# SAFETY DATA SHEET JMS BED PAN DETERGENT

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

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

1.1. Product identifier

Product name JMS BED PAN DETERGENT

Internal identification 3038

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

**Identified uses** Caustic Detergent. For professional use only.

Uses advised against Not for direct contact with Food or Beverage stuffs. Not for oral consumption. Use of this

product for cleaning by hand is not recommended. Must not be used where acid based

chemicals are present.

1.3. Details of the supplier of the safety data sheet

Supplier MERLIN CHEMICALS

Unit 5, Passfield Mill Business Park, Liphook, Hampshire, GU30 7RR

+44 (0)1428 751122 +44 (0)1428 751133

technical@merlinchemicals.co.uk

1.4. Emergency telephone number

**Emergency telephone** Out of Office Hours Emergency Information:-

For accidents and spillages involving this product that pose a threat to the environment, or

human health, or require immediate first aid advice call:- +44(0) 7050 265597.

Note:- This number will not accept order queries or calls dealing with equipment breakdowns.

UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental

Protection Agency 1890 335599 (This is a Lo Call Number)

# SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290

**Health hazards** Skin Corr. 1A - H314

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

**Hazard statements** H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

#### JMS BED PAN DETERGENT

Precautionary statements P234 Keep only in original container.

P280 Wear protective clothing, gloves, eye and face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention. P404 Store in a closed container.

SODIUM HYDROXIDE Contains

**Detergent labelling** < 5% EDTA and salts thereof, < 5% polycarboxylates

Supplementary precautionary P501 Dispose of contents/ container in accordance with national regulations.

statements

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Note: "H290 May Be Corrosive to Metals" relates to the concentrated product.

# SECTION 3: Composition/information on ingredients

# 3.2. Mixtures

SODIUM HYDROXIDE 10-30%

CAS number: 1310-73-2 EC number: 215-185-5 REACH registration number: 01-

2119457892-27

Classification Classification (67/548/EEC or 1999/45/EC)

Met. Corr. 1 - H290 C:R35

Skin Corr. 1A - H314 Eye Dam. 1 - H318

#### ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM <1%

**SALT** 

CAS number: 64-02-8 EC number: 200-573-9 REACH registration number: 01-

2119486762-27

Classification Classification (67/548/EEC or 1999/45/EC)

Met. Corr. 1 - H290 Xn;R20,R22. Xi;R41.

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Dam. 1 - H318 STOT RE 2 - H373

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments To the best of our knowledge, all of the substances used in this product are being supported

> for the relevent application in REACH. Note:- Corrosion to Metals H290 statement refers to Soft Metals such as Aluminium or Copper, this product is not expected to corrode 304 or 316

Stainless Steel.

# SECTION 4: First aid measures

# 4.1. Description of first aid measures

#### JMS BED PAN DETERGENT

**General information** When it is safe to do so, remove victim immediately from source of exposure. However,

consideration should be given as to whether moving the victim will cause further injury. For

immediate First Aid advice in the UK, dial 111.

Inhalation Remove affected person from source of contamination. Provide rest, warmth and fresh air. If

breathing stops, provide artificial respiration. Get medical attention if any discomfort

continues.

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly. Place unconscious person on their side in

the recovery position and ensure breathing can take place. Get medical attention.

**Skin contact** Remove contaminated clothing that is not stuck to the skin. Flush area with clean water.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of

water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical

attention.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

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

General information Neat product may cause chemical burns and permanent eye damage. Dilute product may

cause irritation to the skin and eyes.

**Inhalation** This product is corrosive. Inhalation of neat product is unlikely. However, inhalation of

vapours from hot surfaces, or sprayed droplets may result in severe burns to the mouth, nose,

GI tract and airways.

Ingestion Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical

burning of mouth, throat and GI tract will occur. If dilute chemical is ingested, soreness of

mouth, throat and GI tract may occur together with redness and blistering.

**Skin contact** Causes severe burns.

**Eye contact** May result in permanent eye damage.

# 4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Rinse well with water to neutral pH.

# SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media This product will not support combustion and is not flammable. Use an extinguishing media

suitable for surrounding materials.

#### 5.2. Special hazards arising from the substance or mixture

Specific hazards In contact with some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed,

which may form an explosive mixture with air. Note - Comment refers to neat product. The product is non-combustible. If heated, corrosive and toxic vapours/gases may be formed.

