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1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: MAKITA HAMMER GREASE/PASTE P 08361-50
- Material Safety Date Sheet: 08361
- Relevant identified uses of the substance or mixture and uses advised against :
- Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- Product category PC24 Lubricants, greases, release products
- Process category

PROC10 Roller application or brushing

PROC17 Lubrication at high energy conditions and in partly open process

- Environmental release category

ERC4 Industrial use of processing aids in processes and products, not becoming part of articles

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8d Wide dispersive outdoor use of processing aids in open systems

- Use of the substance / the preparation : EP-lubricant grease on the basis of molybdenum disulphide.
- USAGES: Industrial.
- Dosage: As supplied
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

AR.I. Chimica sas

Via Soperga,32

20127 - Milano

Tel.(02)26117342

Fax (02)2619750 e-mail:info@arichimica.it

- E-mail of the M.S.D.S. responsible person : AR.I. Chimica srl

reme@arichimica.it

- Emergency telephone number:

ANTITOXIN CENTRE AT NIGUARDA HOSPITAL IN MILANO - Telephone: ++39 02 66101029

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not subject to classification according to Directive 67/548/EC

- Classification system:

The classification is in line with current EEC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies and exsperimentales results.

- Label elements
- Labelling according to EU guidelines:

Observe the normal safety regulations when handling chemicals

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

- Code letter and hazard designation of product:

not applicable

- Hazard-determining components of labelling: see point 3
- Safety phrases:

60 This material and its container must be disposed of as hazardous waste.

- Other hazards :
- Results of PBT and vPvB assessment

Accordance to Annex XIII of Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Restriction of chemical substances (see section 3 and 2): does not meet the criteria for classification as PBT and vPvB therefore - not applicable.

Use according to good working pratices, avoiding to disperse the product into the environment.

- PBT: Not applicable.
- vPvB: Not applicable

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture consisting of the following components.

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	(Contd. of	page 1)
- Components :		
CAS: 74869-21-9 EINECS: 278-011-7	lubricating greases as a mixture containing 62,9 % of paraffinic regenerated and twice refined mineral oil, lithium soaps from natural substances, EP additives. substance with a Community workplace exposure limit	96.0%
CAS: 1317-33-5 EINECS: 215-263-9	molybdenum disulphide substance with a Community workplace exposure limit	4.0%

- SVHC: Any SVHC present in the mixture.

- Additional information

Mineral lubricating oil with extract of DMSO<3%weight(method IP 346).According UE directive 94/69 note L not to be classified as cancerous.

For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- Description of first aid measures
- General information :

No special measures required.

Take affected persons into the open air.

- After inhalation: Supply fresh air; consult doctor in case of symptoms.
- After skin contact: The product is not skin irritating.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Instantly call for doctor.
- Information for doctor
- Indication of any immediate medical attention and special treatment needed :

Treatment of symptomatic (decontamination, vital functions).

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents : Use fire fighting measures that suit the environment.
- Unsuitable extinguishing agents:

Attention:

The use of water as an extinguihing agent may not be effective, or even counterproductive, for the immiscibility with the mixture, which could in fact float on the fire spreading to other areas.

- Special hazards arising from the substance or mixture :

Can be released in case of fire

Carbon monoxide (CO)

Unburned hydrocarbons.

Sulphur dioxide (SO2)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Avoid inhalation of fumes evolved in a fire,use self-contained

breathing apparatus and protective clothing keep at a safe distance.

- Advice for firefighters: In case of fire wear a respirator autonomus and full protective clothing.
- Protective equipment: Wear self-contained breathing apparatus.
- Additional information: Cool endangered containers with water spray jet.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

- Reference to other sections :

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

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7 Handling and storage

- Handling:

Avoid contact with eyes.

Follow the normal hygiene rules.

- Precautions for safe handling: No special measures required.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage: Store the packaging on solid structures.
- Information about storage in one common storage facility:
- Do not store together with oxidizing and acidic materials.
- Storage class
- Class according to regulation on inflammable liquids (VCI): Is not subject to the provisions.
- Specific end use(s): See point 1 identified use.

