



# MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 080241

## BIOADHESIVE PLUS

Date of the previous version: not applicable

Revision Date: 2011-05-11

Version 1

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

<b>Product name</b>	<b>BIOADHESIVE PLUS</b>
<b>Number</b>	0B2
<b>Pure substance/mixture</b>	Mixture

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

<b>Identified uses</b>	Lubricating grease.
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#### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	TOTAL LUBRIFIANTS 562 Avenue du Parc de L'île 92029 Nanterre Cedex Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71
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#### For further information, please contact

<b>Contact Point</b>	HSE
<b>E-mail Address</b>	rm.msds-lubs@total.com

#### 1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)

France - ORFILA Tél : 01.45.42.59.59

In France : - PARIS : Hôpital Fernand Widal 200, rue du Faubourg Saint-Denis 75475 Paris Cédex 10 , Tel : 01.40.05.48.48. - MARSEILLE : Hopital Salvator, 249 bd Ste Marguerite 13274 Marseille cedex 5, Tel : 04.91.75.25.25. - LYON : Hopital Hédouard Herriot, 5 place d'Arsonvil, 69437 Lyon cedex 3, Tel : 04.72.11.69.11. - NANCY : Hopital central, 29 Av du Mal De Lattre de Tassigny, 54000 Nancy, Tel : 03.83.32.36.36 ou le SAMU : Tel ( 15 )

### 2. HAZARDS IDENTIFICATION

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

##### REGULATION (EC) No 1272/2008

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

##### DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

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Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC

**Symbol(s)**

Not Classified

### 2.2. Label elements

**Labelled according to:** Not classified/No labelling required

**R-phrase(s)**

none

**S-phrase(s)**

none

### 2.3. Other hazards

**Physical-Chemical Properties** Contaminated surfaces will be extremely slippery.

**Environmental properties** Should not be released into the environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixture

**Chemical nature**
**Hazardous ingredients**

The product is made from synthetic base oils (esters) .

Do not contain hazardous substance nor substance with european workplace exposure limits in concentration above regulatory thresholds

**For the full text of the R-phrases mentioned in this Section, see Section 16**

**For the full text of the H-Statements mentioned in this Section, see Section 16.**

## 4. FIRST AID MEASURES

### 4.1. Description of first-aid measures

**General advice**

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

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<b>Eye contact</b>	Rinse immediately with plenty of water and seek medical advice.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent. In this case, the casualty should be sent immediately to hospital.
<b>Inhalation</b>	Move to fresh air
<b>Ingestion</b>	If swallowed, do not induce vomiting - seek medical advice.

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

<b>Eye contact</b>	Not classified.
<b>Skin contact</b>	Not classified.
<b>Inhalation</b>	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	Treat symptomatically
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## 5. FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Foam. Carbon dioxide (CO <sub>2</sub> ). ABC powder.
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.

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

<b>Special Hazard</b>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.
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### 5.3. Advice for fire-fighters

<b>Special protective equipment for fire-fighters</b>	Wear self-contained breathing apparatus and protective suit
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### Other information

Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General Information

Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

### 6.2. Environmental precautions

#### General Information

Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

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

#### Methods for cleaning up

Take up mechanically and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

#### Personal Protective Equipment

See Section 8 for more detail

#### Waste treatment

See section 13

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### Advice on safe handling

When using, do not eat, drink or smoke. Wear suitable protective clothing. For personal protection see section 8. Remove all sources of ignition.

#### Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and at the end of workday. Do not use abrasives, solvents or fuels. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

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

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**Technical measures/Storage conditions**

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Protect from frost, heat and sunlight. Protect from moisture.

**Materials to Avoid**

Strong oxidizing agents.

7.3. Specific end uses**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**Exposure limits**

Contains no substances with occupational exposure limit values

**Legend**

See section 16

8.2. Exposure controls**Occupational Exposure Controls****Engineering Measures**

When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Personal Protective Equipment****General Information**

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied

**Respiratory protection**

The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

**Eye Protection**

If splashes are likely to occur, wear: Safety glasses with side-shields.

**Skin and body protection**

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.

