SAFETY DATA SHEET

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 3.1

Print Date 16/11/2017 **Creation Date** 02/02/2015 Revision Date 30/05/2017

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

1.1. Product identifier

Product Name HYDROGARD FG ISO 46 **Product Code** EP_1260G F1 (CLP)

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

Recommended use

Lubricant. For food industrial application.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland, NCH House, Springvale Avenue, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502

E-mail address technical_uk@nch.com Website address www.ncheurope.com

1.4. Emergency telephone number

01902 510331 (available during Office Hours)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

This mixture is not classified according to EU Regulation No 1272/2008

Safety data sheet available on request.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

EU classification for GHS template

Safety data sheet available on request.

For industrial and institutional use only.

Keep out of reach of children.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Component	CAS-No.		EU - REACH reg number	Weight percent	EU - GHS/CLP Classificatio n	Notes
WHITE MINERAL OIL	8042-47-5	232-455-8	01-21194870 78-27	50 - 100	-	

This mixture contains substances with a Community workplace exposure limit. For any H statements mentioned in this section, see the full text in section 16. The GHS/CLP classification for substances are listed once they have been harmonised according to the REACH Regulation No 1907 / 2006.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Product Name HYDROGARD FG ISO 46

Product Code EP_1260G Print Date 16/11/2017

General advice

Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Do not use solvents or thinners. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Rinse mouth with water. If swallowed, seek medical advice immediately and show this container or label.

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

Sensitisation

No information available.

Eye contact

May cause irritation as itching and redness.

Skin contact

Unlikely to be irritant on brief or occasional exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use:. Dry powder. Alcohol-resistant foam. Carbon dioxide (CO2). Water spray.

Extinguishing media which must not be used for safety reasons

Water jet.

5.2. Special hazards arising from the substance or mixture

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

Material can create slippery conditions. Thermal decomposition can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

6.2. Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Insoluble in water and hence will float on the surface.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). If using a cloth to wipe up a small spillage, properly dispose of the used cloth to avoid a fire risk.

Methods for Cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

Product Name HYDROGARD FG ISO 46

Product Code EP_1260G Print Date 16/11/2017

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

TWA (8hrs): 5mg/m³ / STEL(15mins):10mg/m³

TVV (enile): enight / enelle(renille): renight :					
Component	European Union	The United Kingdom	France	Germany	Austria
WHITE MINERAL OIL				Peak: 20mg/m ³	
				TWA: 5mg/m ³	

Component	Spain	Portugal	Italy	The Netherlands	Switzerland
WHITE MINERAL OIL	STEL: 10 mg/m ³	STEL: 10 mg/m ³		_	
	TWA: 5 mg/m ³	TWA: 5 mg/m ³			

Component	Denmark	Finland	Norway	Sweden	Czech
WHITE MINERAL OIL			TWA: 1 mg/m ³		PEL: 5mg/m ³
			-		NPK-P: 10mg/m ³

Component	Poland	Ireland
WHITE MINERAL OIL	NDS: 5 mg/m ³	

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

If excessive mist formation is likely wear suitable respiratory protection. Conforming to EN 143 eg P2 / P3 Particle filters.

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested: Neoprene gloves (0.4 mm). Nitrile rubber (0.4 mm). Solvent-resistant gloves (butyl-rubber). For break through times, refer to glove manufacturers recommendations.

Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance Colorless Specific Gravity 0.86

Physical StateLiquidSolubilityInsoluble in waterOdourOdourlessAutoignition Temperature> 280 °CpHNot applicable.Viscosity $46 \operatorname{cst} (40 \circ C)$

Product Name HYDROGARD FG ISO 46

Product Code EP_1260G Print Date 16/11/2017

-10 °C

Melting Point/RangeNot applicable.Explosive propertiesNo information availableBoiling Point/Range> 250 °COxidizing PropertiesNo information available.

Flash Point > 190 °C VOC Content (%)
Evaporation Rate No information available.
Flammability Limits in Air % No information available.

Vapour Pressure < 0.01 kPa (20°C)
Vapor Density No information available.

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

No conditions to be specially mentioned.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

The product itself has not been tested.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
WHITE MINERAL OIL	> 5000 mg/kg (Rat)		= 2062 ppm (Rat) 4 h

Sensitisation

No information available.

Skin contact

Unlikely to be irritant on brief or occasional exposure.

Eye contact

May cause irritation as itching and redness.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information

The product itself has not been tested.

Component	Toxicity to Fish	Water Flea	Toxicity to Algae
WHITE MINERAL OIL	LC50 > 10000 mg/L Lepomis macrochirus 96 h		

Product Name HYDROGARD FG ISO 46

Product Code EP_1260G Print Date 16/11/2017

12.2. Persistence and degradability

Persistence and degradability are substance specific, no test data is available on the constituents of this mixture to degrade or persist in the environment, either through biodegradation or other processes, such as oxidation or hydrolysis. Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Not likely to bioaccumulate. Component information below.

Component	log Pow	
WHITE MINERAL OIL	6.006	

12.4. Mobility in soil

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations. . .

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty remaining contents. Recycle according to official regulations.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

13 01 10* mineral based non-chlorinated hydraulic oils

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

Not classified for transport as dangerous goods

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION

Product Name HYDROGARD FG ISO 46

Product Code EP_1260G Print Date 16/11/2017

Prepared By Austen Pimm **Creation Date** 02/02/2015 Revision Date 30/05/2017

Revision summary

CLP update. SDS sections updated 2 15 3 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service PBT: Persistent Bioaccumulative Toxic vPvB: very Persistent very Bioaccumulative LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS; Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit TWA: Time Weighted Average **Further Information**

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet