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## **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### **1.1 Product identifier**

#### **HOUSE MATE SHOWER HEAD DESCALER**

##### **Contains:**

- Formic Acid
- In a HDPE polymer container with a child resistant screw cap.

### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Descaling equipment, Kitchen accessories

Uses advised against : uses other than those are not are not recommended

### **1.3 Company**

RD*i* INTERNATIONAL LTD  
UNIT 4 PARK FARM  
WITHAM ROAD  
BLACK NOTLEY  
ESSEX  
CM77 8JX  
UNITED KINGDOM

**Telephone number:** 01376 333550

**Fax number:** 01376 333569

**Email address:** sales@thinkr*di*.com

### **1.4 Emergency telephone number : 01446 775577 (Office hours)**

**NOTE:** This number is only available during the following office hours: **0900 to 1700 Monday to Thursday; 0900 to 1200 Friday. UK TIMES**

## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

#### **2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)**

Danger

#### **2.1.2 Classification according to Directive 1999/45/EC**

#### **2.1.3 Additional information**

Most important adverse effects: Serious irritation to eyes & skin.

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For full text of EU Hazard- statements: See SECTION 16

## 2.2 Label elements

### 2.2.1 Labelling according to Regulation (EC) No 1272/2008 (CLP)

Pictograms			
Signal Word	<b>DANGER</b>		
Hazard Statements	<b>H302 Harmful if swallowed</b>	Acute Tox.2	
	<b>H314</b>	Acute Tox.2	
	<b>H319</b>	Acute Tox.2	
	<b>H335</b>	Acute Tox.2	
Hazard Statements	<b>H372</b>	Acute Tox.2	
Precautionary Statements	P280	Wear protective gloves/protective clothing/eye protection/face protection.	
	P285	In case of inadequate ventilation wear respiratory protection.	
	P302+P305+P306 P352	If on Contact: Wash with plenty of soap and water.	
	P333 +P337+P315	If skin/eye irritation or rash occurs: Get immediate medical advice/attention.	
	P304+P312	If inhaled: Call a POISON CENTRE or doctor if you feel unwell.	
	P272	Contaminated work clothing should not be allowed out of the workplace.	
	P363	Wash contaminated clothing before reuse.	
	P501	Dispose of contents/container in accordance with local/regional/national regulation.	

### 2.2.2 Labelling according to Directive 1999/45/EC

N/A

See SECTION 16.

## 2.3 Other hazards

This mixture does not contain any substances that are assessed to be PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Mixtures

Description of the mixture:

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A mixture of Formic acid & Ammonium formate & viscosity modifier in water.

**Hazardous ingredients:**

CAS No.	EC No.	Index No.	REACH Registration No.	% (weight)	Name	Classification according to Regulation (EC) No. 1278/2008 (CLP)	Classification according to 67/548/EEC
64-18-6	200-579-1	607-001-00-0		1 - 10	Formic Acid	<ul style="list-style-type: none"><li>· Acute Tox.2</li><li>· H204</li><li>· H302 Harmful if swallowed</li> <li>· H314/H319 Eye Dam.1/Serious Eye Irritation. &amp; Serious Skin Irritation.</li> <li>· H335 May cause Respiratory Irritation</li> <li>· H372 Causes damage to organs through prolonged or repeated exposure cause the hazard&gt;.</li></ul>	N/A
540-69-2	540-69-2	N/A		1 - 5	Ammonium Formate	<ul style="list-style-type: none"><li>· H204</li><li>· H302; H314/319; H335 7 H372</li></ul>	

N/A – Not applicable

**The Full text for all R-Phrases and Hazards Statements are stated in Section 16.**

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**First aid measures**

**Inhalation :**

Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Ingestion :**

Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe.

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Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact :**

Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. Prolonged contact may cause redness, irritation and pain.

**Eye contact :**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Irritating to eyes and may cause redness and pain.

## 4.2 Most important symptoms and effects, both acute and delayed

### Over-exposure signs/symptoms

**Inhalation :**

Move person to fresh air at once. Rinse nose and mouth with water. Get medical attention if discomfort continues.

**Ingestion :** NEVER MAKE AN UNCONCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention immediately if any discomfort continues.

**Skin :**

Rinse immediately with plenty of water. Remove contaminated clothing. Contact physician if irritation persists.

**Eyes :**

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

See SECTION 11 for more detailed information on health effects and symptoms.

## 4.3 Indications of any immediate medical attention and special treatment needed

**Skin contact**

Prolonged contact may cause redness, irritation and skin burn.

**Eye contact**

Irritating and may cause redness and pain and may lead to serious irritation.

**Notes to physician :**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Show this Safety Data Sheet to the doctor in attendance.

