ATTACHMENT 5.0

- STATEMENT BRUSS SEALING SYSTEMS ON THE MANUFACTURE OF COMPOUND

BRUSS

BRUSS Sealing Systems GmbH – Schultwiete 12 – 22955 Hoisdorf

Environmental Protection Agency,
Environmental Licensing Programme
Office of Climate, Licensing & Resource Use
Inniscarra,
Co. Cork,

03.07.2017 **Ref:** Environmental Licensing Programme – PO465-02

Dear Mr Clabby,

With reference to synthetic rubbers used in manufacturing at Global BRUSS sites and, in particular, at G. BRUSS GmbH DICHTUNGSTECHNIK, Finisklin Road Sligo, Ireland, we would inform you of the following process activities within the BRUSS Group:

Activities carried out at BRUSS Sealing Systems GmbH, Germany, Global Headquarter of BRUSS.

(1) **Manufacture of BRUSS Bespoke Synthetic Rubber Compounds**

Pre-manufactured base elastomer is used as a raw material component in the development and production of BRUSS bespoke synthetic rubber compounds. Compounds are manufactured by blending of component elements such as fillers, plasticizers and additional chemicals together with the base elastomer. This process equips each BRUSS compound with its final physical properties.

The base elastomer is supplied to BRUSS Sealing Systems, Germany from the following manufacturers:

Company Name	Location
DuPont de Nemours	Canada and USA
Zeon	USA
Unimatec	Japan
Solvay Speciality Polymers	Italy
Daikin	France and Japan
Arlanxeo	Germany

(2) **Distribution of BRUSS Synthetic Rubber Compound to BRUSS production sites.**

BRUSS Synthetic Rubber Compound is distributed to BRUSS production sites globally and used in the manufacture of components for the automotive industry.

Production activities at G. BRUSS GmbH DICHTUNGSTECHNIK, Finisklin Road, Sligo, involve the moulding of BRUSS compound to produce synthetic rubber seals.

Sincerely,

Dipl.-Ing. (FH)
Juergen Grundt
MANAGER Chemical Development BRUSS Group

Geschäftsführer: Oliver Bruss, Thomas Hinz, André Ralfs
Amtsgericht Lübeck HRB 15213 HL
USt-ID-Nummer: DE135508251
info@bruss.de
www.bruss.de
Tel +49 4107 59-0
Fax +49 4107 59-101
Schultwiete 12
22955 Hoisdorf
BRUSS Sealing Systems GmbH

ATTACHMENT 6.0

- CORRESPONDANCE RELATING TO IPC STATUS
- CORRESPONDANCE RE CLASSIFICATION 5.7

BRUSS

Anna Garvey <anna@bruss.ie>

FW: Re PO465-01 reveiw Application

Licensing Staff <licensing@epa.ie> Tue, Mar 4, 2014 at 4:28 PM
To: "anna@bruss.ie" <anna@bruss.ie>
Cc: Marie O'Connor <m.oconnor@epa.ie>

Hi Ana

As per the attached letter you are now deemed to be IPC activity as per the EPA (Integrated Pollution Control) (Licensing) Regulations, 2013 (SI 283 of 2013).

Regards

Ann Kehoe

From: Anna Garvey [mailto:anna@bruss.ie]
Sent: 04 March 2014 16:22
To: Licensing Staff
Subject: Re PO465-01 reveiw Application

Hello,

Could you please have a look at our Licence PO465-01 and confirm if we are now classified as IPC.

I have not had an official reply to the IPC/IEL registration from last year as yet.

If you look at attached letter re a review application that we would like to submit it would seem that IPC is the likely classification

I would appreciate it if you could let me know at your earliest convenience

Thanks for your help,

Anna Garvey

G.Bruss GmbH DICHTUNGSTECHNIK

Environmental Manager

APQP -

Finisklin Road
Sligo, Ireland
Tel: 00353 71 9156342
Fax: 00353 719169352
Web: www.bruss.de

Registered Office: Finisklin Road, Sligo. Reg No:902311

Amtsgericht Ahrensburg HRB 137

VAT No.: 4540059I

Directors: Oliver Bruss, Thomas Hinz, André Ralfs

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters, PO Box 3000
Johnstown Castle Estate
County Wexford, Ireland

Ceanncheathrú, Bosca Poist 3000
Eastát Chaisleán Bhaile Sheáin
Contae Loch Garman, Éire

T: +353 53 9160600
F: +353 53 9160699
E: info@epa.ie
W: www.epa.ie

LoCall: 1890 33 55 99

Ms Anna Garvey
Environmental Officer
G. Bruss GmbH Dichtungstechnik
Finisklin Road
Sligo

20 February 2014

Dear Ms Garvey

Re: Application for a review of licence – P0465-01

With reference to your application for a review of your Integrated Pollution Control Licence (Reg No. P0465-01) received on 22 May 2013 the Agency would draw your attention to a change in the applicable rules.

Pursuant to the European Union (Industrial Emissions) Regulations 2013, Part IV of the Environmental Protection Agency Act 1992 has been amended and the Agency is now required to determine the application under the new Part IV.

