COSHH Assessment

Course Aim

This course supplements the ‘Corporate Safety Management Training’.

The course aim is to ensure all managers and colleagues have awareness of the corporate policy in relation to COSHH, how to undertake the assessment of chemicals and other substances using the correct corporate assessment template and what supporting information is required to comply with the regulations.

Course Objectives

At the end of this course you will be able to:

- Identify Legislative duties and statutory compliance.
- Understand the hazards associated with substances used in the workplace.
- Learn how to avoid harmful exposure to hazardous substances.
- Identify the most commonly used hazard labels.
- Complete the COSHH Assessment and use of the Manufacturers Data Sheets

The Legal Framework

The Legal Framework

The Health & Safety at Work Etc. Act 1974 (HSAWA)

Health and Safety at Work etc Act 1974

Control Of Substances Hazardous to Health 2002 (COSHH)

Personal Protective Equipment Regulations 1992 (PPE)

Duties of the Employer

HASAWA Section 2

Ensure, in so far as is reasonably practicable, the health, safety and welfare of all employees.

Health and Safety at Work etc Act 1974

- Provide safe plant and equipment, and safe systems of work.
- The provision of any necessary information instruction training and supervision.
- The safe use, handling storage and transportation of any articles or substances for use at work.
- Maintain a safe place of work with adequate access and egress.

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COSHH Regulations 2002

COSHH stands for the

Control **O**f **S**ubstances **H**azardous to **H**ealth

COSHH Regulations require that:

- risk assessments are completed and consulted.
- the type of hazard created by a substance is identified by a warning label on its container.
- large quantities need to be stored in special secure containers.

Control of Substance Hazardous to Health (COSHH) Regulations 2002

Managers are required to:

- **Assess Risks**
- **Identify Precautions required**
- **Prevent or Control exposure**
- **Ensure Control Measures are used and Maintained**
- **Monitor Exposure**
- **Undertake appropriate Health Surveillance**
- **Inform and train employees**

PPE concepts and definitions

Personal Protective Equipment

'all equipment which is intended to be worn or held by a person at work and which protects them against one or more risks to their health and safety'

NOT ordinary work clothes, weapons, or sports equipment

PPE is used as a last resort

- Only protects the wearer
- Theoretical maximum levels of protection are difficult to achieve
- PPE restricts the wearer

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Routes Of Entry?

Exposure can take place in one of 4 ways.

What 4 ways can exposure take place and which is considered potentially the most dangerous?

Routes of entry

Hazardous substances can also cause damage to the body when they:

- Come in contact with the skin or via a cut or eyes (**Absorption**)
- Are breathed in through the nose or mouth (**Inhalation**)
- Enter the body by the mouth either by swallowing or contact with contaminated hands (**Ingestion**)
- Enter the body by a sharp object (**injection**)

COSHH Labelling

Hazards symbols

What Symbol would Expect to find on a bottle of bleach?

Hazards symbols

Chemical irritants affect the airway (respiratory tract and lung tissues) and can cause either immediate or long term damage.

These chemicals can also irritate the eyes and skin. If there is any contact with the eyes, wash with plenty of water and seek medical advice.

Hazards symbols

What Symbol would Expect to find on a bottle of Rodent Killer?

Hazards symbols

A substance which if it is inhaled, ingested or allowed to penetrate the skin, may involve serious or chronic health risks and even death.

New international symbols

International symbols begin to replace the European symbols from 2009.