8 Exposure controls/personal protection

- Technical provisions:

Aerate work-rooms where the product is used.

Avoid production and diffusion of fogs and aerosols by providing barriers to machines and by using ventilation/localised suction.

- Control parameters
- Components with limit values that require monitoring at the workplace:

74869-21-9 lubricating greases as a mixture containing 62,9 % of paraffinic regenerated and twice refined mineral oil, lithium soaps from natural substances, EP additives.

WEL Long-term value: 5 (oil mist) mg/m³

1317-33-5 molybdenum disulphide

WEL Short-term value: 20 mg/m³ Long-term value: 10 mg/m³

as Mo

- Exposure controls
- General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

- Breathing equipment: Not necessary if room is well-ventilated.
- Protection of hands:

In case of correct use not necessary.

For the permanent contact in work areas with high risks of injury (mechanical hazard) no recommendation for a suitable glove material can be given.

These information is based on tests carried out suppliers of raw material, data from literature and information given by producers of gloves or which by analogy can be concluded from similar compositions.

- For the permanent contact gloves are suitable:



Oil resistant gloves.

- Material of gloves

Nitrile rubber, NBR

Recommended material thickness : ≥ 0,38 mm

- Penetration time of glove material

Minutes ≥480 (penetration according to standard EN 374-3 :

Level of penetration = ND - Index of egradation = 1)

INDEX OF PENETRATION:

1 = TOP = Degradation can be negleted.

2 = GOOD = Weak degradation.

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3 = MODERATE = Moderate degradation. 4 = BAD= Significant degradation.

- As protection from splashes gloves made of the following materials are suitable:

If only a short-time loading of the glove material by splshes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.

- Eye protection:

Wear security glasses whenever there is a possibility of contact with the product.



Gauze goggles EN 166 F CE.

- Body protection: In case of correct use not necessary.

9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance

Form:

Colour:

- Odour:

- Odour threshold: - Important informations on protection of Pasty Black

Characteristic

2 - 5%

VALUE/RANGE UNIT METHOD

environment and on safety:

- pH-value:

Not determined.

- Change in condition

Melting point/Melting range:

Boiling point/Boiling range:

Not determined >250 °C (calculated) 180 °C (ASTM-D-92)

- Flash point:

- Ignition temperature:

Decomposition temperature:

Not determined. Product is not selfigniting. - Self-inflammability:

- Danger of explosion:

Product is not explosive. - Critical values for explosion: Lower: Not determined.

Upper: - Vapour pressure:

- Density at 20 °C

- Relative density - Vapour density - Evaporation rate

- Solubility in / Miscibility with

Water:

Not determined.

Not determined.

Not determined.

Not determined.

Not determined.

Not determined.

1.029 g/cm3 (ASTM-D-70)

Not miscible or difficult to mix

- Partition coefficient (n-octanol/water): - Viscosity:

dynamic: - Solvent content: Not determined.

Organic solvents boiling range ≤250 °C : 0.0 % (calculated) Solids content: 4.0 % (calculated)

- Other information Radioactivity: not radioactive.

10 Stability and reactivity

- Reactivity: No dangerous reaction if properly used and stored.
- Chemical stability:

The product is stable under the conditions of storage and use recommended. See Chapter 7

- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- Possibility of hazardous reactions: No dangerous reaction if properly used and stored.