A valid application for a review of licence must now contain the information prescribed in Regulation 9 of the EPA (Integrated Pollution Control) (Licensing) Regulations, 2013 (S.I. 283 of 2013). The Agency is returning your application to review the licence as Regulation 15 of the *EPA (Licensing Regs 1994) as amended*, is no longer applicable i.e. a Licensee may now make a direct application to the Agency for a review of their licence. The appropriate fee for a review of your licence under class 5.7 is €14,601, which will need to accompany the IPC Application. Please ensure to use the most up-to-date IPC Application Form which is available to download from the Agency's Website at the link: http://www.epa.ie/pubs/forms/lic/ipc/

If you need any further assistance, or have any queries in relation to these matters, please contact the Environmental Licensing Programme at licensing@epa.ie.

Yours sincerely

Marie O'Connor
Senior Inspector
Environmental Licensing Programme

ATTACHMENT 7.0

- CONFIRMATION OF PLANNING EXEMPTION ED 182 SLIGO CO,CO

COMHAIRLE CHONTAE SHLIGIGH
ÁRAS AN CONTAE COIS ABHAINN SLIGEACH

SLIGO COUNTY COUNCIL
COUNTY HALL RIVERSIDE SLIGO

T +353 71 911 1111
F +353 71 914 1119

E info@sligococo.ie
W www.sligococo.ie

REGISTERED POST

10th July 2014

File Ref: ED 182

G. Bruss GMBH Dichtungstechnik
C/o. Anna Garvey
Finisklin Road
Sligo

Re: Application for exemption in accordance with Section 5 of the Planning and Development Act 2000 (as amended) in respect of the erection of a hut and associated exhaust vent to house coating process equipment at G. Bruss GMBH Dichtungstechnik, Finisklin Road, Sligo.

I enclose herewith a declaration in accordance with Section 5 of the Planning and Development Act, 2000 (as amended) in respect of the following:

Name & Address of Applicant:	G. Bruss GMBH Dichtungstechnik Finisklin Road Sligo
Declaration Requested for:	Erection of a hut and associated exhaust vent to house coating process equipment
Location:	Finisklin Road, Sligo
File Reference:	ED 182
Application Received:	19th June 2014

Where a Declaration is issued under this Section, any persons may, on payment to An Bord Pleanala of such fee as may be prescribed, refer a declaration for review to the Board within four weeks of the date of issuing of the declaration by Sligo County Council.

Signed on behalf of Sligo County Council

pp

Janet McNamara
ADMINISTRATIVE OFFICER
PLANNING SECTION

sligo.ie

SLIGO COUNTY COUNCIL
(Comhairle Chontae Shligigh)

CHIEF EXECUTIVE'S ORDER

P 279/14
ED182

APPLICATION FOR DECLARATION OF EXEMPTED DEVELOPMENT PURSUANT TO SECTION 5 OF THE PLANNING & DEVELOPMENT ACT 2000 (AS AMENDED)

Name & Address of Applicant:	G. Bruss GMBH Dichtungstechnik, Finisklin Road Sligo
Declaration Requested for:	Erection of a hut and associated exhaust vent to house coating process equipment
Location:	Finisklin Road, Sligo.

Having regard to:

i. The Sligo and Environs Development Plan 2010-2016.
ii. Article 6.3 of EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora).
iii. The information submitted with the application.
iv. Site inspection carried out.
v. The Planning and Development Act 2000 (as amended).
vi. The Planning and Development Regulations 2001 (as amended).

The Planning Authority considers that:

i. Where an application has been submitted to the Planning Authority under Section 5 of the Planning and Development Act 2000 (as amended) on the question of whether the proposal outlined in submission of 19th June 2014 consisting of the erection of a hut and associated exhaust vent to house coating process equipment is or is not development and is or is not exempted development, it is considered that the proposal would constitute 'development' and would constitute 'exempted development'.

Reasons & Considerations:

(a) The definition of 'works' and 'development' as set out in Section 2 and Section 3 of the Planning and Development Act 2000 (as amended).
(b) The provisions of exempted development as set out in Class 21, Part 1, Schedule 2 of the Planning and Development Regulations 2001 (as amended).

Order: **Pursuant to Section 5 of the Planning & Development Act 2000, Sligo County Council hereby decides that the erection of a hut and associated exhaust vent to house coating process equipment at G. Bruss GMBH Dichtungstechnik, Finisklin Road, Sligo in accordance with details submitted to the Planning Authority on 19th June 2014 is exempted development.**

Director of Services

9/7/14
Date

To whom this function has been delegated in accordance with the provisions of Section 154 of the Local Government Act, 2001, by Order No. 07/13 dated the 9th May 2013.

