SAFETY DATA SHEET

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

1.1 Product identifier

Trade name: **SD6P, SD9P**
Other name: AB Class Foam Fire Extinguisher

(This SDS covers the mixture – 1,5% Glorilight ECO + 35% Imprex B and Nitrogen used as the propellant in pressurized container.)

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

Relevant identified uses: Fire extinguisher for use on class A and B fires
Uses advised against: Not determined

1.3 Details of the supplier of the safety data sheet

Manufacturer / supplier: Carrier Manufacturing Poland Sp. z o.o.
Address: Ul. Kolejowa 24, 39-100 Ropczyce, Poland
Telephone number: +48 17 221 02 02
Fax: +48 17 221 02 48
e-mail address of competent person responsible for the Safety Data Sheet: msds-rop@carrier.com

1.4 Emergency telephone number

European Union emergency phone number:
112 - in case of poisoning - ask for Poison Information (24 hours a day, 7 days a week).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Press. Gas, H280

2.1.2 Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)[1].

[1] *Fire extinguisher is an article, labeling according the CLP Regulation is not required.*

Hazard pictograms:

Signal word:
Warning

Hazard statements:
H280: Contents under pressure; may explode if heated.

Precautionary statements:
P403: Store in a well-ventilated place.

Supplemental Hazard information (EU):
Not applicable.

2.3 Other hazards
Product does not contain ingredients, which meet criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII .
Product does not contain substances identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.
Within expanded foam respiration is not possible, danger of suffocation!

SECTION 3: Composition / information on ingredients

3.1 Substances
Propellant (Nitrogen):

CAS No EC No REACH No	Name	Concentration [%] (w/w)	Classification according to Regulation (EC) No 1272/2008 (CLP)
7727-37-9 231-783-9 Listed in Annex IV of Regulation (EC) No 1907/2006 (REACH) - exempted from registration	Nitrogen	< 100	Press. Gas (Liq.), H280

3.2 Mixtures
(1,5% Glorilight ECO + 35% Imprex B):

CAS No EC No REACH No	Name	Concentration [%] (w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
112-34-5 203-961-6 -	2-(2-butoxyethoxy)ethanol	4.3	Eye Irrit. 2, H319
107-21-1 203-473-3	ethylene glycol	3.3	Acute Tox. 4 (Oral), H302

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142-31-4 205-535-5 01-2119966154-35	Sodium octyl sulphate	0.7 – 1.4	Skin Irrit. 2, H315 Eye Dam. 1, H318
90583-18-9 292-216-9 -	Sulfuric acid, mono-C12-14-alkyl esters, compds. with triethanolamine	0.7 – 1.2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
2634-33-5 220-120-9	1,2-Benzisothiazol-3(2H)-one	0.005 – 0.007	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400

Further information:
SVHC: Components of the pressurized container contains Lead CAS No: 7439-92-1 in a concentration greater than 0.1% (w/w). The identification of the Candidate List substance is sufficient to allow safe use of the article throughout the whole life cycle including service life, disassembly and waste/recycling stage.
For more information please see: SCIP DATABASE https://echa.europa.eu/pl/scip-database (search by part number).

Mixture contain substances with a Community workplace exposure limit.

SECTION 4: First aid measures

4.1 Description of first aid measures
General notes: ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Following inhalation: remove person to fresh air and keep comfortable for breathing, in case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).
Following skin contact: after contact with skin, wash immediately with plenty of water and soap. Consult a doctor if disturbing symptom occur.
Following eye contact: immediately flush eyes with large amounts of water. If irritation occurs, get medical assistance.
Following ingestion: never give anything by mouth to an unconscious person. Contact a doctor if disturbing symptom occur.
Self-protection of the first aider: use personal protective equipment as required.

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

4.3 Indication of any immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: this product is not flammable. Use extinguishing agent suitable for type of surrounding fire, product is used for fire extinguishing.
Unsuitable extinguishing media: none, product is used for fire extinguishing.

5.2 Special hazards arising from the substance or mixture
At high temperature concentrate gives toxic products. Thermal decomposition of usage concentrations does not present a hazard.

5.3 Advice for firefighters
Protection during firefighting: do not enter fire area without proper protective equipment. Avoid contact with water reactive materials, burning metals and electrically energized equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment. Use appropriate respiratory protection. In case of large spills, isolate the exposed area. Avoid direct contact with skin and eyes.

