



Safety Data Sheet

Tixophalte

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

Product Code 003E0503
Infosafe No. ACNMW GB/eng/C
Issued Date 05/09/2006
Product Type/Use Sealant.

Other Names **Name**
 Tixophalte

Supplier

Shell UK Oil Products Ltd.
 Stanlow Manufacturing Complex
 PO Box 3
 Ellesmere Port
 CH65 4HB
 UNITED KINGDOM

Telephone Numbers
Emergency Tel.

+44 (0) 151 350 4595

Telephone/Fax Number

Tel: +44 (0) 151 350 4000

2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description

A blend of components derived from crude petroleum oil, solvent and additives.

Name	CAS	EINECS	Proportion	Hazard	R Phrase
N-butyl propionate	590-01-2	209-669-5	10-20 %		R10
N-alkyl propylene diamine dioleate	40027-38-1	254-754-2	1-5 %	Xi, Xn, N	R38, R41, R22, R50

Other Information

See Section 16 'Other Information' for full text of each relevant Risk Phrase.

3. HAZARDS IDENTIFICATION

EC Classification	Flammable.
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Human Health Hazards

Not expected to be a health hazard at ambient temperature.

Safety Hazards

Flammable.

Environmental Hazards

Not classified as dangerous for the environment.



4. FIRST AID MEASURES

Symptoms and Effects

Not expected to give rise to an acute hazard under normal conditions of use.

Inhalation

If inhalation of mists, fumes or vapour causes irritation to the nose or throat, remove to fresh air. If rapid recovery does not occur, obtain medical attention.

Skin

Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Eye

Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion

Under normal conditions of use this is not expected to be a primary route of exposure.

Advice to Doctor

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Specific Hazards

Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and unidentified organic and inorganic compounds.

Extinguishing Media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

Do not use water in a jet.

Protective Equipment

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with skin, eyes, clothing. Do not breathe fumes, vapour. Remove all possible sources of ignition in the surrounding area. Use compressed air or fresh air respiratory equipment in confined spaces.

Environmental Precautions

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean-up Methods - Small Spillages

Shovel into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.

Clean-up Methods - Large Spillages

Prevent from spreading by making a barrier with sand, earth or other containment material. Treat residues as for small spillage.

Other Information

Local authorities should be advised if significant spillages cannot be contained.



7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes, and clothing. Extinguish any naked flames. Remove ignition sources. Avoid sparks. Do not smoke.

For quality, health and safety reasons do not exceed the recommended storage and handling temperature. Only use in well-ventilated areas. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication 'COSHH Essentials'.

Storage

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Protect from frost.

Storage Temperatures

5°C Minimum. 30°C Maximum.

Recommended Materials

For containers or container linings, use mild steel, stainless steel or aluminium.

Unsuitable Materials

For containers or container linings avoid PVC, polyethylene or high density polyethylene.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Asphalt (petroleum; bitumen) fume, as benzene-soluble aerosol, inhalable particulate	EH 40 2005	TWA	5	mg/m ³	
	EH 40 2005	STEL	10	mg/m ³	

EH 40 2005

EH 40 2005 Health and Safety Executive. EH40; Workplace Exposure Limits

Exposure Controls

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Hygiene Measures

Wash hands before eating, drinking, smoking and using the toilet.

Respiratory Protection

In the event of an inhalation risk, use with local exhaust ventilation.

Hand Protection

PVC, neoprene, or nitrile rubber gloves. Chemical protective gloves are made from a wide range of materials, but there is no single glove material (or combination of materials) which gives unlimited resistance to any individual or combination of substances or preparations. The extent of the breakthrough time will be affected by a combination of factors which include permeation, penetration, degradation, use pattern (full immersion, occasional contacts) and how the glove is stored when not in use.

Theoretical maximum levels of protection are seldom achieved in practice and the actual level of protection can be difficult to assess.



Eye Protection

Wear safety glasses or full face shield if splashes are likely to occur.

Body Protection

Standard issue work clothes. Safety shoes or boots - chemical resistant.

Personal Protective Equipment

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Environmental Exposure Controls

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour	Black.
Physical State	Semi-solid at ambient temperature.
Odour	Characteristic.
Solubility in Water	Negligible.
Density	1300 kg/m ³ at 20°C.
Flash Point	>37°C.

10. STABILITY AND REACTIVITY

Stability

Stable under normal use conditions.

Conditions to Avoid

Heat, flames and sparks.

Materials to Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous decomposition products are not expected to form during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment

Toxicological data have not been determined specifically for this product. Information given is based on data on the components and the toxicology of similar products.

Acute Toxicity - Oral

LD50 > 2000 mg/kg.

Acute Toxicity - Dermal

LD50 > 2000 mg/kg.