ATTACHMENT 9.0

- K3 GLEITMO SFL TF (A LTERNATIVE) SDS

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: gleitmo SFL 9680 K3 TF

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

Identified uses: Lubricant
Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier	FUCHS LUBRITECH GmbH Werner-Heisenberg-Straße 1 67661 Kaiserslautern/Germany
Telephone:	+49 (0) 6301 3206-0
Fax:	+49 (0) 6301 3206-940
Contact Person:	FUCHS LUBRITECH GmbH - Product Safety Management
Telephone:	+49 (0) 6301 3206-0
Fax:	+49 (0) 6301 3206-940
E-mail:	reach@fuchs-lubritech.de

1.4 Emergency telephone number:

+49 (0) 6301 3206-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards

Flammable liquids	Category 3	H226: Flammable liquid and vapor.

Health Hazards

Toxic to reproduction	Category 2	H361: Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Single Exposure	Category 3	H336: May cause drowsiness or dizziness.
Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters airways.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 3	H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Contains: Hydrocarbons, low viscosity
Zn-Octoat

Signal Words: Danger

Hazard Statement(s):
H226: Flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H336: May cause drowsiness or dizziness.
H361: Suspected of damaging fertility or the unborn child.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement

Prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.

Supplemental label information

EUH066: Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards: The product may not be released into the environment without control. By handling of chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of the substances listed below with harmless additions.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Hydrocarbons, low viscosity	EC: 927-241-2	50,00 - <100,00%	01-2119471843-32	
Zn-Octoat	EINECS: 286-272-3	5,00 - <10,00%	2119979093-30	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Classification

Chemical name	Identifier	Classification	
Hydrocarbons, low viscosity	EC: 927-241-2	CLP:	Flam. Liq. 3;H226, Asp. Tox. 1;H304, STOT SE 3;H336, Aquatic Chronic 3;H412
Zn-Octoat	EINECS: 286-272-3	CLP:	Repr. 2;H361d, Eye Irrit. 2;H319, Aquatic Chronic 3;H412

CLP: Regulation No. 1272/2008.

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

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation:	Supply fresh air; consult doctor in case of symptoms.
Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids.
Skin Contact:	Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting.
4.2 Most important symptoms and effects, both acute and delayed:	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.
4.3 Indication of any immediate medical attention and special treatment needed	Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards:	Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.
5.1 Extinguishing media	
Suitable extinguishing media:	CO_2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
5.2 Special hazards arising from the substance or mixture:	During fire, gases hazardous to health may be formed.
5.3 Advice for firefighters	
Special fire fighting procedures:	Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water inaccordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation of spray mist and contact with skin and eyes. Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. In case of spills, beware of slippery floors and surfaces. Keep away from sources of ignition - No smoking.

6.2 Environmental Precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections:

See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities:

Store locked up. Store in a well-ventilated place. Store in a cool place. Local regulations concerning handling and storage of waterpolluting products have to be followed.

7.3 Specific end use(s):

not applicable

Storage Class:

3, Flammable Liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Hydrocarbons, low viscosity	AGW	600 mg/m3	Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace
Zn-Octoat - Inhalable fraction.	MAK	2 mg/m3	Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG) (2011)
Zn-Octoat - Respirable fraction.	MAK	0,1 mg/m3	Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG) (2011)

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information: Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to inhandling the chemicals or the mineral oil products.

Eye/face protection: Wear goggles/face shield. Safety glasses (EN 166) recommended during refilling.

Skin protection

Hand Protection: Material: Nitrile butyl rubber (NBR).
Min. Breakthrough time: >= 480 min
Recommended thickness of the material: >= 0,38 mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other: Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection: Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

Thermal hazards:	Not known.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	not applicable
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	> 23 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)–:	Not applicable for mixtures
Flammability Limit - Lower (%)–:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	0,80 g/cm3 (20 °C)
Solubility(ies)	
Solubility in Water:	Practically Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
Flow time	Value not relevant for classification
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification

9.2 Other information

Minimum ignition temperature:	> 220 °C

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Heat, sparks, flames.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Hydrocarbons, low viscosity	LD 50 (Rat): > 5.001 mg/kg (OECD 401)

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Hydrocarbons, low viscosity	LD 50 (Rabbit): > 5.001 mg/kg (OECD 402)

Inhalation

Product:

Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are not met.

Specified substance(s)

Hydrocarbons, low viscosity	OECD 404 Prolonged or repeated contact: Slightly irritating.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: May be fatal if swallowed and enters airways.

Other Adverse Effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish
Specified substance(s)

Hydrocarbons, low viscosity	LC 50 (Fish, 96 h): 10 - 30 mg/l

Aquatic Invertebrates
Specified substance(s)

Hydrocarbons, low viscosity	EC 50 (Water Flea, 48 h): 22 - 46 mg/l

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Toxicity to Aquatic Plants
Specified substance(s)

Hydrocarbons, low viscosity	EC 50 (Alga, 72 h): > 1.000 mg/l

12.2 Persistence and Degradability

Biodegradation

Product:	Not applicable for mixtures
Specified substance(s)	
Hydrocarbons, low viscosity	89 % (28 d) The product is easily biodegradable.

12.3 Bioaccumulative Potential

Product:	Not applicable for mixtures

12.4 Mobility in Soil:

Product:	Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:	The product does not contain any substances fulfilling the PBT/vPvB criteria.
12.6 Other Adverse Effects:	Harmful to aquatic life with long lasting effects.
Water Hazard Class (WGK):	WGK 1: slightly water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information:	Dispose in accordance with all applicable regulations.
Disposal methods:	Discharge, treatment, or disposal may be subject to national, state, or local laws.