6.2 Environmental precautions
Do not let the product to enter ground waters, drainage system, sewage and soil. Clean contaminated objects and areas thoroughly observing environmental regulations. Notify relevant emergency services. Treat the assimilated material according to the section on waste disposal.

6.3 Methods and material for containment and cleaning up
Soak up inert absorbent and dispose as waste requiring special observation. Use approved industrial vacuum cleaner for removal.

6.4 Reference to other sections
Appropriate conduct with waste product – SECTION 13. Personal protection equipment – SECTION 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good occupational hygiene and safety practices. Keep in a well-ventilated place. Avoid eyes and skin contamination. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities
Storage temperature +5°C / +60°C. Incompatible products: Strong bases, strong acids, oxidizing agent, strong reducing agents.

7.3 Specific end use(s)
No information about uses other than mentioned in subsection 1.2.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	52 mg/m³ 20 ppm
IOEL STEL	104 mg/m³ 40 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	52 mg/m³ 20 ppm
OEL STEL	104 mg/m³ 40 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	52 mg/m³ 20 ppm
VLE (OEL C/STEL)	104 mg/m³ 40 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	52 mg/m³ (damp) 10 mg/m³ (druppels) 20 ppm (damp) 3.9 ppm (druppels)

ethylene glycol (107-21-1)	
TGG-15min (OEL STEL)	104 mg/m³ (damp) 40 ppm (damp)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	10 mg/m³ 52 mg/m³ 20 ppm
WEL STEL (OEL STEL)	104 mg/m³ 40 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	25 ppm (Vapor fraction)
ACGIH OEL STEL	10 mg/m³ (Inhalable fraction, Aerosol only) 50 ppm (Vapor fraction)

2-(2-butoxyethoxy)ethanol (112-34-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	67.5 mg/m³ 10 ppm
IOEL STEL	101.2 mg/m³ 15 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	67.5 mg/m³ 10 ppm
OEL STEL	101.2 mg/m³ 15 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	67.5 mg/m³ 10 ppm
VLE (OEL C/STEL)	101.2 mg/m³ 15 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	50 mg/m³ 7.4 ppm
TGG-15min (OEL STEL)	100 mg/m³ 15 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	67.5 mg/m³ 10 ppm
WEL STEL (OEL STEL)	101.2 mg/m³ 15 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 ppm (Inhalable fraction and vapor)

8.2 Exposure controls

8.2.1 Appropriate engineering controls

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. Observe good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Wash hands thoroughly before breaks and after work. Ensure adequate general and/or local ventilation in the workplace.

8.2.2 Personal protection equipment

Personal protective equipment must meet requirements of directive 89/686/CE. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Hand and body protection:
Under normal conditions of work is not required. When in contact with mixture, protective gloves and clothing are required.
Eye and face protection:
Avoid eye contact. Wear vented goggles.
Respiratory protection:
With correct and proper use, and under normal conditions, breathing protection is not required.

8.2.3 Environmental exposure controls
Avoid release to the environment, do not enter the sewage system. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Basic physical and chemical properties of:

		Mixture (1,5% Glorilight ECO + 35% Imprex B)	**Propellant (Nitrogen)**
a)	**Physical state:**	liquid	gas
b)	**Colour:**	colourless to slightly yellow	colourless
c)	**Odour:**	characteristic	odourless
d)	**Melting point/freezing point:**	-1 °C	not applicable
e)	**Boiling point or initial boiling point and boiling range:**	not available	-196°C
f)	**Flammability:**	not applicable	not flammable
g)	**Lower and upper explosion limit:**	not applicable	not applicable
h)	**Flash point:**	not applicable	not applicable
i)	**Auto-ignition temperature:**	not applicable	not applicable
j)	**Decomposition temperature:**	not applicable	not applicable
k)	**pH:**	6,0-9,0 (20°C)	not applicable
l)	**Kinematic viscosity:**	not determined	not applicable
m)	**Solubility:**	insoluble in water	20 mg/l (water)
n)	**Partition coefficient n-octanol/water:**	not applicable	not applicable
o)	**Vapour pressure:**	not applicable	not applicable
p)	**Density and/or relative density:**	1,01-1,07 g/cm^3 (20°C)	not applicable
q)	**Relative vapour density:**	not applicable	not determined
r)	**Particle characteristics:**	not applicable	not applicable

9.2 Other information
Product contains gas under pressure.

SECTION 10: Stability and reactivity

10.1 Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability
Mixture stable under normal conditions.

10.3 Possibility of hazardous reactions
Mixture - no dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid
Avoid elevated temperatures, sources of fire and heat.

10.5 Incompatible materials
No additional information available.

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

SECTION 11: Toxicological information

Acute toxicity: based on available data, the classification criteria are not met.

ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral	2410 – 5530 mg/kg bodyweight (Equivalent or similar to OECD 401, Mouse, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	2764 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation: based on available data, the classification criteria are not met.
Serious eye damage/irritation: based on available data, the classification criteria are not met.
Respiratory or skin sensitization: based on available data, the classification criteria are not met.
Germ cell mutagenicity: based on available data, the classification criteria are not met.
Carcinogenicity: based on available data, the classification criteria are not met.
Reproductive toxicity: based on available data, the classification criteria are not met.
STOT-single exposure: based on available data, the classification criteria are not met.
STOT-repeated exposure: based on available data, the classification criteria are not met.
Aspiration hazard: based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity
The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

1,5% Glorilight ECO + 35% Imprex B	
LC50 - Fish [1]	955 mg/l (Danio rerio)
EC50 - Crustacea [1]	1760 mg/l (Daphnia magna)
EC50 72h - Algae [1]	> 1000 mg/l (Scenedesmus subspicatus)
Propane-1,2-diol (57-55-6)	
LC50 - Fish [1]	51400 mg/l
EC50 - Crustacea [1]	43500 mg/l
EC50 72h - Algae [1]	24200 mg/l
ethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)
2-(2-butoxyethoxy)ethanol (112-34-5)	
LC50 - Fish [1]	1300 mg/l (Equivalent or similar to OECD 203, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 100 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

12.2 Persistence and degradability

1,5% Glorilight ECO + 35% Imprex B	
Persistence and degradability	Rapidly degradable
Water (7732-18-5)	
Persistence and degradability	Rapidly degradable
Sodium octyl sulphate (142-31-4)	
Persistence and degradability	Rapidly degradable
Sulfuric acid, mono-C12-14-alkyl esters, compds. with triethanolamine (90583-18-9)	
Persistence and degradability	Rapidly degradable

12.3 Bio accumulative potential

Propane-1,2-diol (57-55-6)	
Bioaccumulative potential	Not bioaccumulative.
ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.
2-(2-butoxyethoxy)ethanol (112-34-5)	
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4 Mobility in soil

ethylene glycol (107-21-1)	
Surface tension	48.4 mN/m (20 °C)
Ecology - soil	Highly mobile in soil.
2-(2-butoxyethoxy)ethanol (112-34-5)	
Surface tension	27 mN/m (25 °C, 0.00212 mol/g)
Ecology - soil	Highly mobile in soil.

12.5 Results of PBT and vPvB assessment

Product has not been tested.

12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59 (1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

12.7 Other adverse effects

Product has not been tested.

12.8 Additional information

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the mixture: do not deposit with household waste. Waste should not be disposed of by release to sewers. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

Disposal methods for used packing: package should be passed to a certified company. Do not mix with other wastes. Waste code should be assigned in place of formation. Waste code should be assigned in place of formation.

Legal basis: Directive 2008/98/EC, 94/62/EC.

SECTION 14: Transport information

14.1 UN Number or ID Number
UN 1044

14.2 UN proper shipping name
Fire extinguisher

14.3 Transport hazard class(es)
2.2

14.4 Packing group
Not applicable.

14.5 Environmental hazards
Not applicable.

14.6 Special precautions for user
Land carriage:
- according to special regulation 594 free from GGVSE/ADR-regulations.

Sea carriage:
- IMDG/GGV sea: Class 2.2
- EMS: F-C,S-V
- PG: none,
- marine pollutant: no marking / label,
- danger marking No. 2.2

14.7 Maritime transport in bulk according to IMO instruments
Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive **2006/15/EC** of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.
Commission **Regulation (EU) 2020/878** of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) as amended.
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

15.2 Chemical safety assessment
It is not necessary to carry out a chemical safety assessment for the mixture.

SECTION 16: Other information

Relevant H- and EUH-phrases (number and full text):

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H280	Contents gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Abbreviations and acronyms:

PBT Persistent, Bioaccumulative and Toxic substance vPvB very Persistent, very Bioaccumulative substance

Trainings:

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data:

This SDS was prepared on the basis of sheets of the AB fire extinguishing mixture, literature data, online databases as well as our knowledge and experience, taking into account current legislation.

Additional information:

Classification was based on data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP). The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.