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Avoid Exposure

COSHH - Hierarchy of controls

1. Prevent exposure

- eliminate use
- substitute material
- change work methods to remove the operation

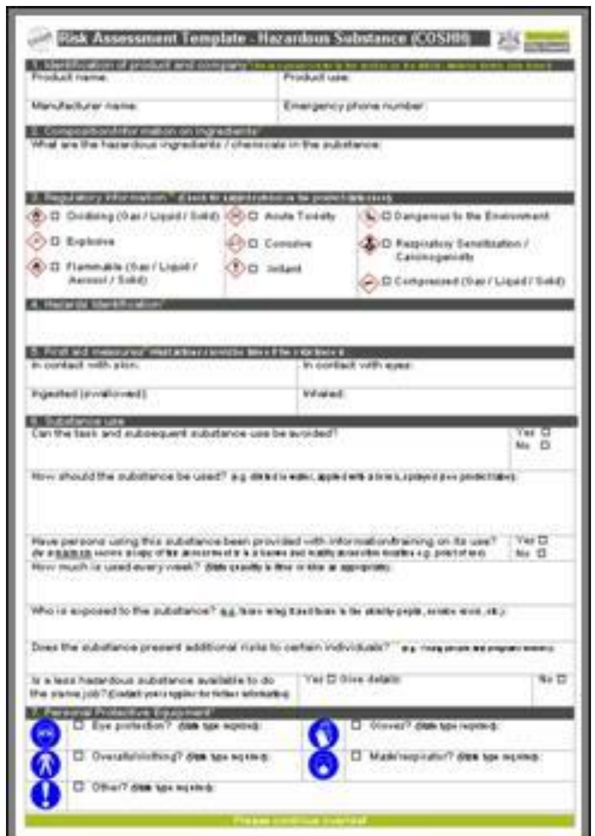
2. Control exposure

- use of control measures

3. Issue Personal Protective Equipment

- gloves, goggles, overalls, masks, etc.

COSHH Assessment & Manufacturers Data Sheets



Risk Assessment Template - Hazardous Substance (COSHH)

1. Identification of product and company

Product name:	Product use:
Manufacturer name:	Emergency phone number:

2. Composition/information on ingredients

What are the hazardous ingredients / chemicals in the substance:

3. Regulatory information

- ☐ Oxidising (Gas / Liquid / Solid)
- ☐ Explosive
- ☐ Flammable (Gas / Liquid / Aerosol / Solid)
- ☐ Acute Toxicity
- ☐ Corrosive
- ☐ Irritant
- ☐ Dangerous to the Environment
- ☐ Respiratory Sensitisation / Carcinogenicity
- ☐ Compressed (Gas / Liquid / Solid)

4. Hazards Identification

5. First aid measures

In contact with skin:	In contact with eyes:
Ingested (swallowed):	Inhaled:

6. Substance use

Can the task and subsequent substance use be avoided? Yes ☐ No ☐

How should the substance be used?

Have persons using this substance been provided with information/training on its use? Yes ☐ No ☐

How much is used every week?

Who is exposed to the substance?

Does the substance present additional risks to certain individuals?

Is a less hazardous substance available to do the same job? Yes ☐ Give details: No ☐

7. Personal Protective Equipment

- ☐ Eye protection?
- ☐ Gloves?
- ☐ Overalls/clothing?
- ☐ Mask/respirator?
- ☐ Other?

Please continue overleaf

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COSHH - Action Checklist

Before Starting the COSHH Assessment, you will need to:

- ☑ List all your substances
- ☑ Edit out those obviously not hazardous
- ☑ Co-ordinate to avoid duplication
- ☑ Obtain a data sheet from the supplier
- ☑ Assess the way it is used
- ☑ Liase with other using the same substances