SECTION 14: Transport information

ADR/RID

14.1 UN Number:	UN 3295
14.2 UN Proper Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.(Hydrocarbon solvent, dearomatized, low viscous)
14.3 Transport Hazard Class(es)	
Class:	3
Label(s):	3
Hazard No. (ADR):	30
Tunnel restriction code:	(D/E)
14.4 Packing Group:	III
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

ADN

14.1 UN Number:	UN 3295
14.2 UN Proper Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.
14.3 Transport Hazard Class(es)	
Class:	3
Label(s):	3
14.3 Packing Group:	III
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

IMDG

14.1 UN Number:	UN 3295
14.2 UN Proper Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.(Hydrocarbon solvent, dearomatized, low viscous)
14.3 Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-D
14.3 Packing Group:	III
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

IATA

14.1 UN Number:	UN 3295
14.2 Proper Shipping Name:	Hydrocarbons, liquid, n.o.s.(Hydrocarbon solvent, dearomatized, low viscous)
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
14.4 Packing Group:	III
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

National Regulations

Water Hazard Class (WGK): WGK 1: slightly water-endangering.

15.2 Chemical safety No Chemical Safety Assessment has been carried out.

assessment:

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H412	Harmful to aquatic life with long lasting effects.

Other information: The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

Revision Date: 15.06.2016

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.

ATTACHMENT 11.0

- TABLE G.1 (I)
- SDS OXISO OS 05 COATING

Table G.1(i) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. Nº or Code	Material / Substance[1]	CAS Number	Danger[2] Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R[3] - Phrase	S[3] - Phrase	Hazard Statement[4]
BRUSS Material Codes	**BRUSS Elastomers** (Synthetic Rubber Compounds)					Production Moulding – Injection & Compression Busniess Units 1,2,3			
Type:NBR	Acrylonitrile-butadiene rubber					As above			
01736	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.10	2.77		R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	Silicic Acid, aluminum sodium salt	1344-00-9	Xi, Eye-Skin 2 STOT SE 3				R36/37/38		H335, H315, H319
	Quartz (SiO2)	14808-60-7	Xi, Eye-Skin 2 STOT SE 3, Acute Tox 4, Xn, STOT RE 2				R36/37/38-48/20		H315, H319, H335, H332, H373
01722	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.42	1.59	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Bis(2-ethylhexyl) adipate	103-23-1	Xi, Skin-Eye irrt. 2, T, Acute Tox 3,4,Carc. Cat3, Carc.2, F				R36/38-40-39/23/24/25-23/24/25-11		H319, H315, H311, H301, H331, H330

									H351
	Quartz (SiO2)	14808-60-7	Xi, Eye-Skin 2 STOT SE 3, Acute Tox 4, Xn, STOT RE 2				R36/37/38-48/20		H315, H319, H335, H332, H373
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
01723	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.66	2.56	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Bis(2-ethylhexyl) adipate	103-23-1	Xi, Skin-Eye irrt. 2, T, Acute Tox 3,4, Carc.2, F				R36/38-40-39/23/24/25-23/24/25-11		H319, H315, H311, H301, H331, H330 H351
	Quartz (SiO2)	14808-60-7	Xi, Eye-Skin 2 STOT SE 3, Acute Tox 4, Xn, STOT RE 2				R36/37/38-48/20		H315, H319, H335, H332, H373
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
Type: HNBR	Hydrogenated Acrylonitrile-butadiene rubber					As Above			
14750	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	5.52	20.69	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	1,-1'-)1,-3-Phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7	Xi, Eye-Skin 2 STOT SE 3, Xn Acute Tox 4, T+ Acute Tox 1,2				R22, R26, R36/R37/R38		H335, H319, H315, H302 H330
	calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318

14615	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.146	0.552	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	1,-1'-)1,-3-Phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7	Xi, Eye-Skin 2 STOT SE 3, Xn Acute Tox 4, T+ Acute Tox 1,2				R22, R26, R36/R37/R38		H335, H319, H315, H302 H330
	calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
14617	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.80	3.21	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	1,-1'-)1,-3-Phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7	Xi, Eye-Skin 2 STOT SE 3, Xn Acute Tox 4, T+ Acute Tox 1,2				R22, R26, R36/R37/R38		H335, H319, H315, H302 H330
	calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
Type: EPDM	Hydrogenated Acrylonitrile-butadiene rubber					As above			
09611	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	22.6	84.56	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Calcium Carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
	2,2'-Oxydiethanol	111-46-6	Xn, Acute Tox 4				R22		H302

	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
09617	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.76	2.88	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Calcium Carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	2,2'-Oxydiethanol	111-46-6	Xn, Acute Tox 4				R22		H302
09716	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.42	1.62	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Calcium Carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	Quartz (SiO2)	14808-60-7	Xi, Eye-Skin 2 STOT SE 3, Acute Tox 4, Xn, STOT RE 2				R36/37/38-48/20		H315, H319, H335, H332, H373
09613	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.132	0.501	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Calcium Carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318

