

SAFETY DATA SHEET

Version: 3.0 Revision date: 22.12.2022

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	Oz Heat / Just Heat / Prime Heat/Stem wick Liquid Chafing Fuel
Alternative names	Liquid Wick Chafing Fuel
Product code(s)	Not applicable
Substance name	Diethylene Glycol
CAS No.	111-46-6
EC No.	203-872-2
REACH No.	01-2119457857-21-0134
Unique Formula Identifier (UFI)	not applicable
Nanoform	The product does not contain nanoparticles.
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified Use(s)	Liquid Chafing Fuel for food warming applications
Uses Advised Against	Anything other than the above.
1.3 Details of the supplier of the safety data sheet	
Company Identification	PJ Nordic A/S Baelumvej 25 DK-9575, Terndrup
Telephone	+4550900087
E-Mail (competent person)	info@pjnordic.com
1.4 Emergency telephone number	
Languages spoken	+(45) 82 12 12 12 Giftinformation (DK), Bispebjerg Hospital (open 24 hours) English spoken

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Regulation (EC) No. 1272/2008 (CLP)	Acute Tox. 4; H302
2.2 Label elements	
Product Name	According to Regulation (EC) No. 1272/2008 (CLP) Oz Heat / Just Heat / Prime Heat Liquid Chafing Fuel
Substance name	Diethylene Glycol
CAS No.	111-46-6
EC No.	203-872-2
Hazard Pictogram(s)	
Signal Word(s)	Warning
Hazard Statement(s)	H302: Harmful if swallowed.
Precautionary Statement(s)	P102: Keep out of reach of children. P264: Wash hands and exposed skin thoroughly after handling. P301+P312+P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P101: If medical advice is needed, have product container or label at hand.

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P501: Dispose of this material and its container to hazardous or special waste collection point. Do not dispose of with household waste.

Supplemental information

None

2.3 Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical identity of the substance	CAS No.	EC No.	INDEX No.	REACH Registration No.	%W/W
Diethylene glycol	111-46-6	203-872-2	603-140-00-6	01-2119457857-21-0134	100

3.2 Mixture
not applicable

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures Self-protection of the first aider

Inhalation

Ensure adequate ventilation. Avoid breathing vapours. Wear suitable protective clothing and gloves. Contaminated clothing should be laundered before reuse.

IF INHALED: Keep patient at rest. Remove to fresh air immediately. Seek medical attention if ill effects occur. If breathing is difficult, oxygen should be given by a trained person. If symptoms develop, obtain medical attention.

Skin Contact

IF ON SKIN (or hair): Wash with plenty of water. If irritation (redness, rash, blistering) develops, get medical attention. Remove contaminated clothing and wash clothing before reuse.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

IF SWALLOWED: Rinse mouth. Give 200-300mls (half pint) water to drink. Never give anything by mouth to an unconscious person. Call a POISON CENTER/doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing Media

In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing Media

None known. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Not flammable. Toxic fumes may be produced in a fire. (Carbon monoxide, Carbon dioxide).

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Combustion may cause toxic fumes. Oxides of carbon, Hydrocarbons. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Caution - spillages may be slippery. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing vapours.
- 6.2 Environmental precautions** Do not allow to enter drains, sewers or watercourses.
- 6.3 Methods and material for containment and cleaning up** Small spillages: Absorb spillage in earth or sand. Transfer to a container for disposal or recovery. Use only non-sparking tools. Ventilate the area and wash spill site after material pick-up is complete. Do not dispose of with household waste. Dispose of waste according to applicable legislation.
- Large spillages: Contain spill and cover if possible to prevent spreading of spilled material and reduce dust. Dispose of wastes in an approved waste disposal facility.
- 6.4 Reference to other sections** See Section: 8, 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Ensure adequate ventilation. Handle and open container with care. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- 7.2 Conditions for safe storage, including any incompatibilities** Store in a cool/low-temperature, well-ventilated (dry) place. Store products enclosed, in original packing. Keep container tightly closed. Protect from light. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food, drinks and animal food.
- Storage temperature Keep in a cool place. Recommended: 4 - 49°C
- Storage life Stable under normal conditions. Suitable materials: aluminum alloy, Stainless steel, High density polyethylene. Duration: 12 Months
- Incompatible materials Strong oxidising agents.
- 7.3 Specific end use(s)** See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
- 8.1.1 Occupational Exposure Limits**