Once completed, the COSHH Assessment MUST be communicated to staff

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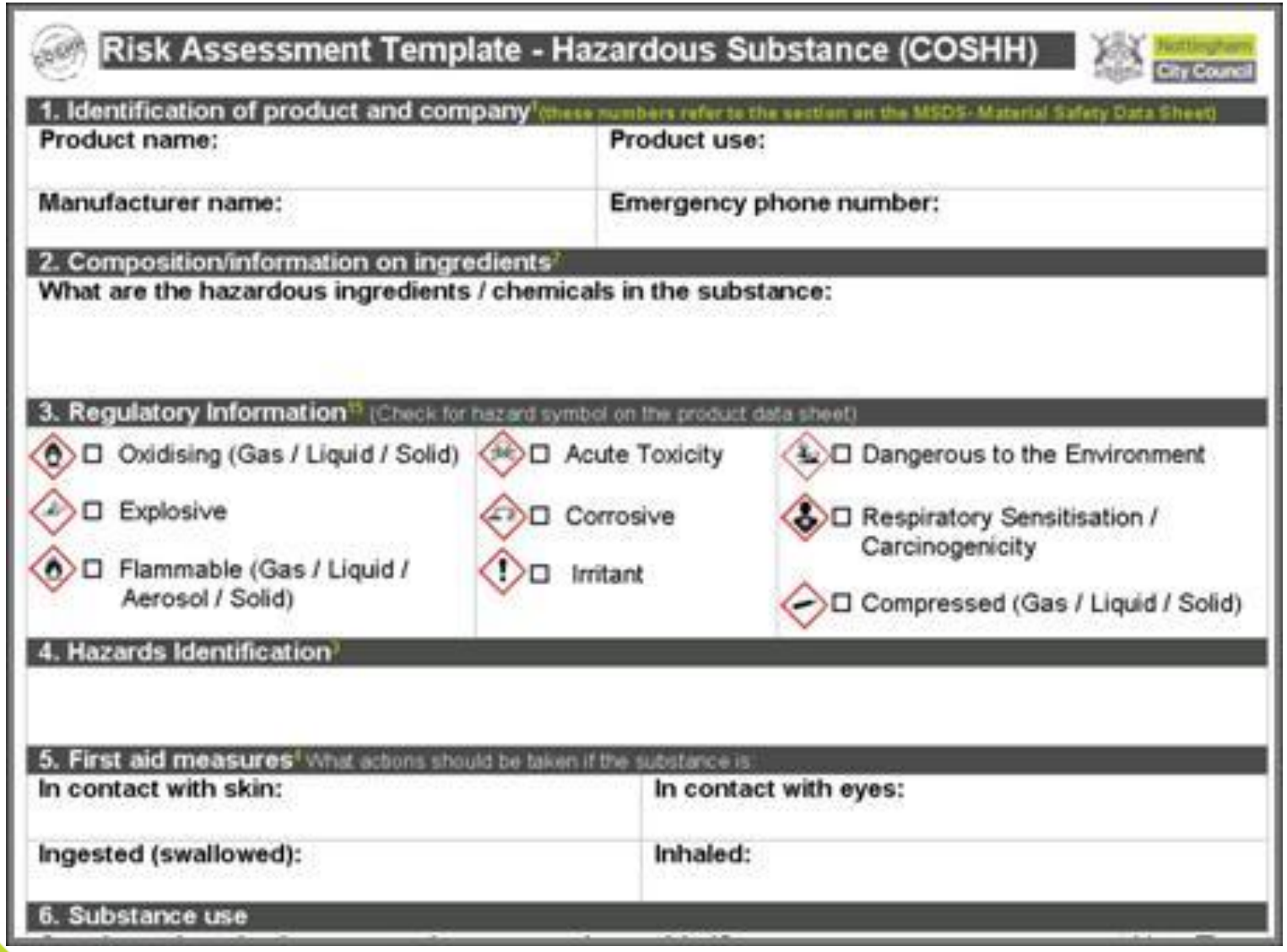
COSHH Assessment



Risk Assessment Template - Hazardous Substance (COSHH)

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1. Identification of product and company (these numbers refer to the section on the MSDS - Material Safety Data Sheet)

Product name:	Product use:
Manufacturer name:	Emergency phone number:

2. Composition/information on ingredients

What are the hazardous ingredients / chemicals in the substance:

3. Regulatory Information (Check for hazard symbol on the product data sheet)

- ☐ Oxidising (Gas / Liquid / Solid)
- ☐ Explosive
- ☐ Flammable (Gas / Liquid / Aerosol / Solid)
- ☐ Acute Toxicity
- ☐ Corrosive
- ☐ Irritant
- ☐ Dangerous to the Environment
- ☐ Respiratory Sensitisation / Carcinogenicity
- ☐ Compressed (Gas / Liquid / Solid)