**Hand Protection**

Hydrocarbon-proof gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

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**Environmental exposure controls****General Information**

The product should not be allowed to enter drains, water courses or the soil

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****Appearance**

smooth

**Color**

brown

**Physical State @20°C**

solid

**Odor**

Characteristic

**Property****Values****Remarks****Method****pH**

Not applicable

**Boiling point/boiling range**

Not applicable

**Flash point**

No information available

**Evaporation rate**

No information available

**Flammability Limits in Air**

No information available

**Vapor Pressure @20°C (kPa)**

No information available

**Vapor density**

No information available

**Density**850 kg/m<sup>3</sup>

@ 15 °C

**Water solubility**

Insoluble

**Solubility in other solvents**

Soluble in many common organic solvents

**logPow**

No information available

**Autoignition temperature**

Not applicable

**Viscosity, kinematic**

Not applicable

**Explosive properties**

Not explosive

**Oxidizing Properties**

Not applicable

**Possibility of hazardous reactions**

Not applicable

**9.2. Other information****Penetration index**

310 - 340 (1/10mm)

ISO 2137

**Drop point**

130 °C

IP-396

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**10. STABILITY AND REACTIVITY**10.1. Reactivity10.2. Chemical stability**Stability** Stable under recommended storage conditions.10.3. Possibility of hazardous reactions**Hazardous Reactions** None under normal processing.10.4. Conditions to Avoid**Conditions to Avoid** Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.10.5. Incompatible Materials**Materials to Avoid** Strong oxidizing agents.10.6. Hazardous Decomposition Products**Hazardous Decomposition Products** Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.**11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**Acute toxicity Local effects, Product Information****Skin contact** Not classified.**Eye contact** Not classified.**Inhalation** Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.**Ingestion** Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.**Acute toxicity Component Information**

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### Sensitization

**Sensitization** Not classified as a sensitizer.

### Specific effects

**Carcinogenicity** This product is not classified carcinogenic.

**Mutagenicity** This product is not classified as mutagenic.

**Reproductive toxicity** This product does not contain any known or suspected reproductive hazards.

### Repeated Dose Toxicity

**Subchronic toxicity** No information available.

### Target Organ Effects (STOT)

**Target Organ Effects (STOT)** No information available.

### Other information

**Other adverse effects** Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Not classified.

#### Acute aquatic toxicity Product Information

No information available.

#### Acute aquatic toxicity Component Information

No information available.

#### Chronic aquatic toxicity Product Information

No information available.

#### Chronic aquatic toxicity Component Information

No information available.

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**Effects on terrestrial organisms**

No information available.

12.2. Persistence and degradability**General Information**

Readily biodegradable ( &gt;60 % after 28 days).

OECD 301 B .

12.3. Bioaccumulative potential**Product Information**

No information available

**logPow**

No information available

**Component Information**12.4. Mobility in soil**Soil**

Given its physical and chemical characteristics, the product has no soil mobility.

**Water**

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

No information available.

12.6. Other adverse effects**13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**Waste from Residues / Unused Products**

Dispose of in accordance with the European Directives on waste and hazardous waste. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal

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**EWC Waste Disposal No.**

The following Waste Codes are only suggestions: 12 01 12. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

**14. TRANSPORT INFORMATION**

<u>ADR/RID</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>ICAO/IATA</u>	Not regulated
<u>ADN</u>	Not regulated

**15. REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Union

## International Inventories

<b>EINECS/ELINCS</b>	Complies
<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	-
<b>PICCS</b>	Complies
<b>AICS</b>	-
<b>NZIoC</b>	Complies
<b>Legend</b>	

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

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AICS - Australian Inventory of Chemical Substances  
 NZIoC - New Zealand Inventory of Chemicals

Further information

### 15.2. Chemical Safety Assessment

**Chemical Safety Assessment**      No information available

### 16. OTHER INFORMATION

**Full text of R-phrases referred to under sections 2 and 3**  
 No information available

#### Abbreviations, acronyms

Legend Section 8

+	Sensitizer	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

**Revision Date:** 2011-05-11

**Revision Note** \*\*\* Indicates updated section

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet

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