Acute Toxicity - Inhalation

Not considered to be an inhalation hazard under normal conditions of use.

Eye Irritation

Expected to be slightly irritating.

Skin Irritation

Expected to be slightly irritating.



Respiratory Irritation

Inhalation of vapour or mists may cause irritation.

Skin Sensitisation

Not expected to be a skin sensitizer.

Carcinogenicity

Bitumen is not classified as dangerous under EC criteria, but it does contain low concentrations of Polycyclic Aromatic Compounds (PAC's). Undiluted these PAC's are not considered to be bio-available. However, if bitumen is mixed with diluents to obtain a low viscosity at ambient temperatures it is believed that such materials may become bio-available. Despite the known presence of PAC's there is no evidence that exposure to undiluted bitumen or its' fumes is harmful.

Mutagenicity

Not considered to be a mutagenic hazard.

Reproductive Toxicity

Data not available.

12. ECOLOGICAL INFORMATION

Basis for Assessment

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Mobility

If it enters soil, it will adsorb to soil particles and will not be mobile. Sinks in water.

Persistence / Degradability

Not readily biodegradable.

Bioaccumulation

Has the potential to bioaccumulate. In practice, the very low water solubilities and high molecular weights of these substances are such that their bioavailability to aquatic organisms is limited and therefore bioaccumulation is unlikely.

Ecotoxicity

Poorly soluble mixture. May cause physical fouling of aquatic organisms. Product is expected to be practically non-toxic to aquatic organisms, LL/EL50 >100 mg/l. (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).

Other Adverse Effects

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Product Disposal

Recover or recycle if possible. Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose into the environment, in drains or in water courses.

Container Disposal

Recycle or dispose of in accordance with the legislation in force with a recognised collector or contractor.

Local Legislation

Comply with any local recovery or waste disposal regulations.



14. TRANSPORT INFORMATION**ADR/RID UN Number**

3295

ADR/RID Class

3

ADR/RID Packing Group

III

ADR/RID Proper Shipping Name

HYDROCARBONS, LIQUID, N.O.S. - (BUTYL PROPIONATE)

IMDG UN Number

3295

IMDG Hazard Class

3

IMDG Packing Group

III

IMDG Proper Shipping Name

HYDROCARBONS, LIQUID, N.O.S. - (BUTYL PROPIONATE)

IATA UN Number

3295

IATA Hazard Class

3

IATA Packing Group

III

IATA Proper Shipping Name

HYDROCARBONS, LIQUID, N.O.S. - (BUTYL PROPIONATE)

15. REGULATORY INFORMATION

EC Symbols	None.
EC Risk Phrase	R10 Flammable.
EC Safety Phrase	S16 Keep away from sources of ignition - No smoking. S2 Keep out of reach of children. S46 If swallowed, seek medical advice immediately and show this container or label.
EINECS	All components listed or polymer exempt.
TSCA (USA)	All components in compliance.

National Legislation

Environmental Protection Act 1990 (as amended).

Health and Safety at Work Act 1974

Consumers Protection Act 1987

Control of Pollution Act 1974

Environmental Act 1995

Factories Act 1961

Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.

Control of Substances Hazardous to Health Regulations 1994 (as amended).



Tixophalte

Road Traffic (Carriage of Dangerous Substances in Packages) Regulations
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations
Road Traffic (Carriage of Dangerous Substances in Road Tankers in Tank Containers) Regulations
Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
Health and Safety (First Aid) Regulations 1981
Personal Protective Equipment (EC Directive) Regulations 1992
Personal Protective Equipment at Work Regulations 1992.

Packaging & Labelling

Safety data sheet available for professional user on request.

16. OTHER INFORMATION

Revisions Highlighted

Because of a new system the version number was reset.

References

CONCAWE product dossier 92/104 - Bitumen and bitumen derivatives
CONCAWE report 01/54 - Environmental classification of petroleum substances - summary data and rationale
CONCAWE report 01/53 - Classification and labelling of petroleum substances according to the EU dangerous substances directive (CONCAWE recommendations - July 2005)
CONCAWE report 5/02 - Amended safety data sheet directive (2002/58/EC)
CEN/TC 19/SC Bitumen and bituminous binders, terminology
Energy Institute - Bitumen safety code
Eurobitume - Guidelines on the classification of bitumens and bituminous preparations
EAPA - Guide to the compilation of safety data sheets for bituminous mixtures

Restrictions

This product must not be used in applications other than recommended without first seeking the advice of the SHELL technical department.

List of R Phrases in Section 2

R10 Flammable.
R22 Harmful if swallowed.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.

Further Information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute a guarantee for any specific property of the product.

... **End Of SDS** ...