	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	2,2'-Oxydiethanol	111-46-6	Xn, Acute Tox 4				R22		H302
Type: FKM	**Fluorocarbon Rubber**					As above			
07770	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	3.6	13.79	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Octedecylamide	124-30-1	Xi, Eye Dam 1, Skin Irrt.2				R38, R41		H318, H315
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
07730	Calcium-dihydroxide	1305-62-0	Xi, STOT SE 3, Eye Irrt2, T+ , Acute Tox1, 2, T, STOT SE1, Carc.Cat2,	3.50	13.34	As above	R26, R39, R41, R43 R36/37/39, R27		H319,H335, H310, H330, H370,
	Magnesium-Oxide	1309-48-4	T, Acute Tox1,				R24/25		H311,H301
	Chromium(III) Oxide	1308-38-9	T, Acute Tox1,				R24/25		H311,H301
	Barium sulphate	7727-43-7	Xn, Acute Tox 4				R20/21/22, R36/37/38		H332, H312, H302
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
	Siloxanes and silicones, Di-Me, hydroxly-terminated	70131-67-8	Xi, Eye-Skin 2 STOT SE 3				R36/37/38		H335, H315, H319
07712	Calcium-dihydroxide	1305-62-0	Xi, STOT SE 3, Eye Irrt2, T+ , Acute Tox1, 2, T, STOT SE1, Carc.Cat2-1A,!b	3.70	13.98	As above	R26, R39, R41, R43 R36/37/39, R27		H319,H335, H310, H330, H370,
	Magnesium-Oxide	1309-48-4	T, Acute Tox1,				R24/25		H311,H301
	Chromium(III) Oxide	1308-38-9	T, Acute Tox1,				R24/25		
	Barium sulphate	7727-43-7	Xn, Acute Tox 4				R20/21/22, R36/37/38		H332, H312, H302
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
	Siloxanes and silicones, Di-Me, hydroxly-terminated	70131-67-8	Xi, Eye-Skin 2 STOT SE 3				R36/37/38		H335, H315, H319

07795	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	4.00	15.00	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Octedecylamide	124-30-1	Xi, Eye Dam 1, Skin Irrt.2				R38, 41		H318, H315
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
07781	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	7.50	28.39	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
	Octedecylamide	124-30-1	Xi, Eye Dam 1, Skin Irrt.2				R38, 41		H318, H315
	Lead-monoxide	1317-36-8	Repr.1A, Repr 1B, Repr.2				R61, R20/21, R33, R50/53. R62		H360D, H360fd, H361Df, H361f, H361D
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
07709	Magnesium-Oxide	1309-48-4	T, Acute Tox1,	0.020	0.145	As above	R24/25		H311,H301
	Wollastonite	13983-17-0	Xi, STOT SE 3 Eye Irrt.2				R36/37		H335, H319
	Diiron-trioxide	1306-37-1	T, Acute Tox 3				R24/25		H301, H311
	Octedecylamide	124-30-1	Xi, Eye Dam 1, Skin Irrt.2				R38, 41		H318, H315
	Oprefluoropolyehter	60164-51-4	Xi, STOT SE 3 Eye Irrt.2				R36/37,	S26, S36	H335, H319
07694	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	0.376	1.41	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Barium sulphate	7727-43-7	Xn, Acute Tox 4				R20/21/22, R36/37/38		H332, H312, H302
	Kieselguhr, soda ash flux-calcined	68855-54-9	Xn, Acute Tox 4, STOT RE 1, 2, Xi, STOT Rep.Exp 2 Eye-Skin				R48/20, R36/37, R37/38, R36/37/38		H332 H335, H319, H373, H315,

			Irrt.2,						
	Zinc oxide	1314-13-2	Xn, Acute Tox 4,Aquatic chronic 1, STOT SE 3, F, Xi				R50/53-20-43-36/38-20/21/22-67-66-10-11		H410, H317, H332, H302, H312, H336
	Calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye Irrt.2, eye Dam 1,				R36/37, R41, R36/38, R36		H319, H335, H315, H318
	Octedecylamide	124-30-1	Xi, Eye Dam 1, Skin Irrt.2				R38, 41		H318, H315
	Carnauba-wax	8015-86-9	Acute Tox 3				R24/R25		H301, H311
Type: ACM	**Polyacrylate Rubber**					As above			
05532	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	17.58	65.81	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	N,N'-Ethylenedi(stearamide)	110-30-5	Xi, STOT SE 3, Eye-Skin Irrt.2				R36/37/38		H335, H315, H319
05730	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	12.45	46.95	As above	R11, 40, 36/37/38		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	N,N'-Ethylenedi(stearamide)	110-30-5	Xi, STOT SE 3, Eye-Skin Irrt.2				R36/37/38		H335, H315, H319
05740	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	3.20	12.02	As above	R11, 40, 36/37/38		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	N,N'-Ethylenedi(stearamide)	110-30-5	Xi, STOT SE 3, Eye-Skin Irrt.2				R36/37/38		H335, H315, H319
05640	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	11.50	43.04	As above	R11, 40, 36/37/38		H319, H335 EUH018, H315

