according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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

- · 1.1 Product identifier
- · Trade name: Pre-Mix
- · Product code: 35% DowFrost HD, 65% DI Water
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture: Corrosion and burst protection
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Opti Temp

1500 International Drive

Traverse City, MI 49686

Tel: (231) 946.2931

E-mail: Information@OptiTemp.com

· 1.4 Emergency telephone number: (231) 946-2931

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

The product is not classified as hazardous according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

This product does not have a classification according to the CLP regulation.

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

- · Hazard pictograms Not Regulated
- · Signal word Not Regulated
- · Hazard-determining components of labelling: None.
- · Hazard statements Not Regulated
- · Precautionary statements Not Regulated.
- · Additional information:

Safety data sheet available on request.

- · 2.3 Other hazards There are no other hazards not otherwise classified that have been identified.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

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Trade name: PreMix- 35% DowFrost HD, 65% DI Water

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Components:

CAS: 57-55-6 propylene glycol

..

EINECS: 200-338-0

substance with a Community workplace exposure limit

20-40%

Reg.nr.: 01-2119456809-23-XXXX

· Additional information:

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Clean with water and soap.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

Slight irritant effect on eyes.

May cause gastro-intestinal irritation if ingested.

 \cdot 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents: None.
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. Particular danger of slipping on leaked/spilled product.

• 6.2 Environmental precautions Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

57-55-6 propylene glycol

WEEL (USA) Long-term value: 10 mg/m³

- **DNELs:** No further relevant information available.
- · PNECs: No further relevant information available.

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- · 8.2 Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

· Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device when aerosol or mist is formed.

For spills, respiratory protection may be advisable.

· Protection of hands:

Wear protective gloves to handle contents of damaged or leaking units.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Eve protection:



Safety glasses

· Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

- · Limitation and supervision of exposure into the environment: No special requirements.
- · Risk management measures: No special requirements.

• 9.1 Information on basic physical and chemical properties • Appearance

Form: Liquid

Colour: Fluorescent yellowOdour: CharacteristicOdour threshold: Not determined.

pH-value at 20 °C (68 °F):
 Melting point/freezing point:
 Initial boiling point and boiling range:
 Not determined.

Flash point: Not applicable.Flammability (solid, gas): Not applicable.

· Auto/Self-ignition temperature: Not determined.

• **Decomposition temperature:** Not determined.

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		(Cont'd. from page
Explosive properties:	Product does not present an explosion hazar	d.
· Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
· Oxidising properties	Not determined.	
· Vapour pressure:	Not determined.	
Density:		
Relative density:	Not determined.	
Vapour density:	Not determined.	
Evaporation rate:	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
Partition coefficient: n-octanol/wa	ater: Not determined.	
· Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

· 10.3 Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong acids and oxidising agents.

· 10.4 Conditions to avoid

Keep away from heat and direct sunlight.

Store away from oxidising agents.

- · 10.5 Incompatible materials Oxidisers
- · 10.6 Hazardous decomposition products Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification: None.
- · Primary irritant effect
- · Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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- · Serious eye damage/irritation: Slight irritant effect on eyes.
- · Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable routes of exposure:

Ingestion.

Eve contact.

Skin contact.

- · 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
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.

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Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- · Uncleaned packaging:
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information		
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	Not Regulated	
 14.2 UN proper shipping name DOT, ADR, IMDG, IATA 	Not Regulated	
· 14.3 Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not Regulated	
· 14.4 Packing group · DOT, ADR, IMDG, IATA	Not Regulated	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann of Marpol and the IBC Code	nex II Not applicable.	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: PreMix- 35% DowFrost HD, 65% DI Water

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· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients are listed.
- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern

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vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

LDLo: Lowest Lethal Dose Observed

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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