes
INGESTION	Slightly hazardous. Causes irritation to gastrointestinal tract
SKIN CONTACT	Causes skin irritation. Wash with running water
EYE CONTACT	Irritating to the eye. Wash with running water. Seek medical advise
CHRONIC (PROLONGED) EXPOSURE	No information available
AGRIVATING CONDITIONS WITH COMBINATIONS	No information available
EU/EC CLASSIFICATION	Irritating and slightly corrosive substance
HAZARDOUS INGREDIENTS	Acids

SECTION 3. **COMPOSITION & INFORMATION ON INGREDIENTS**

Identity	CAS-No.	% w/w	Symbol
Acidifiers		45 - 52	Xi, C
Non Disclosed Ingredients		48 – 55	Xi

Ingredients not identified are confidential or non hazardous. Values on MSDS are not product specifications

SECTION 4. **FIRST AID MEASURES**

IF IN HALLED	Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Do NOT give mouth-to-mouth resuscitation if the victim ingested the substance. If breathing is labored give oxygen. Keep the victim at rest and warm. Obtain immediate medical advice
IF SWALLOWED	If the victim is alert and not convulsing, give the person ½ to one full glass of water to rinse the mouth with. Do not induce vomiting, unless under direction of a physician or a poison control center expert.

	If spontaneous vomiting occurs, have the victim lean forward with the head down to avoid breathing in of vomit, rinse mouth and administer water. Transport the victim immediately to an emergency facility.
IF ON SKIN	Remove all contaminated clothing while flushing the contaminated skin immediately with running water for a minimum of 15 minutes. If irritation persists repeat rinse. Seek medical advice if required
IF IN EYES	Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists repeat rinse. Seek medical advice immediately.

MEDICAL ADVICE: Symptomatic treatment and supportive therapy as indicated above

SECTION 5.

FIRE FIGHTING MEASURES

AUTO IGNITION TEMPERATURE (°C)	Not Flammable
FLASH POINT (°C)	No Flash

EXSTINGUISHING MEDIA	For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires use foam or water-fog; avoid using water jet. Contain run-off with barriers, e.g. earth.
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FIRE & EXPLOSION HAZARDS	Not Flammable. Keep fire exposed containers cool by spraying with water. Container could explode when heated.
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PROTECTIVE EQUIPMENT	Wear full protective clothing and NIOSH-approved self-contained breathing apparatus. Fire might produce irritating vapours, mists or other combustion products.
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SECTION 6.

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Ventilate area of spill or leak. Ensure suitable personal protection during removal of spills. Wear eye protection, chemically resistant gloves, boots and coveralls.
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CLEANING METHODS	Absorb spillages onto sand, earth or any suitable absorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washing must be prevented from entering surface
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	water drains. Seal drums and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill remediation plan.
DEACTIVATING CHEMICALS	Not known
ADDITIONAL INFORMATION	Spillages or uncontrolled discharges into water sources must be alerted to the appropriate regulatory body.

SECTION 7.
HANDLING AND STORAGE

SAFE HANDLING	Practice good industrial housekeeping practices
STORAGE REQUIREMENTS	Store in original containers with lid closed. Keep in cool and dry area. Protect the containers from physical damage.
STORAGE TEMPERATURE	Do not expose sealed containers to temperatures exceeding 37°C

SECTION 8.
EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION CONTROL	Dilution ventilation is a satisfactory health hazard control. Where discomfort is caused to workers, a local exhaust system should be installed. Special Precautions: Avoid breathing vapors or aerosols.
EYE PROTECTION	Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or faceshields. Maintain eye wash fountain and quick drench facilities in work areas
SKIN PROTECTION	Gloves and protective clothing made from Viton or PVC should be used. Verify impermeability under normal usage conditions.

SECTION 9.
PHYSICAL & CHEMICAL PROPERTIES

FORM	Liquid
COLOUR	Clear to Slight Dark
ODOUR	Acidic
BOILING POINT (°C)	> 100
MELTING POINT (°C)	Not Applicable
VAPOR PRESSURE (mmHg)	Not Available

SPECIFIC GRAVITY (g/cm ³)	1.10 – 1.30 (20°C)
SOLUBILITY	Soluble in water
pH-Value	2.0 – 4.5
FLASH POINT (°C)	No Flash
EXPLOSIVE PROPERTIES	Non-Explosive

SECTION 10.
STABILITY & REACTIVITY

STABILITY	Stable under normal storage and usage conditions
INCOMPATIBILITY	Strong Oxidizing agents.
HAZARDOUS POLYMERISATION	Will not occur
HAZARDOUS DECOMPOSITION	Carbon Dioxide, Carbon Monoxide
CONDITIONS TO AVOID	Heat, flames, ignition sources and incompatibles
THERMAL DECOMPOSITION	Non Hazardous

SECTION 11.
TOXICOLOGICAL INFORMATION

ORAL LD50 (Rat)	2500 mg/Kg
DERMAL LD50 (Rabbit)	None Available
INHALATION LD50 (Rat)	None Available

OTHER EFFECTS OF OVEREXPOSURE	CNS depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposure may lead to comma and possible death due to respiratory failure.
CARCINOGENIC EFFECTS	Not Carcinogenic
REPRODUCTIVE TOXICITY	No data available

SECTION 12.
ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE	No information available
ENVIRONMENTAL TOXICITY	No information available

SECTION 13.
DISPOSAL CONSIDERATIONS

Dispose contaminated absorbents, surplus product, etc. in a facility permitted for hazardous waste. Surfactants can cause foaming problems in biological wastewater treatment plants
Empty containers should be rinsed and disposed of in accordance to local waste disposal legislation. Do not reuse containers

SECTION 14.
TRANSPORT INFORMATION

Non – Dangerous

SECTION 15.
REGULATORY INFORMATION

NATIONAL LEGISLATIONS	National Road Traffic Act, 1996 (Act 93 of 1996) Fire Brigade Service Act, 1987 (Act 99 of 1987) Occupational Health & Safety Act, 1993 (Act 85 of 1993)
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SECTION 16.
OTHER INFORMATION

The Information contained in this MSDS is offered as a guide to handle specific material and is based on the current scientific and technical knowledge at the date indicated on the present MSDS. This information is provided in good faith and believed to be accurate and correct. This information is not intended to be all inclusive and the manner and conditions of use and handling may involve other additional considerations. No warranty of any kind is given or implied by IN LINE TRADING and IN LINE TRADING will not be liable for any damages, injuries or consequential damages which may result from the use of or reliance on any information contained herein. It remains the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. Upon receipt of any changes a new MSDS will be made available

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