**Protection of first aid personnel**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## SECTION 5: *Fire fighting measures*

### 5.1 Extinguishing media

Suitable :

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This product is not flammable. Use water spray, fog or foam. Use an extinguishing agent suitable for the surrounding fire.

**Not suitable :**

Do not use water jet.

## 5.2 Special hazards arising from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

### Hazardous thermal decomposition products

In combustion emits toxic fumes; may liberate carbon oxides and other toxic gases or vapours.

## 5.3 Advice for fire fighters

### Special precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Keep run-off water out of sewers and water sources. Prevent for water control & accumulation.

### Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6: *Accidental release measures*

### 6.1 Personal precautions, protective equipment and emergency Procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Avoid breathing vapour or mist. Beware of slippery floors and surfaces.

### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Collect and dispose as indicated in section 13.

### 6.3 Methods and materials for containment and cleaning up

#### Small spill :

Move containers from spill area. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Absorb in vermiculite, dry sand or earth and place it in a waste disposal container. Flush area with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

#### Large spill :

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations . Contaminated absorbent material may pose the same hazard as the spilled product.

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#### 6.4 Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. For waste disposal, see section 13.

### SECTION 7: Handling and Storage

#### 7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). Provide good ventilation. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

#### 7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Components with workplace control parameters

Component	CAS No.	Value	Control Measures	Basis
Formic Acid	64-18-6	TWA	5ppm 9.6mg/m <sup>3</sup>	UK EH40 WEL – Workplace Exposure Limits
	Remarks	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.		

United Kingdom (UK) WEL : Workplace Exposure Limits

Exposure Controls

Protective equipment



Engineering measures

Provide adequate ventilation

Respiratory equipment

Respiratory protection not required

Hand protection

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For prolonged or repeated skin contact use suitable protective gloves. PVC or rubber, are recommended. Simple Design for minimal risk.

#### **Eye protection.**

Wear approved, tight fitting safety glasses where splashes are probable. EN166

#### **Other Protection**

Use barrier creams to prevent skin contact. Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### **Hygiene Measures**

When using do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Use appropriate cream to prevent drying of skin.

#### **Environmental Exposures Controls**

Avoid release to the environment. Users should be aware of environmental considerations and their duties under environmental protection act. Further information may be found on Government websites: [www.dti.gov.uk/access/index/htm](http://www.dti.gov.uk/access/index/htm) and [www.envirowise.gov.uk](http://www.envirowise.gov.uk).

#### **Derived No-Effect Levels' (DNEL's) and Predicted No-Effect Concentrations' (PNEC's)**

**DNELS** No information available.

**PNECS** No information available.

### **8.2 Exposure controls**

#### **Hygiene measures :**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure that there is sufficient ventilation of the area.

#### **Eye and face protection**

Avoid contact with eyes.

#### **Skin protection**

Wear chemical protective gloves according to DIN EN 374 with CE-labelling. Suitable materials include Nitrile rubber, NBR. Gloves for mechanical protection do not provide protection against chemicals. Wear protective clothing.

## **SECTION 9: *Physical and chemical properties***

### **9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	
<b>Physical state</b>	Clear liquid.
<b>Colour</b>	
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not applicable.
<b>pH</b>	<3.0
<b>Melting Point</b>	Not applicable
<b>Initial boiling point and boiling range</b>	Approximately 100°C
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	No data
<b>Flammability</b>	Not classified as flammable
<b>Explosion limits</b>	Not applicable

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<b>Upper</b>	
<b>Lower</b>	
<b>Vapour pressure</b>	No data
<b>Vapour density</b>	No data
<b>Relative density</b>	1.00 – 1.10 @ 20·C
<b>Solubility</b>	Highly soluble and miscible in water
<b>Partition coefficient: n-octanol/water</b>	No data
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	No data
<b>Viscosity</b>	No data
<b>Explosive properties</b>	Not applicable
<b>Oxidising properties</b>	No data

## 9.2 Other information

Not applicable.

## SECTION 10: *Stability and reactivity*

### 10.1 Reactivity

No specific reactivity hazards associated with this product.

### 10.2 Chemical stability

The product is stable under normal conditions of storage and use.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

### 10.5 Incompatible materials

No specific; or groups of materials are likely to react to produce a hazardous situation.

### 10.6 Hazardous decomposition products

There are no anticipated hazardous decomposition products associated with this material.

## SECTION 11: *Toxicological information*

### 11.1 Information on toxicological effects

General Information:

This product has severe hazards & toxicity. Only large volumes may have adverse impact on human health.

#### a) Acute toxicity

##### Oral

May irritate and cause stomach pain, vomiting and diarrhoea; may cause respiratory hazards in relation to breathing are met.