4. Hazards Identification

5. First aid measures What actions should be taken if the substance is:

In contact with skin:	In contact with eyes:
Ingested (swallowed):	Inhaled:

6. Substance use

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COSHH Assessment

6. Substance use		
Can the task and subsequent substance use be avoided?		Yes ☐ No ☐
How should the substance be used? (e.g. diluted in water, applied with a brush, sprayed (see product label)		
Have persons using this substance been provided with information/training on its use? (As a minimum ensure a copy of this assessment is in a known and readily accessible location e.g. point of use)		Yes ☐ No ☐
How much is used every week? (State quantity in litres or kilos as appropriate)		
Who is exposed to the substance? (e.g. those using it and those in the vicinity- pupils, service users, etc.)		
Does the substance present additional risks to certain individuals?[11] (e.g. Young people and pregnant women)		
Is a less hazardous substance available to do the same job?(Contact your supplier for further information)	Yes ☐ Give details:	No ☐

7. Personal Protective Equipment[8]			
	☐ Eye protection? (State type required)		☐ Gloves? (State type required)
	☐ Overalls/clothing? (State type required)		☐ Mask/respirator? (State type required)
	☐ Other? (State type required)		

COSHH Assessment

8. Handling and Storage[7]	
Handling:	**Storage:**
Other precautions and emergency procedures	
Spillages: How should an accidental release/spillage of this substance be dealt with?[6]	
Fire precautions: What actions should be taken in the event of fires involving this substance?[5]	
Chemical reactions: Is there any other substance that this substance must not come into contact with? [10]	
Disposal: How should the substance be disposed of (or not disposed of)?[13]	
Health surveillance: Do staff using the substance require any health surveillance?[11]	
Other:[15]	

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COSHH Assessment

Assessment of risk		
Are all the controls detailed above currently in place?	Yes ☐	No ☐

If these controls are not in place or additional controls are required, state actions to be taken. **Please note** - COSHH substances must **NOT** be used if adequate control measures are not in place.	
Remedial actions required	**Date for completion**
Are hazards to health adequately controlled with all control measures in place?	Yes ☐ No ☐

Assessor(s) name:	**Assessor(s) signature:**	**Date:**
The Line Manager **MUST** sign below to show that the assessment is a correct and reasonable reflection of the hazards and of the control measures and actions required.		
Line Manager's name:	**Line Manager's signature:**	**Date:**
Remedial actions complete: (Date)	**Line Manager's signature:**	**Reviewed on:** (Date)

Until the assessment is signed by the assessor and line manager, the document is only a draft document and not legally compliant.