Substance	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
		ppm	mg/m ³	ppm	mg/m ³	
Diethylene glycol	111-46-6	23	100	-	-	-

Source: Health and Safety Authority 2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulation (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulation (2001-2019)

- 8.1.2 Biological limit value** Not established.
- 8.1.3 PNECs and DNELs** Not established.
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls** Ensure adequate ventilation. No special requirements.
- 8.2.2 Individual protection measures, such as personal protective equipment (PPE)** Use personal protective equipment as required. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective

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clothing to chemicals should be ascertained with the respective supplier. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing. Wash hands before eating, drinking or smoking.

Eye/face protection



Eye Protection: Not normally required.
Recommended: Wear suitable face shield.

Skin protection



Wear suitable gloves if prolonged skin contact is likely. Recommended: Wear impervious gloves (EN374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Wear suitable coveralls to prevent exposure to the skin.

Respiratory protection



Respiratory protection is not necessary if room is well ventilated. In case of inadequate ventilation wear respiratory protection.
Recommended: EN149, EN143.

Thermal hazards

Not applicable

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	colourless
Odour	Characteristic
Melting point/freezing point	- 6.5 °C
Boiling point or initial boiling point and boiling range	245.5 °C
Flammability	Combustible
Lower and upper explosion limit	not determined
Flash point	> 138 °C (Closed cup)
Auto-ignition temperature	372 °C
Decomposition temperature	not determined
pH	6
Kinematic viscosity	not determined
Solubility	Immiscible with water.
Partition coefficient: n-octanol/water (log value)	- 1.98 (20 °C)
Vapour pressure	0.008 hPa (25 °C)
Density and/or relative density	1.12 g/cm ³
Relative vapour density	not determined
Particle characteristics	not applicable - solid

9.2 Other information

Explosive properties	Non-explosive
Oxidising properties	Not oxidising.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Reacts violently with oxidizing substances.
10.4 Conditions to avoid	Avoid prolonged storage at elevated temperature. Keep away from heat, sources of ignition and direct sunlight.

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10.5	Incompatible materials	Strong oxidising agents.
10.6	Hazardous decomposition product(s)	Combustion may cause toxic fumes. Oxides of carbon, Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008	
	Acute toxicity - Ingestion	Acute Tox. 4; H302: Harmful if swallowed. LD50 (oral,rat) mg/kg: 500 (Acute Toxicity Estimate Mixture Calculation).
	Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. No data
	Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. LD50 (skin,rabbit) mg/kg: 13300 mg/kg bw/day (Unnamed, 1978)
	Skin corrosion/irritation	Based upon the available data, the classification criteria are not met. Weight of evidence approach (OECD 439)
	Serious eye damage/irritation	Based upon the available data, the classification criteria are not met. Not irritating to eyes (rabbit) (Carpenter, 1946)
	Respiratory or skin sensitization	Based upon the available data, the classification criteria are not met. No data
	Germ cell mutagenicity	Based upon the available data, the classification criteria are not met. In vitro: Negative (OECD 471) In vivo: Negative (mouse) (OECD 474)
	Carcinogenicity	Based upon the available data, the classification criteria are not met. NOAEL (rat) mg/kg bw/day 1160. No effects observed (Hiasa, 1990)
	Reproductive toxicity	Based upon the available data, the classification criteria are not met. Reproductive toxicity: NOAEL (mouse) mg/kg bw/day 3060 (Unnamed, 1984) Developmental toxicity: NOEL (rat) ml/kg bw/Day 1 (OECD 414)
	STOT - single exposure	Based upon the available data, the classification criteria are not met. No adverse effects observed on general toxicity endpoints
	STOT - repeated exposure	Based upon the available data, the classification criteria are not met. Oral: NOAEL (rat) mg/kg bw/day 300. Available hazard data do not provide quantitative dose-response information (Unnamed, 1976) Inhalation: No data Dermal: NOAEL (Dog) mg/kg bw/day 2220. Kidney effects were observed at this dose: >8000 mg/kg (OECD 410)
	Aspiration hazard	Based upon the available data, the classification criteria are not met. No data
11.2	Other information	
11.2.1	Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to humans.
11.2.2	Other information	None Known