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- Conditions to avoid: No further relevant information available.
- Incompatible materials: Oxidising agents.
- Hazardous decomposition products: see point 5

11 Toxicological information

- Information on toxicological effects
- Acute toxicity

Oral	LD100	2000 mg/kg (-) value calculate on the mixture (according GHS and CLP)
Dermal	LD50	2000 mg/kg (-) value calculated on the mixture (according GHS and CLP)
Inhalative	LC50/4h	70500 mg/m³ (-) value calculated on the mixture (according GHS) - 0 (according CLP)

74869-21-9 lubricating greases as a mixture containing 62,9 % of paraffinic regenerated and twice refined mineral oil, lithium soaps from natural substances, EP additives.

refined filliteral oil, fitthum soaps from flatural substances, Er additives.					
Oral	LD50	2000 mg/kg (rats)			
Dermal	LD50	2000 mL/Kg (rabbits)			
1317-33-5	1317-33-5 molybdenum disulphide				
Oral	LD50	>2000 mg/kg (rats)			
Dermal	LD50	>2000 mg/kg (rabbits)			
Inhalative	LC50/4h	>2820 mg/L (rats)			

- Primary irritant effect:
- on the skin: No irritation.
- on the eye: No irritation.
- Sensitization: No sensitizing effect is known.
- Inhalation: Extended exposure to vapours and fogs can lead to irritations of the breathing apparatus.
- Swallowing:

No risk under normal conditions of use.

Can lead to irritations of the digestive tract with vomiting, nausea and diarrhoea.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

Use according to good working pratices, avoiding to disperse the product into the environment.

- Toxicity
- Aquatic toxicity:

1317-33-5 molybdenum disulphide

LC0 >750 mg/L (Salmo gairdneri)

- Persistence and degradability: Heavily biodegradable
- Behaviour in environmental systems:

Not dispersible in water.

Not available dates on the environmental mobility of the mixture. (for data missing on substances not yet comunicated by our Suppliers).

- Bioaccumulative potential:

No data are available on the bioaccumulation potential of the mixture (for data missing on substances not yet comunicated by our Suppliers).

- Mobility in soil :

No data is avaiable on the mobility in the soil of the mixture (for data missing on substances not yet comunicated by our Suppliers)..

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- Ecotoxical effects:

No data is avaiable on the ecotoxicity o the mixtures (foe data missing on substances not yet comunicated by our Suppliers)..

- Additional ecological information:

- General notes:

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

- Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Restriction of chemical substances (see section 3 and 2): does not meet the criteria for classification as PBT and vPvB therefore - not applicable.

Use according to good working practices, avoiding to disperse the product into the environment.

- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods :

When not contaminated by products of different kind, the rejected parts can be considered as special wastes; on the contrary they can be considered as toxic-harmful in full compliance of the existing laws (DPR- 915/82 and subsequent modifications).

- Recommendation Delivery of waste oil only to offically authorized collectors.
- Waste disposal key number:

ACC = Drum made of welded metal sheet.

EWC waste code refers to emptied containers: 15 01 10*

- EWC European waste catalogue code reported to the mixture or substance :

According to the European Waste Catalogue, Waste Codes are not specific to the article, but application specific. Waste codes should be assigned according to the application that was made of this article.

- Uncleaned packagings:

It is inadvisable to take away the identification labels or the danger symbols from the emptied containers. After a suitable washing pakaging can be recycled.

- Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

This material and its conteiner must be disposed of as hazardous waste.

Dispose of fully emptied product and containers delivering them to companies with a license for the disposal of special waste according to DPR 691/82 (Compulsory consortium of old oil) and those which are contained in the provisions of decree n°22/97 (decree Ronchi).

- Recommended cleaning agent: Solvent naphtha

to not outlined to the provisions
Is not subject to the provisions.
Is not subject to the provisions.
Is not subject to the provisions,
Is not subject to the provisions.
No
Not applicable.
Not applicable.

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- UN "Model Regulation":

EU Regulation 927/2012 - number of Customs

code:

3403 19 10

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Code letter and hazard designation of product:

not applicable

- Safety phrases:

60 This material and its container must be disposed of as hazardous waste.

- Chemical safety assessment

Authorisation inder the REACH Regulation (Regulation EC nº 1907/2006) substances not present in the list of substances of concern (SVHC) candidate to the authorisation.