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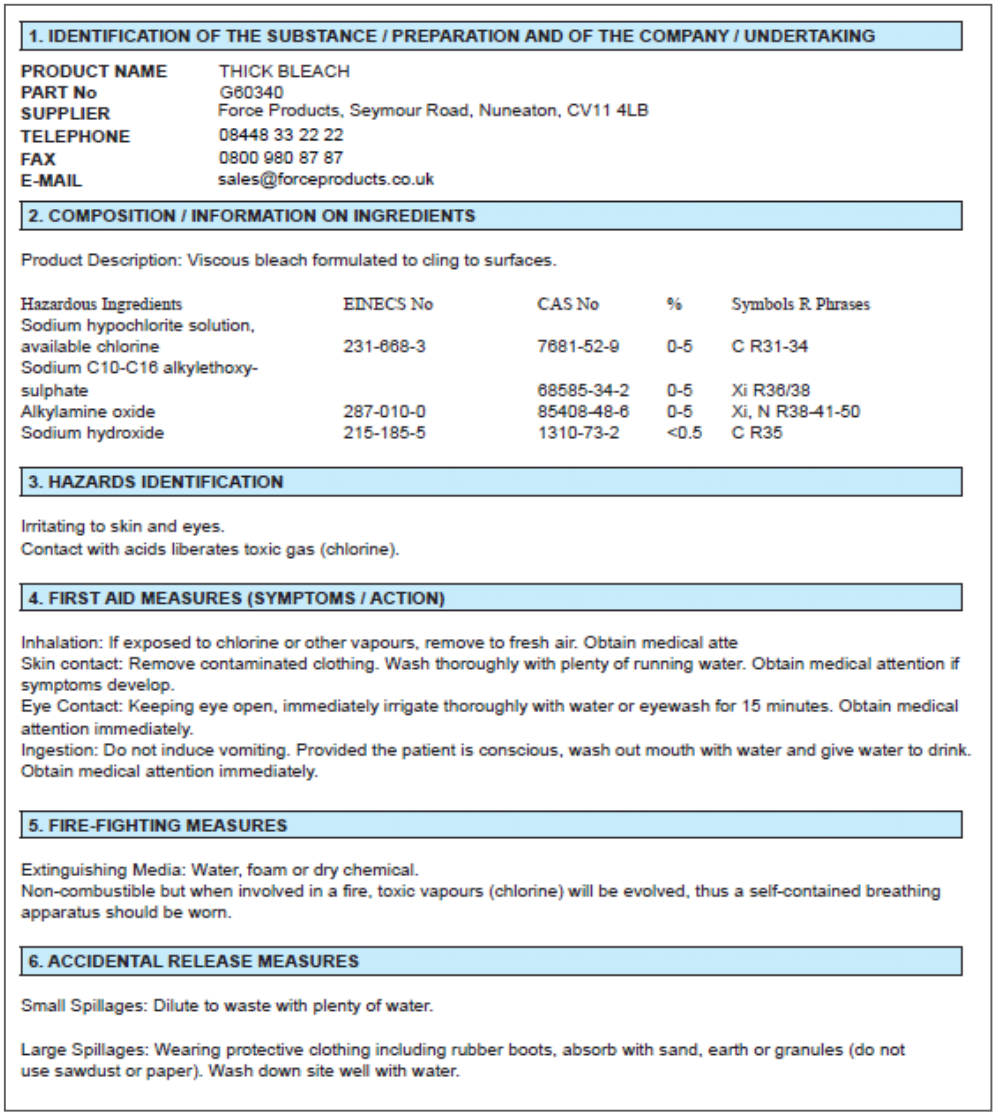
Material Safety Data Sheet



1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT NAME	THICK BLEACH
PART No	G60340
SUPPLIER	Force Products, Seymour Road, Nuneaton, CV11 4LB
TELEPHONE	08448 33 22 22
FAX	0800 980 87 87
E-MAIL	sales@forceproducts.co.uk

2. COMPOSITION / INFORMATION ON INGREDIENTS

Product Description: Viscous bleach formulated to cling to surfaces.

Hazardous Ingredients	EINECS No	CAS No	%	Symbols R Phrases
Sodium hypochlorite solution, available chlorine	231-668-3	7681-52-9	0-5	C R31-34
Sodium C10-C16 alkylethoxy-sulphate		68585-34-2	0-5	Xi R36/38
Alkylamine oxide	287-010-0	85408-48-6	0-5	Xi, N R38-41-50
Sodium hydroxide	215-185-5	1310-73-2	<0.5	C R35

3. HAZARDS IDENTIFICATION

Irritating to skin and eyes.
Contact with acids liberates toxic gas (chlorine).

4. FIRST AID MEASURES (SYMPTOMS / ACTION)

Inhalation: If exposed to chlorine or other vapours, remove to fresh air. Obtain medical atte
Skin contact: Remove contaminated clothing. Wash thoroughly with plenty of running water. Obtain medical attention if symptoms develop.
Eye Contact: Keeping eye open, immediately irrigate thoroughly with water or eyewash for 15 minutes. Obtain medical attention immediately.
Ingestion: Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give water to drink. Obtain medical attention immediately.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water, foam or dry chemical.
Non-combustible but when involved in a fire, toxic vapours (chlorine) will be evolved, thus a self-contained breathing apparatus should be worn.