	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	N,N'-Ethylenedi(stearamide)	110-30-5	Xi, STOT SE 3, Eye-Skin Irrt.2				R36/37/38		H335, H315, H319
Type: AEM	**Ethylene Acrylic Rubber**					As above			
W1150	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	15.48	115.86	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Cellulose	9004-34-6	Xi, STOT SE 3				R37		H 335
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
	Calcium-carbonate	471-34-1	Xi, STOT SE 3, Eye-Skin Irrt, 2, Eye Dam 1				R36/37, R41, R36/38, R36		H335, H319, H315, H318
11888	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	6.69	50.10	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
11721	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	7.50	28.09	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
11727	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	5.20	19.52	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
11827	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	5.30	20.02	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335

11825	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	17.36	65.00	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
11621	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	10.14	37.96	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335
11622	Carbon Black	1333-86-4	Xi, STOT SE 3, Eye Irrt.2, F, CarC. Cat 3, Carc.2	3.06	11.45	As above	R36/37-18-11-40		H319, H335 EUH018, H315
	Stearic acid	57-11-4	Xi,Skin Sen 1, Eye Sen 2, STOT SE 3, F.				R38-36/37/38-11		H315, H319, H335

Ref. Nº or Code	Material/ Substance[1]	CAS Number	Danger[2] Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R[3] - Phrase	S[3] - Phrase	Hazard Statement [4]
	Product Related Materials								
Abbv.	Product Coatings								
OS	Name: OXISO OS 05 Perfluoroalkylether Methyl nonafluorobutylether Methylperflouroisobutlyether Mixture	 60164-51-4 163702-07-6 163702-08-7	Not classified as hazardous Aquatic Chronic 4	0.600	5.28	Surface Coating	R53	P273 P501	H413
GN	(Gleitmo) GN-01 Pigment in Water	None	CLP – Non-Hazardous	0.001	0.001	Surface Coating Colourant: Green	None		None
RD	(Gleitmo) RD-01 Pigment in Water	None	CLP – Non-Hazardous	0.001	0.001	Surface Coating colourant:	None		None

						Red			
BU	(Gleitmo) BU 01 Beta-Naphtholethoxylat Iodbutylcarbamat	35545-57-4 55406-53-6	CLP – Non-Hazardous Xn, Acute Tox4	0.001	0.001	Surface Coating Colourant : Blue	R22		H302
WH	(Gleitmo) WH-01 Below required disclosure limits Contains Isothiazolinone derivative	None	CLP – Non-Hazardous Water Haz Class:1 Slightly water endangering	0.001	0.001	Surface Coating Colourant: White	None		None
RLC K1	Name: gleitmo RLC 3100 K1 Polyethermodifizieries Trisiloxan	27306-76-1	Xn, Xi, Acute Tox 4, Aquatic Chronic 2	0.005	0.005	Surface Coating Colour carrier	R51/53, R30/22		EUH032 H302, H332, H411
RLC K2	Name: gleitmo RLC 3100 K2 Hyddrophiles, aliphatisches Polyisocynanat	None	Skin Sens1 Xi Xn, Acute Tox.4 Aquatic Chronic 3	0.001	0.001	Surface Coating Colour carrier	R20,R37, R43, R52/53		H332, H317, H335, H412
T	Name: TALC Luzenac Chlorite Talc Magnesite Dolomite Quartz	1318-59-8 14807-96-6 546-93-0 16389-88-1 14808-60-7	None	0.100	0.100	Surface Coating	None		None
M	Name: MoS2 S Powder Molybdenum Disulfide	1317-33-5	Non-Hazardous	0.005	0.010	Surface Coating	None		None
G	Name: GETREN M2200 Polydimethylsiloxane emulsion Isotridecanole Polyglycolic ethers	9043030-5	Xn, Acute Tox4, Xi Eye Dam1	0.050	0.300	Suface Coating	R22, R41		H302, H318, H319

W	EWO Mould 6450		Aquatic Chronic 4 Flam. Liq.3 Repr.2	0.050	0.100	Surface Coating	R62, 53		H226, H413, H361f
	Proposed Gleitmo SFL 9680 3 constituent compounds					Surface Coating			
K1	Name: Gleitmo SFL K1 ethylbenzene Mixture of Hydrocarbons, de-aromitized xylene	 100-41-4 64742-48-9 1330-20-7	 F, Xn Xn, Aquatic chronic 3 Flam.Liq.3 Asp Tox 1 Flam. Liq.3,Acute Tox.4,XnAsp.Tox1	0.025	0.065		 R11, R20 R10, 52/53, 65, 66, 67		 H332 H226,304,336 H412 H226, H312 H332, H304 H373
K2	Name: Gleitmo K2 Propan -2-ol	67-63-0	Flam Liq.2, Xn	0.004	0.022		R36, R67		H336,H225
K3	Name: Gleitmo K3 dibutyltindilaurat	77-58-7	T, Repr.1A, 1B, Xn STOT SE 2	0.002	0.002		R22, R38, R48/25, R51/53, R60,R61, R68		H314, H317 H318, H341, H360FD, H370, H372 H410