- National regulations:
- Technical instructions (air):
- EU-VOC in %: 0.00 %
- Water hazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.
- Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57 59 (CANDIDATE LIST No 140 of 20/06/2013):

Are not present substances SVHC listed in " CANDIDATE LIST No 140 of 20/06/2013 "

- RoHS Regulations: Compliant, there are no RoHS substances listed in Regulation.
- Further reference provisions:

Decree 336/94 Table of professional diseases in industry.

Detergent regulation 648/2004/EEC

Decree 136/83 Biodegradation of detergentes.

Directive 2008/47/EEC aerosols Regulation 1907/2006/EEC (REACH) Regulation 1272/2008/EEC (CLP/GHS) Regulation 790/2009/EEC

Regulation (UE) N. 453/2010 - 20/05/2010

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The user is obliged to make sure that the informatin contained in the data sheet and regarding the specic use of the product is appropriate and complete. Furthermore the user is also obliged to comply with the described safety standards. The data and the information are based on available literature and our specific knowledge at the date of the compilation and exclusively refer to the product indicated below.

Furthermore the characteristics mentioned in this document shall not constituite contractual specifications.

This safety data sheet annuls and replaces the previous edition.

- Declaration of conformity:

The present safety data sheet correspond to the provisions of the ministerial decree dated 04/04/97 regarding the compilation of safety data sheet updated to the 31° amendment of the EC directive 2009/2

- Department issuing data specification sheet: AR.I Chimica srl
- Contact:

Merighi Ing.Renzo - reme@arichimica.it

The present information (without signature) is issued under control,

- Abbreviations and acronyms :

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VCI, Verband der chemischen Industrie, Deutschland (German chemical industry association)

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS, Chemical Abstracts Service (division of the American Chemical Society)

VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
VOC: Volatile Organic Compounds (USA, EU) (=COV)
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal Concentration in atmosphere for 50% of animal test.

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LD50: Lethal dose for 50% test animal PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

STEL: Short Term Exposure Limit

TLV: Theshold Limit Value TRGS: Technische Regein für Gefahrstoffe TWA: Time Weighted Average

VLA: Valore Limite Ambientale WEL: Workplace Exposure Limit VLE: Exposure Limit Value

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative ASTM: American Society for Testing and Materials CLP: Classification, Labelling and Packaging

REACH: Registration, Evalutation, Authorization of CHemicals

VwVws: Verwaltungsvorschrift wassergefährdende Stoffe = Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes

BLEVE: Bolling Liquid Expanding Vapour Explosion SVHC: Substance of Very High Concern PNEC: Predicted No Effect Concentration (Risk Assesment)

STP: Sewage Treatment Plant

ACGIH: American Conference of Governmental Industrial Hygienists.

STEL/C: Short-Term Exposure Limit/Ceiling.

VL: Limit Value

SSOG: Stazione Sperimentale Oli Grassi (Milano Italia)

LEL: Lower Explosive Limit UEL: Upper Explosive Limit

BW: Body weight

NOAEL: No Observed Adverse Effects Level
RoHS: Restriction on the use of Hazardous Substances.
RTECS: Registry of Toxic Effects of Chemical Substances.

NA: Not applicable

RCP: Reciprocal Calculation Procedure.
NOAEC: No Observed Adverse Effects Concentration

CER: Catalogo Europeo Rifiuti. EAK : Europäische Abfalle Katalog. EWC : European Waste Catalogue. NOAEL : No Observed Adverse Effects Concentration

OECD: Organisation for Economic Co-operation and Development.

ISO: International Organisation for Standardisation.

Sources:

NIOSH/RTECS - Registry of Toxic Effects of Chemical Substances.

I.N.R.S. Réaction Chimiques Dangereuses.

- Classification and labelling of anionic, noninic surfacyants (1990). CESIO

Aldrich - Library of Chemical Safety Data. - Industrial Hygiene and Toxicology.

- Documentation of the Threshold Limit Values. A.C.G.I.H. - * Data changed compared to the previous version : Changed.

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