6. ACCIDENTAL RELEASE MEASURES

Small Spillages: Dilute to waste with plenty of water.

Large Spillages: Wearing protective clothing including rubber boots, absorb with sand, earth or granules (do not use sawdust or paper). Wash down site well with water.

Normal Contents

- Substance Identification
- Composition
- First aid
- Fire Issues
- Accidental release

Material Safety Data Sheet

7. HANDLING AND STORAGE

Handling: Adequate ventilation is required. Avoid contact with skin and eyes.
Do not breathe mist. Avoid contact with other cleaning agents.

Storage: Store in a cool place away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear PVC or rubber gloves, aprons, eyeshields when handling concentrate.

Workplace Exposure Limits:

Hazardous Ingredient LTEL 8hr TWA STEL
ppm mg/m3 ppm mg/m3
sodium hydroxide - - - 2
In case of chlorine emission, the WEL for chlorine should be observed:
chlorine 0.5 1.5 1 2.9

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: straw/yellow liquid
Odour: faintly chlorinous
pH: typical 12.7
Flash point °C: N/A
Relative Density (20°C): 1.09 typical
Solubility in water: soluble

10. STABILITY AND REACTIVITY

Stability: Product decomposes over time. Factors that increase the rate of decomposition are: increase in temperature, certain metallic impurities, high initial concentration, fall in pH below 11, and exposure to light.
Conditions to Avoid: Contact with acids, most metals, high temperatures, direct sunlight.
Materials to Avoid: Corrosive to most metals, to painted surfaces and to most organic materials.
Hazardous Decomposition Products: Chlorine gas.

11. TOXICOLOGICAL INFORMATION

Inhalation: Little hazard if stored correctly.
Vapour containing chlorine irritates the nose, throat and lungs.
Skin Contact: Will cause irritation. Repeated or prolonged contact may cause irritation and eventuallydermatitis.
Eye Contact: Will cause irritation and inflammation.
Ingestion: Will irritate the mouth, throat and stomach.

Normal Contents

- Handling
- Storage
- Exposure Controls
- Chemical Properties
- Stability
- Toxicology

Material Safety Data Sheet

12. ECOLOGICAL INFORMATION

Biodegradable. To safeguard the environment, this product is rapidly broken down after use into harmless materials by sewage treatment and natural processes.
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
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.

13. DISPOSAL CONSIDERATIONS

Product: Where practical, waste or surplus material should be recovered and recycled.
Dispose of according to national and local authority regulations for via an appropriately licensed waste contractor.
Packaging: Packaging is recyclable and, where practical, containers and packaging should be recycled by a licensed contractor. Wash out empty containers with water before disposal.

14. TRANSPORT INFORMATION

UN No: -
Road Carriage: Not classified as hazardous
TREM Card No: -
ADR/RID Class: -
IMDG Class and Packing Group: -
Proper Shipping Name: -
Marine Pollutant: No
Intrastat/Commodity Code: 2828-90-00

15. REGULATORY INFORMATION

CHIP Classification: Irritant
Hazard Symbol: Xi

Risk Phrases:
R31 - Contact with acids liberates toxic gas.
R36/38 - Irritating to eyes and skin.
Safety Phrases:
S2 - Keep out of reach of children.
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.
S50 - Do not mix with other chemicals

Normal Contents

- Ecological information
- Disposal requirements
- Transport information
- Regulatory information

Summary

- It is all too easy to ignore a hazard because it often takes time for any serious condition to develop.

- Container safety labels and Material Safety Data Sheets are there to inform you of the precautions to take.

- Make sure that you understand and carry out these precautions.

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Any Questions

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