Ref. Nº or Code	Material / Substance[1]	CAS Number	Danger[2] Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R[3] - Phrase	S[3] - Phrase	Hazard Statement[4]
	Process Ancillary Materials								
Maint-	Name: North Sea Anti-Freeze (Blue) Ethylene Glycol Glycerol Sodium 2-ethylhexanoate	 107-21-1 56-81-5 19766-89-3	Warning Acute Tox.4, Not classified Repr.2	0.60	2.20	Manufacturing machines Anti-Freeze	R63, R22		 H302 None H361d

Maint-	Name: CoolElf (Orange) Monoethyleneglycol Sodium 2-ethylhexanoate	 107-21-1 19766-89-3	Acute Tox.4 Xn Repr.3	1.0	5.28	Enclosed System Cooling Towers - Anti-Freeze	R22 R63		H302, H373 H361d
Maint-	Name: Argon Gas	7440-37-1	Gas under Pressure Warning – REACH exempt	1.00	1.00	Welding	None	None	H280
Maint-	Name: Q8 Haydn 68 Distilates (Petrolleum) Solvent, dewaxed	647-42-65-0	Not classified	0.600	5.80	Manufacturing machines	None	None	None
Maint-	Name: Q8 Haydn 46 Distilates (Petrolleum) Solvent, dewaxed Heavy paraffinic	64742-65-0	Not classified	0.416	0.416	Manufacturing machines	None	None	None
Maint-	Name: Hoeschalin 821 Potassium Hydroxide 2-(2-methoxyethoxy)ethanol	 1310-58-3 111-77-3	 Acute Tox 4 Xn, Repr.3	2.00	5.00	Mould Cleaning	 R35, R22 R63,		 H314, H302 H361d
Maint-	Name:Phenolpathalein Solution	77-09-8	Carc. Cat 1B, Mut. Cat 2, F.	0.005	0.005	Titration	R10, R45. R68		H350, H226, H341
Maint-	Name: Hydrochloric Acid Solution 1 mol	7647-01-0	Xi, C	0.007	0.007	Titration	R34, R37		H290, H314, H335
Maint-	Name: Struktol Permalesase 20 Naphtha propane Butane Propan-2-ol	 64741-65-7 74-98-6 106-97-8 67-63-0	F+, Carc. Cat 2,	0.084	0.084	Release Agent	R65, R66, R36, R11 R12		 H225 H304 H331 H280, H220 H36, H319
Maint-	Name: Amsol N- No-, iso-Alkanes Butane Propan-2-ol	0622-58-5	Xn, Asp Tox.1	0.302	0.152	Degreaser	R65, R66	P331, P301 P310 P405 P501	H304

Maint-	Name: Jizer JIZ609 DISTILLATES PETROLEUM HYDROCARBON LIGHT ISOTRIDECANOL, ETHOXYLATED (2-5EO)	64742-47-8 69011-36-5	Xn, Asp Tox.1 Xi,	0.015	0.500	Degreaseer	R 65, R66 R41		EUH066, H304 H318
Maint-	Name: Gleitmo 300 Propan-2-ol Mixture of Hydrocarbons, de-aromatized	67-63=0 64742-46-9	F, Xi, Xn,	0.060	0.240	Lubricating Film Mould Maintenance	R11, R36, R67 R10, R52/53, R65, R66, R67	None	H226, H336, H412, H304
Maint-	Name: korro 60-90 2,2-oxybisethanol Boric Acid	111-46-6 10043-35-3	Xn, Acute Tox.4 STOT RE2 Repr 2,	0.125	0.400	Corrosion Inhibitor	R22, R60, R61		H373, H302 H360FD
Maint-	Name: Alkon 7310 Sodium Alkyl Ether Sulpjate	3088-31-1	Aquatic Chronic 3, Xn	0.275	0.275	Anti-tak agent	None	None	H318, H412 H319
Prod-	Name: DKW W3794E No substances under REACH	None	Not classified	0.400	1.28	Mould Release	None	None	None
Prod-	Name: DKW W4080 No substances under REACH	None	Not classified	0.400	1.656	Mould Release	None	None	None
Prod-	Name: DKW W71D No substances under REACH	None	Not classified	0.400	3.726	Mould Release	None	None	None
Prod-	Name: Methalated Spirits ETHANOL METHANOL	64-17-5 67-56-1 548-62-9	Acute Tox. 4 STOT Single 1 T, F, Xn	0.040	0.060	Degreaser	R39/23/24/25 R20/21/22 R11		H228 H302 . H312

	Methyl Violet Paraffin Oil	8012-95-1							H332 . H370

Notes: 1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.

