

SAFETY DATA SHEET

AMC DP-EP 1 Grease

Section 1. Identification

 AMC DP-EP 1 Grease **GHS** product identifier

Other means of : Not available.

identification

: Solid. **Product type**

: 951720DPEP1 **Product code**

SDS# 397

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

Product use: For : Industrial applications: Lubricants

professional use only.

: RelaDyne, LLC Supplier's details

8280 Montgomery Road,

Suite 101

Cincinnati, OH 45236

Tel: 888-830-3156 www.reladyne.com

Emergency telephone

number

INFOTRAC

800.535.5053

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available

for employees and other users of this product.

Classification of the substance or mixture : Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 9%

GHS label elements

Hazard pictograms : Not applicable. Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Validated on 06/21/2018 1/13

Section 2. Hazards identification

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Hazards not otherwise : None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of : Not available.
identification

CAS number/other identifiers

Ingredient name	%	CAS number
White mineral oil (petroleum)	40-70	8042-47-5
zinc oxide	7-13	1314-13-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Validated on 06/21/2018 2/13

Section 4. First aid measures

Ingestion: No specific data.

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

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Validated on 06/21/2018 3/13

Section 7. Handling and storage

Precautions for safe handling

Protective measures
Advice on general
occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, : including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
White mineral oil (petroleum)	ACGIH TLV (United States, 4/2014). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 2/2013).
zinc oxide	NIOSH REL (United States, 10/2013). CEIL: 15 mg/m³ Form: Dust TWA: 5 mg/m³ 10 hours. Form: Dust and fumes STEL: 10 mg/m³ 15 minutes. Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Fume STEL: 10 mg/m³ 15 minutes. Form: Fume STEL: 10 mg/m³ 8 hours. Form: Fume TWA: 5 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Fume TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 5 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction
	STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction

Appropriate engineering controls

Validated on 06/21/2018 4/13

[:] Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Section 8. Exposure controls/personal protection

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [grease]

Color : White.

Odor : Mild. Petroleum oil
pH : Not applicable.

Melting point : Not available.

Boiling point : Not available.

Flash point : Not available.

Evaporation rate : Not available.

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks

and static discharge.

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure: Not available.Vapor density: Not available.Relative density: 0.89 g/cm³

Validated on 06/21/2018 5/13

Section 9. Physical and chemical properties

Solubility Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature Not available. **Decomposition temperature** : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.64 to 0.7 cm²/s (64 to 70 cSt)

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data. Incompatible materials : No specific data.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
White mineral oil (petroleum)	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary

: No known significant effects or critical hazards.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
zinc oxide	Eyes - Mild irritant	Rabbit		24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary

Skin : May cause skin irritation. : May cause eye irritation. Eyes

Respiratory : Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation. Pre-existing respiratory disorders may be aggravated by over-exposure to this product.

Sensitization

Conclusion/Summary

Skin

: No specific information is available in our database regarding the skin sensitizing properties of this product. Sensitization not suspected for humans.

Sensitization not suspected for humans. Respiratory

Mutagenicity

Conclusion/Summary

: There are no data available on the mixture itself. Mutagenicity not suspected for humans.

Carcinogenicity

Validated on 06/21/2018 6/13

Section 11. Toxicological information

Conclusion/Summary: There are no data available on the mixture itself. Carcinogenicity not suspected for

humans.

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself. Not considered to be dangerous to

humans, according to our database.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself. Teratogenicity not suspected for

humans.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
White mineral oil (petroleum)	ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Routes of entry anticipated: Oral, Dermal.

Potential acute health effects

Eye contact
 Inhalation
 Skin contact
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary: Contains material that may cause target organ damage, based on animal data.

General : No known significant effects or critical hazards.

Validated on 06/21/2018 7/13

Section 11. Toxicological information

Carcinogenicity

Mutagonicity

: No known significant effects or critical hazards.

Mutagenicity Teratogenicity : No known significant effects or critical hazards.

Developmental effects

No known significant effects or critical hazards.No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
zinc oxide	Acute IC50 1.85 mg/l Marine water Acute IC50 46 μg/l Fresh water	Algae - Skeletonema costatum Algae - Pseudokirchneriella subcapitata - Exponential growth phase	96 hours 72 hours
	Acute LC50 98 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary

: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Conclusion/Summary

: This product has not been tested for biodegradation. Not readily biodegradable. This product is not expected to bioaccumulate through food chains in the environment.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
MC 2991XW	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
White mineral oil (petroleum) zinc oxide	>6	-	high
	-	60960	high

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Validated on 06/21/2018 8/13

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	UN3077	UN3077	UN3077	UN3077	UN3077
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
Transport hazard class(es)	-	9	9	9	9	9
Packing group	-	III	III	III	III	III
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.	Yes.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4. 1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4. 1.1.1, 4.1.1.2 and 4.1.1.4 to	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5. 0.2.4.1, 5.0.2.6. 1.1 and 5.0.2.8.

Validated on 06/21/2018 9/13

SDS #: 397 Section 14. Transport information this product 4.1.1.8. are not Tunnel code regulated as dangerous goods when transported by road or rail.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) PAIR: diphenylamine

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: zinc oxide

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

DEA List I Chemicals

: Not listed

: Not listed

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name		hazard	Sudden release of pressure			Delayed (chronic) health hazard
zinc oxide	7-13	No.	No.	No.	Yes.	No.

SARA 313

Validated on 06/21/2018 10/13

Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	zinc oxide	1314-13-2	7-13
Supplier notification	zinc oxide	1314-13-2	7-13

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Connecticut Carcinogen Reporting

Connecticut Hazardous Material Survey

Florida substances

Illinois Chemical Safety Act

Illinois Toxic Substances Disclosure to Employee

Act

Louisiana Reporting

Louisiana Spill

Massachusetts Spill

Massachusetts Substances

Michigan Critical Material

Minnesota Hazardous Substances

New Jersey Spill

New Jersey Toxic Catastrophe Prevention Act

New Jersey Hazardous Substances

New York Acutely Hazardous Substances

New York Toxic Chemical Release Reporting

Pennsylvania RTK Hazardous Substances

Rhode Island Hazardous Substances

: None of the components are listed.

· None of the commonante are listed

: None of the components are listed.

: The following components are listed: ZINC OXIDE FUME;

CALCIUM CARBONATE

: None of the components are listed.

: The following components are listed: ZINC OXIDE;

CALCIUM CARBONATE; LIMESTONE

: None of the components are listed.

: None of the components are listed.

: The following components are listed: ZINC OXIDE (ZNO);

LIMESTONE; ALUMINUM SOLUBLE SALTS

: None of the components are listed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•	9	Maximum acceptable dosage level
crystalline silica, non-respirable	Yes.	No.	No.	No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

International lists

Validated on 06/21/2018 11/13

Section 15. Regulatory information

National inventory

Australia : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Not determined.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Canada

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic).

Canadian lists

Canadian NPRI : The following components are listed: Zinc (and its compounds)

CEPA Toxic substances: None of the components are listed.

Canada inventory; DSL/ : At least one component is not listed in DSL but all such components are listed in NDSL.

NDSL

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Validated on 06/21/2018 12/13

Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of

revision

Date of previous issue : 11/18/2014

Version : 1.01

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

: 06/21/2018

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Validated on 06/21/2018 13/13