



## TETRAHYDROFURAN LRG MSDS

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

PRODUCT NAME	TETRAHYDROFURAN LRG
CAS-No.	109-99-9
EU INDEX NO.	603-025-00-0
EC No.	203-726-8
SUPPLIER	Reagent Chemical Services 18 Aston Fields Road Whitehouse Industrial Estate Runcorn Cheshire WA7 3DL T: 01928 716903 F: 01928 716425 E: <a href="mailto:info@reagent.co.uk">info@reagent.co.uk</a>
PRODUCT NO.	2519
APPLICATION	General chemical reagent

### 2 HAZARDS IDENTIFICATION

Highly flammable. May form explosive peroxides. Irritating to eyes and respiratory system.

CLASSIFICATION (67/548) F;R11, R19 Xi;R36/37

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

EU INDEX NO.	603-025-00-0
EC No.	203-726-8
CAS-No.	109-99-9

### 4 FIRST-AID MEASURES

#### INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. In case of severe exposure or if any discomfort continues get medical attention.

#### INGESTION

Do not induce vomiting. Immediately rinse mouth and drink plenty of water. Get medical attention immediately!

#### SKIN CONTACT

Immediately remove contaminated clothing and wash before re-use. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

#### EYE CONTACT

Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible remove any contact lenses and continue to wash. Get medical attention immediately.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Water spray, foam, dry powder or carbon dioxide.

#### UNUSUAL FIRE & EXPLOSION HAZARDS

HIGHLY FLAMMABLE! Vapours are heavier than air and may spread near ground to sources of ignition. Forms explosive mixtures with air.

#### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

### 6 ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS

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

# TETRAHYDROFURAN LRG

## SPILL CLEAN UP METHODS

Remove sources of ignition. Small Spillages: Absorb with inert, non-combustible material. Large Spillages: Ventilate well. Dam and absorb spillages with sand, earth or other inert, non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash spillage site well with water and detergent, be aware of the potential for surfaces to become slippery. After spillages in enclosed areas test atmosphere before using any potential ignition sources.

## 7 HANDLING AND STORAGE

### USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Static electricity and formation of sparks must be prevented. Eliminate all sources of ignition.

### STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry and cool place.

### STORAGE CLASS

Flammable liquid storage.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
TETRAHYDROFURAN LRG	WEL	50 ppm(Sk)	150 mg/m3(Sk)	100 ppm(Sk)	300 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

### ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit (WEL) is not exceeded. Work in flameproof fume cupboard.

### RESPIRATORY EQUIPMENT

Wear suitable respiratory protection if vapours or mists are generated.

### HAND PROTECTION

Use protective gloves. Polyvinyl alcohol (PVA). Polyethylene/Ethylene Vinyl Alcohol (PE/EVAL). Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

### EYE PROTECTION

Wear safety glasses. If risk of splashing, wear safety goggles or face shield.

### OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower.

### HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated. When using do not eat, drink or smoke.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid	MELTING POINT (°C)	108
COLOUR	Colourless	VAPOUR PRESSURE	17.5 kPa 20
ODOUR	Pungent Similar to ether	FLASH POINT (°C)	-17
SOLUBILITY	Miscible with water	FLAMMABILITY LIMIT - LOWER(%)	1.5
BOILING POINT (°C)	67 760 mm Hg	REFRACTIVE INDEX	1.4072
RELATIVE DENSITY	0.89		
VISCOSITY	0.46 - 0.47 mPas 20		
AUTO IGNITION	230		
TEMPERATURE (°C)			
FLAMMABILITY LIMIT - UPPER(%)	12		

## 10 STABILITY AND REACTIVITY

### STABILITY

Air and light sensitive.

### CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

### MATERIALS TO AVOID

Alkali hydroxides Halogens Oxidising agents. Air/oxygen mixtures

## 11 TOXICOLOGICAL INFORMATION

# TETRAHYDROFURAN LRG

TOXIC DOSE 1 - LD 50 1650 mg/kg (oral rat)  
TOXIC CONC. - LC 50 62 ppm/-- (ihl-rat)

## INHALATION

Headache. May cause irritation to the respiratory tract Vapours in high concentration may have a narcotic effect

## INGESTION

May be harmful by ingestion. Ingestion of large amounts may cause damage to liver and kidneys.

## SKIN CONTACT

Rapidly absorbed Irritating to skin. Product has a defatting effect on skin. May cause secondary inflammation.

## EYE CONTACT

Irritating to eyes.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

Although not classified as environmentally hazardous, harmful effects cannot be excluded in the event of improper handling or disposal. Do not allow to enter drinking water, waste water or soil.

LC 50, 96 Hrs, FISH mg/l 2160 (P.promelas)

### BIOACCUMULATION

Low bioaccumulation potential.

## 13 DISPOSAL CONSIDERATIONS

### DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

## 14 TRANSPORT INFORMATION



UK ROAD CLASS	3		
UN NO. ROAD	2056	UK ROAD PACK GR.	II
ADR CLASS NO.	3	ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	II	RID CLASS NO.	3
RID PACK GROUP	II	UN NO. SEA	2056
IMDG CLASS	3	IMDG PACK GR.	II
UN NO. AIR	2056	AIR CLASS	3
AIR PACK GR.	II		

## 15 REGULATORY INFORMATION

### LABELLING



Irritant



Highly Flammable

### RISK PHRASES

R11	Highly flammable.
R19	May form explosive peroxides.
R36/37	Irritating to eyes and respiratory system.

### SAFETY PHRASES

S2	Keep out of the reach of children.
S16	Keep away from sources of ignition - No smoking.
S29	Do not empty into drains.
S33	Take precautionary measures against static discharges.

### UK REGULATORY REFERENCES

Highly Flammable Liquid Regulations 1972. Fire precautions Act 1971.

# TETRAHYDROFURAN LRG

## STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

## APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply. COSHH essentials: Easy steps to control chemicals.  
Control of Substances Hazardous to Health Regulations.

## GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

## NATIONAL REGULATIONS

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

## 16 OTHER INFORMATION

### GENERAL INFORMATION

Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS).

### REVISION COMMENTS

This is first issue.

REV. NO./REPL. SDS GENERATED 0

SDS NO. 20738

### SAFETY DATA SHEET STATUS

Approved.

DATE 24/07/2008