2. Article 2(2) of S.I. No. 116/2003
3. Schedules 9 and 10 of S.I. No. 62/2004 (as amended by S.I. No. 271/2008)
4. EC Regulation 1272/2008 (Chemicals Act 2008 (13 of 2008) and 2010)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Osixo® OS 05

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

1.1. Product identifier

Osixo® OS 05

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

Use of the substance/mixture

Lubricating agent

Uses advised against

none

1.3. Details of the supplier of the safety data sheet

Company name:	H. Costenoble GmbH & Co. KG
Street:	Rudolf-Diesel-Str. 18
Place:	D-65760 Eschborn / Taunus
Post-office box:	5205 D-65727 Eschborn / Taunus
Telephone:	(+49) (0)6173 / 9373 - 0
e-mail:	service@costenoble.de
Contact person:	Reinhold Lütke-Hündfeld Telephone: (+49)(0)6173 / 9373 - 27
e-mail:	R.Luetke-Huendfeld@costenoble.de
Internet:	www.costenoble.de

1.4. Emergency telephone number:

(+49)(0)6131 / 19240 (Poison Control Center)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This mixture is not classified as hazardous according to Directive 1999/45/EC.

GHS classification

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.
The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air.

After contact with skin

Change contaminated clothing. Wash with plenty of soap and water.

After contact with eyes

Remove contact lenses. If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Caution if victim vomits: Risk of aspiration! Rinse mouth immediately and drink plenty of water. If unconscious place in recovery position and seek medical advice.

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

Dizziness. May cause drowsiness or dizziness.

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

none

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

none

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.
Hazardous decomposition products: Fluorinated compounds. Carbon monoxide. Carbon dioxide (CO_2).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Danger of bursting container. Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. In case of insufficient ventilation, wear suitable respiratory equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Ventilate affected area. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protection equipment. Ventilate affected area. Open and handle container with care.

Avoid contact with skin and eyes. Do not breathe vapour. In case of insufficient ventilation, wear suitable respiratory equipment. When using do not smoke.

Advice on protection against fire and explosion

Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect from sunlight.

Advice on storage compatibility

Do not store together with: Alkalis (alkalis).

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink or smoke.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Wear protective gloves. NBR (Nitrile rubber).

Skin protection

Protective clothing.

Respiratory protection

Do not breathe gas/vapour/aerosol. Thermal decomposition can lead to the escape of irritating gases and vapours. Respiratory protection necessary at: Thermal decomposition.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	clear, colourless
Odour:	like: Ether

		Test method
pH-Value:	not applicable	
Changes in the physical state		
Melting point:	< -120 °C	
Initial boiling point and boiling range:	61 °C	
Flash point:	Non-flammable.	

Explosive properties

not explosive.

Oxidizing properties

none

Vapour pressure: (at 20 °C)	269 hPa
Density:	1,53-1,63 g/cm³
Water solubility:	0,018 g/L
Viscosity / dynamic: (at 23 °C)	0,6 mPa·s
Vapour density:	8,6
Evaporation rate:	49

9.2. Other information

Volatile organic compounds (VOC) content in percent by weight: > 90

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

heat.

10.5. Incompatible materials

strong alkalis

10.6. Hazardous decomposition products

Fluorinated compounds. Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Acute toxicity (oral): No data available.
- Perfluoroalkylether: LD50: 37400 mg/kg (Rat).

Acute toxicity (inhalant): No data available. The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. The inhalation of large quantities may lead to a lung oedema.
- Methyl nonafluorobutylether/ methyl perfluoroisobutylether: NOEL: 4500 ppm
- Perfluoroalkylether: ALC: ca. 19.54 mg/l (4h, Rat)

Acute toxicity (dermal): No data available.
- Perfluoroalkylether: ALD: ca. 17000 mg/l (Rabbit)

Irritation and corrosivity

Irritant effect on the skin: Excessive exposure may lead to the following symptoms: erythema (redness)
- Perfluoroalkylether: Rabbit: Slight irritation. Not classified as irritant.
Serious eye damage/eye irritation: Excessive exposure may lead to the following symptoms: Lachrimation, eye defects.

Sensitising effects

No data available.
- Perfluoroalkylether: No sensitisation in patch test on human volunteers (Modified Draize Test).

Severe effects after repeated or prolonged exposure

No data available.

Carcinogenic/mutagenic/toxic effects for reproduction

No data available.
- Perfluoroalkylether: No evidence for mutagenic effects in tests on cultured bacteria cells.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

No data available

- Perfluoroalkylether:
LC50/96h/Oncorhynchus mykiss (rainbow trout): > 1000 mg/l
EC50/48h/Daphnia magna (water flea): > 1000 mg/l

12.2. Persistence and degradability

This product contains components which are not easily biodegradable.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

Methyl nonafluorobutylether/ methyl perfluoroisobutylether:
Ozone Depleting Potential (ODP): 0
Global Warming potential (GWP): 320

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

070103 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; organic halogenated solvents, washing liquids and mother liquors
Classified as hazardous waste.

Waste disposal number of used product

070103 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; organic halogenated solvents, washing liquids and mother liquors
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

Other applicable information (marine transport)

No dangerous good in sense of these transport regulations.

Air transport (ICAO)

Other applicable information (air transport)

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

not applicable

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

not applicable

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

Osixo® is a registered trademark of H. Costenoble GmbH & Co. KG, Eschborn, Germany.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)