

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

COMPANY NAME:	AMERICAN INDUSTRIES, INC.	PRODUCT NAME:	DEFROST
ADDRESS LINE 1:	4300 Kahn Drive, Box 1405	PRODUCT CODE:	2037
ADDRESS LINE 2:	Lumberton, NC 28359-1405 USA	PRODUCT USE:	Industrial D-Icer
TELEPHONE NUMBERS:	800-753-5153 (or) 910-738-7224	SDS FILE ID:	2037.13
EMERGENCY PHONE:	CHEMTREC 1-800-424-9300	SDS DATE:	2022-09-28
		REPLACES VERSION DATED:	2016-12-08 and all prior versions

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification	
Specific Target Organ Toxicity-Single Exposure	Category 1
Specific Target Organ Toxicity-Repeated Exposure	Category 2
Acute Toxicity Dermal	Category 4
Reproductive Toxicity	Category 2
Acute Toxicity Inhalation	Category 4
Aerosol	Category 1
Acute Toxicity Oral	Category 4
Label elements	



Signal word	DANGER
Hazard statements	H222 Extremely flammable aerosol. H280 Contains gas under pressure; may explode if heated. H312 Harmful in contact with skin H332 Harmful if inhaled. H301 Toxic if swallowed. H361 Suspected of damaging fertility or the unborn child. H370 Causes damage to organs. P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection P271 Use only outdoors or in a well-ventilated area. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P308 + P313 If exposed or concerned: get medical attention P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P362+P364 Take off immediately all contaminated clothing and wash it before reuse. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P314 Get medical attention if you feel unwell.

P403 + P405 Store in well-ventilated place. Store locked up.

P410 Protect from sunlight.

P412 Do not expose to temperatures exceeding 122°F (50°C).

P501 Dispose of contents and container in accordance with all local, regional, national, and international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>CAS number</u>	<u>%</u>
Methanol	67-56-1	40 -66
Ethylene Glycol	107-21-1	6-12
CO2	124-38-9	2-5

SECTION 4: FIRST AID MEASURES

Inhalation	Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor. Eliminate all ignition sources if safe to do so.
Skin contact	Take off immediately all contaminated clothing, shoes and leather goods (e.g., watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention.
Eye contact	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.
Ingestion	Do NOT induce vomiting. Immediately call a POISON CENTER/doctor/. If vomiting occurs naturally, lie on your side, in the recovery position.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, foam, carbon dioxide. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only. Do not direct a solid stream of water or foam into hot, burning pools this may results in frothing and increase fire intensity.
Unsuitable extinguishing media	No data available.
Specific hazards arising from the chemical	Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a buildup of internal pressures. Cool with water. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.
Special protective equipment and precautions for firefighters	Wear protective pressure self-contained breathing apparatus (SCBA)and full turnout gear.
Fire-fighting procedures	Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk-through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the public or the environment occurs or is likely to occur. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.
Personal precautions	Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.
Environmental precautions	Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.
Recommended equipment	Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).
Methods and materials for containment and cleaning up	Absorb liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored.
Ventilation Requirements	Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.
Conditions for safe storage	Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them. Store at temperatures below 120°F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Component</u>	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA Tables <u>Z1,2,3</u>	NIOSH TWA (ppm)	NIOSH TWA (mgm3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
CO2	5000	9000	1	5000	9000	30000	54000	5000		30000	
Ethylene Glycol								25 (v)		50 (v)	10 (I,H)
Methanol	200	260	1	200	260	250	325	200		250	

<u>Component</u>	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
CO2		Asphyxia	
Ethylene Glycol	A4	URT irr	
Methanol		Hedache; eye dam; dizziness; nausea	

(C) - Ceiling limit, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, dam -Damage, eff - Effects, irr - Irritation, repro - reproductive, URT - Upper respiratory tract

Eye/face protection	Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.
Skin protection	Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene, or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g., frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.
Appropriate engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
Respiratory protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Aerosol
Flash point	N/A
Density	7.41 lb/gal
Density VOC	4.99 lb/gal
% VOC	67.28%
VOC Actual	N/A
VOC Regulatory	N/A
Flammability	N/A
Low boiling point	N/A
High boiling point	N/A
Freezing Point	N/A
Decomposition Pt	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
pH	N/A
Solubility in water	N/A
Vapor density	N/A
Viscosity	N/A
Evaporation Rate	Slower than ether

SECTION 10: STABILITY AND REACTIVITY

Chemical stability	This product is stable under normal storage conditions.
Hazardous Polymerization	Will not occur.
Conditions to avoid	Avoid heat, sparks, flame, high temperature and contact with incompatible materials. Dropping containers may cause bursting.
Hazardous decomposition products	No data available.
Incompatible materials	Avoid strong oxidizers, reducers, acids, and alkalis.