# 5.3. Advice for firefighters

Protective actions during

firefighting

Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

# SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

#### JMS BED PAN DETERGENT

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the

Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots,

clothing or apron, as appropriate. Stop leak if possible without risk. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections See sections 8,12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear appropriate clothing to prevent any possibility of liquid contact and repeated or

prolonged vapour contact. Refer to section 8.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Store away from the following materials: Acids. Store below

40°C.

7.3. Specific end use(s)

Specific end use(s) Caustic detergent. Refer to Product Information Sheet.

**Usage description**This product is suitable for use in food preparation areas, but is not designed for direct food

contact.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### JMS BED PAN DETERGENT

#### Ingredient comments

As a requirement of REACH we have considered all of the components of this formulation. We believe that Sodium Hydroxide (NaOH) is the most hazardous component of this formulation. Sodium Hydroxide is not expected to be systemically available to the body under normal handling and use conditions, therefore systemic effects of Sodium Hydroxide after Dermal or Inhalation Exposure are not expected to occur. Based on data from our raw material suppliers, we understand that if the risk management measures outlined in section 8.2 are followed, the inhalation exposure is below the DNEL of 1mg/m3. Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. This is taken from the Chemical Agents Directive (98/24/EC). Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

#### SODIUM HYDROXIDE (CAS: 1310-73-2)

**DNEL** 

Industry - Inhalation; Long term local effects: 1.0 mg/m³

DNEL data for Professional users is not yet available, but it is assumed to be the

same as for Industrial users.

Industry - Dermal; Short term local effects: 2%

**PNEC** 

No information is available for PNEC data for Sodium Hydroxide

# 8.2. Exposure controls

# Protective equipment









Appropriate engineering controls

Personal protection

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

#### JMS BED PAN DETERGENT

**Eye/face protection** Wear full-face visor or shield. Refer to EN Standard 166 to select appropriate level of

protection.

Hand protection Impervious Chemical Resistant Gloves of Butyl Rubber, PVC, Polychloroprene with a natural

latex liner, all with a minimum material thickness 0.5mm and a breakthrough time of

>480mins. Alternatively Nitrile Rubber, Fluorinated Rubber, both with a minimum thickness of

0.35 - 0.4mm and a breakthrough time of >480minutes. Refer to Standard EN 374.

Other skin and body

protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Reference to EN

13832 and EN 943 is useful when selecting footwear and clothing.

Hygiene measures Promptly remove non-impervious clothing that has become contaminated, provided it is not

adhered to the skin. Contaminated clothing and shoes must be discarded. Provide eyewash

station and safety shower.

Respiratory protection 
No specific recommendation made, but respiratory protection must be used if the general

level exceeds the Workplace Exposure Limit.

Environmental exposure

controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 &13. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be

adopted.

General Health and Safety

Measures.

The classification given for this product is for the neat material. Use solutions will be less hazardous, but because pH is expected to be >11.5 they should still be considered as capable of causing severe skin burns and eye damage. Use of Eye Protection and Gloves is recommended as min PPE.A full Risk Assessment should be carried out before handling any chemical(s). Risk Assessments should refer to COSHH, and any other relevant legislation or industry specific guidelines governing the use of chemicals.

#### **SECTION 9: Physical and Chemical Properties**

## 9.1. Information on basic physical and chemical properties

Appearance Liquid

Colour Colourless to pale yellow.

Odour Detergent

Odour threshold Not applicable.

pH (concentrated solution): >13

Melting point Not applicable.

**Initial boiling point and range** Approximately 95 - 105 Degrees C at Atmospheric Pressure.

Flash point Not applicable.

Evaporation rate Not applicable.

**Evaporation factor** Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

explosive limits

Not applicable.

Vapour pressure Not applicable.

Vapour density Not applicable.

#### JMS BED PAN DETERGENT

Relative density 1.15 - 1.165 @ 20 Degrees C

Bulk density Not applicable.

Solubility(ies) Soluble in water.

Partition coefficient Not applicable.

Auto-ignition temperature Not applicable.

Decomposition Temperature Not applicable.

Viscosity Not determined.

**Explosive properties** Not applicable.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index

Particle size

Not applicable.

Molecular weight

Not applicable.

Volatility

Not applicable.

Saturation concentration

Not applicable.

Critical temperature

Not applicable.

Volatile organic compound

Not applicable.

Explosive Properties Not Classified as Explosive

Storage Temperature Range 0 - 40°C

# SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not expected to react when correctly stored and used. Mixing with other chemicals may

produce unexpected reactions. The solution is strongly alkaline and reacts with strong acids

with heat generation.

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended. - See note 10.6.

10.3. Possibility of hazardous reactions

Possibility of hazardous

Refer to section 10.1. Do not mix with acids, this will generate heat and give off corrosive

vapours.

