



MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 080241

BIOADHESIVE PLUS

Date of the previous version: 2013-05-10

Revision Date: 2013-07-24

Version 1.02

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

1.1. Product identifier

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

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

Identified uses	Lubricating grease.
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1.3. Details of the supplier of the safety data sheet

Supplier	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:

Contact Point	HSE
E-mail Address	rm.msds-lubs@total.com

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
 France - ORFILA (INRS) Tél : +33 (0)1 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 Edouard
 Herriot, 5 place d'Arsonvol, 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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The substance/mixture is non-dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)
Not classified

2.2. Label elements

Labelled according to Not classified/No labelling required

R-phrases(s)
none

S-phrases(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 The product is made from synthetic base oils (esters) .
Hazardous ingredients 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.

Eye contact Rinse immediately with plenty of water and seek medical advice.



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Skin contact	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.
Inhalation	Move to fresh air.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.

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

Eye contact	Not classified.
Skin 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.

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

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Special Hazard	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

Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
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



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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

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

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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.
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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	None under normal use conditions.***
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. Fluorinated rubber. Nitrile rubber. 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.

Environmental exposure controls

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



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<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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		No information available	
Vapor density		No information available	
Density	850 kg/m ³	@ 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

10. STABILITY AND REACTIVITY10.1. 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



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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 effectsAcute 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 InformationSensitization

Sensitization	Not classified as a sensitizer.
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Specific effects

Carcinogenicity	This product is not classified carcinogenic.
Mutagenicity	This product is not classified as mutagenic.
Reproductive toxicity	This product does not present any known or suspected reproductive hazards.
Repeated Dose Toxicity	

Subchronic toxicity	No information available.
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Target Organ Effects (STOT)

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

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

12.1. Toxicity



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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.

Effects on terrestrial organisms

No information available.

12.2. Persistence and degradability

General Information

Readily biodegradable (>60 % after 28 days).

OECD 301 B .

12.3. Bioaccumulative potential

Product Information

No information available.

logPow

No information available

Component Information

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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



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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.

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

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

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

European Union

International Inventories

EINECS/ELINCS

TSCA

DSL

ENCS

IECSC

KECL

PICCS

AICS

NZIoC

Legend

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



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IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
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

Not applicable***

Abbreviations, acronyms

Legend Section 8

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

Revision Date: 2013-07-24

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