

Nomad Grease Complex EP 2

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

1.1. Product identifier

Product Nomad Grease Complex EP 2

name B44
Number Mixture

Pure

substance/mixture

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

Identified uses Lubricating grease.

1.3. Details of the supplier of the safety data sheet

Supplier NOMAD LUBRICANTS

NEW INDUSTRIAL AREA 1

AJMAN, UAE

Tel: +971 6 7433354

For further information, please contact:

Contact Point HSE

E-mail Address info@nomad-lubricants.com

1.4. Emergency telephone number

+971 55 3325889

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 1

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

Directive 1999/45/EC

R-phrase(s) none***

S-phrase(s) none***

Contains Reaction products of bis(4- methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines,C12-14 alkyl (branched). May produce an allergic reaction.

Safety data sheet available on request.

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 Name	EC-No	REACH	CAS-No	Weight	Classification	Classification (Reg. 1272/2008)
		registrati onNo		%	(Dir. 67/548)	1272/2008/
Phosphorodithioic acid,	270-	01-211949362 <mark>8-</mark>	68457-	<1.8	Xi;R38-	Aquatic Chronic 2
mixedO,O-bis(iso-Bu	608-0	22	79-4		41	(H411)Eye Dam. 1
and pentyl) esters, zinc salts					N;R51- 53	(H318) Skin Irrit. 2 (H315)

Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

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 thoroughly with plenty of water for at least 15 minutes, lifting lower and upper

eyelids.

Consult a physician.

Skin contact Remove contaminated clothing and shoes. Wash skin with soap and water. Wash

contaminated clothing before reuse. In the case of skin irritation or allergic

reactions see aphysician.

High pressure jets may cause skin damage. Take victim immediately to hospital.

Inhalation Move to fresh air.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Call aphysician or Poison Control Center immediately.

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

Eye contact Not classified.

Skin contact Not classified. May produce an allergic reaction.

High pressure injection of the products under the skin may have very serious

consequenceseven though no symptom or injury may be apparent.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of

respiratorysystem.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea,

vomiting anddiarrhea.

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

Notes to physician Treat symptomatically.





5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Carbon dioxide (CO 2). ABC powder. Foam. Water spray or fog.

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 maybe highly dangerous if inhaled in confined spaces or at high concentration.

5.3. Advice for fire-fighters

Special protective equipment

forfire-fighters

Wear self-contained breathing apparatus and protective suit.

Other information

extinguishing

Cool containers / tanks with water spray. Fire residues and contaminated fire

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

extremely

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

slippery. Use personal protective equipment. Ensure adequate ventilation. Remove

allsources of ignition.

6.2. Environmental precautions

General Information

material from

Do not allow material to contaminate ground water system. Try to prevent the

entering drains or water courses. Local authorities should be advised if significant

spillagescannot be contained.





6.3. Methods and materials for containment and cleaning up

Methods for cleaning up

Dam up. Contain spillage, and then collect with non-combustible absorbent material,

(e.g.sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Collect free product with

suitable mechanical means. 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. For personal protection see section 8. Use

only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with

skin, eyesand clothing.

Prevention of fire and explosion Take precautionary measures against static discharges. Ground/bond containers,

tanks and transfer/receiving equipment.

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 immediately after handling the product. Do not use abrasives, solvents or fuels. 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 container tightly closed. 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). Design the installations in order to avoid accidentalemissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect

Materials to Avoid from moisture.

Strong oxidizing agents





7.3. Specific end uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits oil mist : 10mg/m³, for 15 minutes; oil mist : 5mg/m³, for 8 hours.

Legend See section 16

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Phosphorodithioic acid, mixed O,O-bis(iso- Buand pentyl) esters, zinc salts 68457-79-4			11.87 mg/kg bw/day Dermal 8.13 mg/m ³ Inhalation	

DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Phosphorodithioic acid, mixed O,O-bis(iso- Buand pentyl) esters, zinc salts 68457-79-4			5.93 mg/kg bw/day Dermal 2.06 mg/m ³ Inhalation 0.24	
	1	7	mg/kg bw/day Oral	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	r	STP	Oral
Phosphorodithioic acid, mixed O,O- bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4	0.000 <mark>004</mark> mg/l fw 0.0000046 mg/l mw 0.000046 mg/l or				100 mg/l	10.67 mg/kg food





8.2. Exposure controls

Occupational Exposure Controls

Engineering Measures

working in

Apply technical measures to comply with the occupational exposure limits. When

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 protectionNone under normal use conditions. When workers are facing concentrations above

the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). The use of breathing apparatus must comply strictlywith 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: 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 whichthe 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.





applicable

Insoluble

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Color red
Physical State @20°C solid

Odor Characteristic

<u>Property</u> <u>Values</u> <u>Remarks</u> <u>Method</u>

Ph Not

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 No information available

Density

~ 000

~ 900 kg/m³

Not applicable

Solubility in other

No information available
solvents

logPow
Autoignition temperature

No information available
No information available

Viscosity, kinematic

Explosive properties

No information available

No information available

Oxidizing Properties Not applicable

9.2. Other information

Water solubility

Possibility of

hazardous reactions

Drop point > 275 °C ISO 2176



10. STABILITY AND REACTIVITY

10.1. Reactivity

10.2. 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 None under normal use. Incomplete combustion and thermolysis may produce

gases of varying toxicity such as carbon monoxide, carbon dioxide, various

hydrocarbons, aldehydesand soot.





11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact Not classified. May produce an allergic reaction.

High pressure injection of the products under the skin may have very serious

consequences even though no symptom or injury may be apparent.

Eye contact Not classified.

Inhalation Not classified. Inhalation of vapors in high concentration may cause

irritation ofrespiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea,

vomiting anddiarrhea.

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts	LD50 3600 mg/kg (Rat - OECD 401)***	LD50 > 20000 mg/kg (Rabbit - OECD 402)***	

Sensitization

Sensitization Not classified as a sensitizer. Contains sensitizer(s). May produce an allergic reaction.

Specific effects

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

Reproductive toxicity
Repeated Dose Toxicity

This product is not classified as inutagenic.

This product does not present 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 experimental data available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4	EbL50 (72h) 21 mg/l (Scenedesmus subspicatus - OECD 201)***	EC50 (48h) 23 mg/l (Daphnia magna - OECD 202)***	LC50 (96h) 4.5 mg/l (Cyprinodon variegatus - OECD 203)***	

Chronic aquatic toxicity • Product Information

No information available.

Chronic aquatic toxicity - Component Information

Chemical Name	Toxi <mark>city</mark> to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4		NOEC(21d) 0.8 mg/l Daphnia magna		

Effects on terrestrial organisms

No information available.

12.2. Persistence and degradability

General Information

No information available.

12.3. Bioaccumulative potential

Product Information No information available.

logPow No information available





Component Information

Chemical Name	log Pow
Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts - 68457-79-4	0.69***

12.4. Mobility in soil

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

Air Loss by evaporation is limited.

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

General Information No information available.





13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues /

UnusedProducts

Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance 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 wasused.

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/NDSL - 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

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

R41 - Risk of serious damage to

eyes

R38 - Irritating to skin

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

Abbreviations, acronyms

Legend Section 8

Sensitizer * Skin designation

** Hazard C: Carcinogen

Designation R: Toxic to reproduction

M: Mutagen

Revision Date: 2013-05-13

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 theuser 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