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Based upon the available data, the classification criteria are not met. LC50 (fish) mg/l: 75200 (96 hour) (Geiger, 1990) Read across: CAS No. 107-21-1. NOEC (Fish) mg/l: 15380 (7 Day) (Unnamed, 1985)
12.2	Persistence and degradability	Readily biodegradable.
12.3	Bioaccumulative potential	Bioconcentration factor (BCF) : -1.5 log Kow.
12.4	Mobility in soil	Not determined.
12.5	Results of PBT and VPvB assessment	Not classified as PBT or vPvB.
12.6	Endocrine disrupting properties	This substance does not have endocrine disrupting properties with respect to non-target organisms.
12.7	Other adverse effects	None known

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of this material and its container as hazardous waste. Dispose of empty containers and wastes safely. Dispose of contents in accordance with local, state or national legislation.
	Waste classification according to Directive 2008/98/EC (Waste Framework Directive)	HP 6 Acute toxicity
13.2	Additional Information	None

SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	ADR/RID	IMDG	ICAO/IATA
14.1	UN number or ID number	Not classified	Not classified
14.2	UN proper shipping name	Not classified	Not classified
14.3	Transport hazard class(es)	Not classified	Not classified
14.4	Packing group	Not classified	Not classified
14.5	Environmental hazards	Not classified	Not classified as a Marine Pollutant.
14.6	Special precautions for user	See Section: 2	
14.7	Maritime transport in bulk according to IMO instruments	Not applicable.	
14.8	Additional Information	Not applicable.	

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Use restriction according to REACH annex XVII, no.: Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]	3 not relevant / not applicable
	Directive 2010/75/EU on industrial emissions	This substance/mixture does not contain any volatile organic compounds in the sense of Directive 2010/75/EU.
	Restrictions of occupation:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
	To follow:	Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work
15.1.2	National regulations	
	Ireland	
	S.I. No. 619/2001	The substance is not listed.
	Germany	
	Water hazard class (WGK)	slightly hazardous to water (WGK 1)
15.2	Chemical Safety Assessment	A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New format has been issued, all sections have been updated to include new information. Review SDS with care.

Date of First Issue: 09.05.2016

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References:

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Existing Safety Data Sheet (SDS). Existing ECHA registration(s) for Diethylene glycol (CAS No. 111-46-6). Harmonised Classification(s) for Diethylene glycol (CAS No. 111-46-6). All test data taken from existing ECHA registrations for the substances mentioned.

Literature References:

1. Carpenter CP, Smyth HF. 1946. Chemical burns of the rabbit cornea. Am J Ophthal 29: 1363-1372.
2. Hiasa Y, Kitahori Y, Morimoto J, Konishi N, Ohshima M. 1990. Absence of carcinogenic or promoting effects of diethylene glycol on renal tumorigenesis in rats. J Toxicol Pathol 3: 97-104.

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

LEGEND

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DIN	German Institute for Standardisation
DNEL	Derived no effect level
EU	European Union
EC	European Community
EC50	Effect concentration; 50 %
EL50	Effective loading rate; 50 %
ECHA	European Chemicals Agency
EN	European Standard
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
LC50	Lethal concentration at which 50% of the population is killed
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
MARPOL	The International Convention for the Prevention of Pollution from Ships
NOAEL	No Observed Adverse Effect Level
NOAEC	No observed adverse effect concentration
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	very Persistent and very Bioaccumulative
UN	United Nations
VOC	Volatile organic compounds

Hazard classification / Classification code:

Acute Tox. 4; Acute Toxicity, Category 4

Hazard Statement(s)

H302: Harmful if swallowed.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS)

Not available.

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