SECTION 11: TOXICOLOGICAL INFORMATION

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Likely route of exposure	Inhalation, ingestion, skin absorption, skin contact, eye contact

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.
Specific target organ toxicity-Single Exposure	Causes damage to organs
Specific Target Organ Toxicity-Repeated Exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration Hazard	Based on available data, the classification criteria are not met.
Acute Toxicity	Harmful in contact with skin. Harmful if inhaled. Harmful if swallowed.
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Carcinogenicity	Based on available data, the classification criteria are not met.
Potential health effects-Miscellaneous:	
67-56-1 Methanol	Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, kidneys, liver, skin. Excessive human exposure to methanol may lead to: fatigue, headache, anaesthetic, neurologic effects, and visual difficulties including blindness or death. Recurrent overexposure may result in liver and kidney injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. Ingestion may cause any of the following: blindness. Eye contact may cause any of the following: conjunctivitis, mild irritation, corneal opacity.
109-86-4 2-Methoxyethanol	The substance may have effects on the blood and bone marrow. This may result in anemia and lesions of blood cells.
110-91-8 Morpholine	LC50 (rat): 2250 ppm/duration not reported (male rat) (1,9); 2150 ppm/duration not reported (female rat) (1,9); greater than 22.2 mg/L (6240ppm)/1-hr exposure (12) LC50 (mouse): 1320 mg/m3 (371 ppm)/2-hr exposure (reported but cannot be confirmed) LD50 (oral, rat): 1600 mg/kg (7,12,13); 1050 mg/kg (3,7,9,12) LD50 (oral, mouse): 525 mg/kg (16); 720 mg/kg (15) LD50 (oral, guinea pig): 900 mg/kg (7,12,13) LD50 (skin, rabbit): 0.5 mL/kg/24-hr (500 mg/kg/24-hr) (undiluted) (3,7,12,16) Lethal dose (oral, rat or guinea pig): 0.1 g/kg (undiluted, not neutralized); all animals died rapidly. When diluted with 4 volumes of water, the minimum lethal dose was 0.9 g/kg (guinea pig) or 1.6 g/kg (rat) (13).
67-56-1 Methanol	LD50 (oral, rat): 5628 mg/kg (14, unconfirmed) LD50 (oral, 14-day old rat): 5850 mg/kg (cited as 7.4 mL/kg) (15) LD50 (oral, young adult rat): 10280 mg/kg (cited as 13.0 mL/kg) (15) LD50 (oral, monkey): 3000 mg/kg (1/1 animal died) (16) LD50 (dermal, rabbit): 15800 mg/kg (cited as 20 mL/kg) (17 citing unpublished information)
107-21-1 Ethylene Glycol	LD50 (oral, rat): 5.89 g/kg; 8.54 g/kg; 13.0 g/kg (5) LD50 (oral, mouse): 7.5 g/kg; 15.28 g/kg (5,6) LD50 (oral, guinea pig): 6.6 g/kg; 11.0 g/kg (5) LD50 (oral, rabbit): 5.0 g/kg (5) LD50 (dermal, rabbit): 9.5 g/kg (6)
109-86-4 2-Methoxyethanol	LC50 (mouse): 1480 ppm (7-hour exposure) (1) LD50 (oral, rat): 2460 mg/kg (19); 3250 mg/kg (18) LD50 (oral, guinea pig): 950 mg/kg (18,19) LD50 (oral, rabbit): 890 mg/kg (18) LD50 (dermal, rabbit): 1300 mg/kg (cited as 1.34 mL/kg) (24-hours contact)(18)
107-15-3 Ethylenediamine	LC50 (mouse): 300 mg/m3 (exposure duration not reported) (1) LETHAL CONCENTRATION (rat): 4000 ppm (8-hr exposure); 6 of 6 rats died.2000 ppm (8-hr exposure); 0 of 6 rats died.(2)

LD50 (dermal, rabbit): 657 mg (730 mL)/kg body weight.(2)
 LD50 (oral, rat): 1160 mg/kg body weight.(2)
 LD50 (oral, rat): 500 mg/kg body weight.(1)
 LD50 (oral, guinea pig): 470 mg/kg.(1)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Based on available data, the classification criteria are not met..
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal instructions	Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.
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SECTION 14: TRANSPORT INFORMATION

	US DOT Info	IMDG Info	IATA Info
UN Number	UN1950	UN1950	UN1950
Shipping Name	Aerosols	Aerosols	Aerosols
Hazard Class	2.1	2.1	2.1
Packaging Group	N.A.	N.A.	N.A.
Hazardous Substance (RQ)	N.D.A.		
Marine Pollutant	N.D.A.	N.D.A.	N.D.A.
Note/Special Provision	(LTD QTY)	(LTD QTY)	(LTD QTY)
Toxic-Inhalation hazard	N.D.A.		
DOT	Consumer Commodity, ORM-D		

SECTION 15: REGULATORY INFORMATION

COMPONENT	(CAS/PERC)	REGULATION
Methanol	(67-56-1) 40-66%	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, RCRA, ACGIH, California Proposition 65 Developmental, OSHA
Ethylene Glycol	(107-21-1) 6-12%	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, ACGIH, California Proposition 65 Developmental
CO2	(124-38-9) 2-5%	SARA 312, TSCA, ACGIH, OSHA
2-Methoxyethanol	(109-86-4) Trace	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, ACGIH, California Proposition 65 Developmental - Male, OSHA

SECTION 16: OTHER INFORMATION

Important Note: *To be the best of our knowledge, the information contained herein is accurate. However there is no assumption of liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer/supplier, the manufacturer/supplier will not be responsible for loss, injury, or expense arising out of the products improper use. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.*

End of SDS