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**Dermal**

Based on the available data on component substances, the classification criteria for acute dermal toxicity can cause serious hazards such as severe irritation. Repeated exposures may cause severe burns, are met.

**Inhalation**

Based on the available data on component substances, the classification criteria for acute inhalation toxicity to cause damage to organs through prolonged or repeated exposure cause the hazard> are met.

**Other routes**

No data.

**(b) Skin corrosion/irritation**

Based on the available data on component substances, the classification criteria to cause for skin corrosion or burns are met.

**(c) Serious eye damage/irritation**

Based on the available data on component substances, the classification criteria for serious eye damage are met; irritation may occur and cause redness and pain.

**(d) Respiratory or skin sensitization**

Based on respiratory in take causes to organs through prolonged or repeated exposure exposure cause hazard is met.

**(e) Germ cell mutagenicity**

Based on the available data on component substances, the classification criteria for germ cell mutagenicity are not met.

**(f) Carcinogenicity**

Based on the available data on component substances, the classification criteria for carcinogenicity are not met.

**(g) Reproductive toxicity**

Based on the available data on component substances, the classification criteria for reproductive toxicity are not met.

**(h) STOT-single exposure**

Based on the available data on component substances, the classification criteria for specific target organ toxicity as a result of single exposure are not met.

**(i) STOT-repeated exposure**

Based on the available data on component substances, the classification criteria for specific target organ toxicity as a result of repeated exposure are not met.

**(j) Aspiration hazard**

Based on the available data on component substances, the classification criteria for aspiration hazard are not met.

**Other information**

No applicable toxicity data. No known significant effects or critical hazards.

## SECTION 12: *Ecological information*

### 12.1 Toxicity

Based on hazardous substances in the mixture and their concentration the product has been assessed according to the calculation method of Regulation (EC) 1272/2008 (as amended). The product is classified as dangerous to health hazards and its hazards are stated in section 2.2.1.

### 12.2 Persistence and degradability

Results of PBT and vPvB assessment: The product does not contain any PBT or vPvB substances.

### 12.3 Bioaccumulative potential

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There is data on the degradability of this product. The ingredient(s) contained in this preparation comply with the readily biodegradability resulting to >90%. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

#### 12.4 Mobility in soil

The product is water soluble and is expected to decompose readily.

12.5 Other adverse effects : None Known for its adverse effects.

### SECTION 13: *Disposal considerations*

#### 13.1 Waste treatment methods

##### General Information:

Do not discharge into drains, water courses or onto the ground.

##### Methods of disposal :

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Packaging is recyclable. Wash out containers with water before disposal.

##### Hazardous waste :

The classification of the product may meet the criteria for a hazardous waste.

### SECTION 14: *Transport information*

This product requires a classification for transport.

#### 14.1 UN number

ADR/RID: 1779

IMDG:1779

IATA:1779

#### 14.2 UN proper shipping name

ADR/RID: FORMIC ACID

IMDG : FORMIC ACID

IATA : FORMIC ACID

#### 14.3 Transport hazard class(es)

ADR/RID 8(3)

IMDG: 8 (3)

IATA: 8(3)

#### 14.4 Packing group

ADR/RID: II

IMDG: 8 (3)

IATA: 8(3)

#### 14.5 Environmental hazards

ADR/RID: no

IMDG: Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user

No data available

#### 14.7 Hazard Class Label

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**14.8 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## SECTION 15: *Regulatory information*

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**CLP** – Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

#### REACH Status

The substance(s) in this product has (have) been pre-registered, registered or are exempt according to Regulation (EC) No. 1907/2006 (REACH).

**SEVESO II Directive 96/82/EC (as amended).**

**Detergent Regulation [Regulation (EC) No 648/2004]**

#### UK Regulations

COSHH – Control of Substances Hazardous to Health Regulations 2002 (as amended).

COMAH – Control of Major Accidents Hazards Regulations 1999 (as amended).

CHIP – The Chemical (Hazard Information and Packaging for Supply) Regulations 2009

### 15.2 Chemical safety assessment

Chemical safety assessments have been completed by the substance Registrants for some of the components of this product.

## SECTION 16: *Other information*

### Full text of classifications (CLP)

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H314	Causes severe skin burns and eye damage.
H372	Causes damage to organs through prolonged or repeated exposure

Acute toxicity, Category 2; H302, H314, H319, H335, H372.

Skin Category 2; H314

#### Other abbreviations

PBT : Persistent, bioaccumulative and toxic.

vPvB : Very persistent and very bioaccumulative.

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**Note (1)** – New SDS for CLP/GHS compliant product labelling.

***Safety Data Sheet complied according to Regulation (EC) No. 1907 (as Amended).***

**Notice to readers**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.