10.4. Conditions to avoid

reactions

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong acids. Bleach. Reaction with Aluminium, Zinc, Tin, Copper or their alloys produces

flammable Hydrogen Gas. - Note: reaction relates to neat product.

# 10.6. Hazardous decomposition products

#### JMS BED PAN DETERGENT

Hazardous decomposition

products

No specific hazardous decomposition products noted. - See section 10.5.

# SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Acute toxicity - oral

**ATE oral (mg/kg)** 526,315.79

General information

Toxic effect linked with corrosive properties. See section 4.2.

Inhalation

This product is strongly corrosive. Inhalation of sprayed droplets or vapours from hot surfaces

may result in severe burns to the mouth, nose, GI tract and airways. - See section 4.2.

Ingestion

Causes severe burns. May cause chemical burns in mouth, oesophagus and stomach.

Skin contact

Causes severe burns.

Eye contact

Risk of serious damage to eyes. May cause permanent eye injury.

# SECTION 12: Ecological Information

**Ecotoxicity** This product is not classified as environmentally hazardous. However, this does not exclude

the possibility that large or frequent spills can have a harmful or damaging effect on the

environment. Normal use is unlikely to pose a risk to the environment.

12.1. Toxicity

**Acute toxicity - fish**This mixture is not classified as toxic to aquatic organisms.

Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there

may also be damage to aquatic plants.

Normal use of the diluted product is not expected to pose any risk.

See note 12.0

#### 12.2. Persistence and degradability

Persistence and degradability This product consists mainly of inorganic components for which biodegradation assessment is

not applicable. The product meets the requirements of the European Detergents Regulation

648/2004 as amended.

# 12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not applicable.

12.4. Mobility in soil

**Mobility** The product contains substances which are water-soluble and may spread in water systems.

# 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

Other adverse effects Not determined.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### JMS BED PAN DETERGENT

#### General information

When handling waste, the safety precautions applying to handling of the product should be considered. Do not mix with other chemicals. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

# **SECTION 14: Transport information**

#### 14.1. UN number

UN No. (ADR/RID) 1824 UN No. (IMDG) 1824 UN No. (ICAO) 1824 UN No. (ADN) 1824

# 14.2. UN proper shipping name

Proper shipping name

SODIUM HYDROXIDE SOLUTION

(ADR/RID)

Proper shipping name (IMDG) SODIUM HYDROXIDE SOLUTION
Proper shipping name (ICAO) SODIUM HYDROXIDE SOLUTION
Proper shipping name (ADN) SODIUM HYDROXIDE SOLUTION

#### 14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C5

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

#### Transport labels



# 14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ADN packing group III
ICAO packing group III

# 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

# 14.6. Special precautions for user

**EmS** F-A, S-B

ADR transport category 3

#### JMS BED PAN DETERGENT

Emergency Action Code 2R

Hazard Identification Number 80

(ADR/RID)

Tunnel restriction code (E)

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to** Not applicable. **Annex II of MARPOL 73/78** 

and the IBC Code

#### SECTION 15: Regulatory information

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

EU legislation European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of

Substances and Mixtures.

This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC)

No.1907/2006.

#### 15.2. Chemical safety assessment

#### **Pcs Information**

# **SECTION 16: Other information**

Abbreviations and acronyms used in the safety data sheet

(EC) No. 1272/2008: EU Regulation on Classification, Labelling and Packaging of

Substances and Mixtures.

COSHH - Control of Substances Hazardous to Health.

DNEL - Derived No Effect Limit.

Industry - Refers in section 8 to application of the substance in an industrial process.

NPIS - National Poisons Information Service. PBT - Persistent, Bioaccumulative & Toxic.

Professional - Refers in section 8 to application/use of the preparation/product in a skilled

trade premises.

REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC

1907/2006).

vPvB - Very Persistent, Very bioaccumulative.

General information Only trained personnel should use this material. This document is a Safety Data Sheet, NOT

a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH

assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification,

for this refer to section 2.

**Revision comments** Reissue following review of text.

Revision date 23/07/2018

SDS number 25464

#### JMS BED PAN DETERGENT

Hazard statements in full H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

REACH extended MSDS

comments

REACH requires that persons handling chemicals should take the necessary risk

management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevent recommendations must be passed along the supply

chain. These assessments are generally reported in Exposure Scenarios.

Where Exposure Scenarios have been provided for substances used in this product, the

relevent information is incorporated into the safety data sheet.

END OF SAFETY DATA SHEET

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.