

**SAFETY DATA SHEET
POLYURETHANE FOAM SYSTEM
B-SIDE COMPONENT HVLP QS MD 2.0**



SECTION 1- IDENTIFICATION

1.1 Product Identifier

Product Name: HandiFoam® HVLP QS MD 2.0

ID SDS: SD006B

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

General Use Polyurethane Foam System, Side-B Component, for PROFESSIONAL USE ONLY

Uses advised against No further information available

1.3 Details of the supplier and of the safety data sheet:

Manufacturer ICP Building Solutions Group

2775 Barber Road

Norton, Ohio 44203

In Ohio: 330-753-4585; 1-800-321-5585 (Monday-Friday, 8:00 am – 5:00pm EST)

1.4 Emergency telephone numbers:

In the U.S.A CHEMTEL (24 hours) 1-800-255-3924

International CHEMTEL (24 hours) 1-813-248-0585

SECTION 2- HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification: Skin Corrosion/Irritation- Category 2

Eye Damage/Irritation- Category 1

Skin Sensitizer- Category 1

Reproductive- Category 2

Specific Target Organ Toxicity, Repeated Exposure- Category 2 (STOT RE 2)

2.2 Label elements

Hazard Symbols:



Signal Word: DANGER

Hazard Statements: H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H361 Suspected of damaging the unborn child
H373 May cause damage to organs (Kidney) through prolonged or repeated exposure (oral).

Prevention: P201 Obtain special instructions before use (training)
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust/gas/mist/vapours
P264 Wash hands and other skin areas exposed to material thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves, protective clothing and eye protection

Response: P303+P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician. Refer to product label and Section 4 of this SDS
P362+P364 Take off contaminated clothing and wash before reuse.

Storage: P405 Store locked up
P410+P403 Protect from sunlight. Store in a well-ventilated place.

Disposal: P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3-COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical characterization (preparation):

% by Weight	Ingredient	CAS No.
10-15	Triethyl phosphate	78-40-0
1-5	2-dimethylaminoethanol	108-01-0
1-5	Diethylene glycol	111-46-6
1-3	Dipropylene glycol	25265-71-8
0.3-3.0	Triethylenediamine	280-57-9
0.3-<1.0	2-((2-(dimethylamino)ethyl)methylamino)ethanol	2212-32-0
0.0-1.0	2-ethylhexanoic acid	149-57-5
0.0-1.0	Formic Acid	64-18-6
0.0-1.0	1-((dimethylamino)ethyl)-4-methylpiperazine	104-19-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

SECTION 4- FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapors causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen. If respiratory arrest occurs, start artificial respiration by a trained individual. Loosen tight fitting clothing such as a jacket or tie. Seek medical attention immediately.

Eye: Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with fingers and occasionally lifting the upper and lower lids. Use lukewarm water if possible. If present and easy to do, remove contact lenses. If irritation persists, get medical attention. Seek medical attention or consult and eye specialist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Gently wipe product from skin with a damp cloth and continue rinsing for 15 minutes. Wash clothing before reuse. Call a physician if irritation persists.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3 Notes to the physician

If case of an accident or if you feel unwell, seek medical advice immediately (show label or SDS if possible). Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high propellant concentrations (enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe victim for the development of cardiac arrhythmias.

SECTION 5- FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use dry chemical, carbon dioxide, alcohol resistant foams and water spray

Unsuitable methods of extinction: None

5.2 Special hazards arising from the substance or mixture

Drums may explode due to the buildup of pressure when exposed to extreme heat. Highly toxic gases may be generated by thermal decomposition or combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Hazardous decomposition products may include and are not limited to: Carbon monoxide, Carbon dioxide, Oxides of Nitrogen, Hydrogen cyanide.

5.3 Advice for firefighters

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

SECTION 6- ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ventilate the area. High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover spilled material with a large quantity of inert absorbent. Collect material and place into an approved, open-head metal container. Clean contaminated area with soap and water.

6.4 Reference to other sections

For indications about waste treatment and disposal, see Section 13

See Section 7 for information about safe handling

SECTION 7- HANDLING AND STORAGE

7.1 Precautions for safe handling

For Industrial or professional use only. Observe label precautions, do not use until all safety precautions have been read and understood. Wear all appropriate protective equipment specified in Section 8. Protect against moisture. Ensure thorough ventilation of the work area.

Avoid contact with eyes and skin.

Advice on protection against fire and explosion

Exposure to high temperatures can cause drums to rupture or explode.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, well-ventilated area and away from incompatible materials (see Section 10.5). Storage temperature is 70-80°F (21-27°C).

Avoid extreme heat. Protect from direct sunlight. Protect against moisture. Store unopened original containers in a cool and dry place.

SECTION 8- EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control Parameters

Ingredient	CAS Number	OSHA-PEL	ACGIH-TLV	Other
Diethylene glycol	111-46-6			WEEL 10 mg/kg
2-ethylhexanoic acid	149-57-5		TWA 5 mg/ m ³ (Inhalable fraction and vapor)	WEEL 1,000 ppm
Formic acid	64-18-6	PEL 5 ppm 9 mg/m ³ TWA 5 ppm 9 mg/m ³	TWA 5 ppm; STEL 10 ppm	

8.2 Exposure controls:

Engineering Controls: Use local and general exhaust ventilation to control levels of exposure. See ICP guidelines on Ventilation.

Eye/face Protection: Wear protective goggles or safety glasses with side shields.

Hand Protection: Use chemically resistant gloves (i.e. Nitrile gloves). Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use. Break through time of selected gloves must be greater than the intended use period.

Other Protective Equipment: Use clothing that protects against dermal exposure. Appropriate protective clothing varies depending on the potential for exposure. To ensure proper skin protection, wear PPE in such a manner that no skin is exposed.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guidelines. Use products only in a well-ventilated area. Engineering and administrative (work practices) controls should be implemented to protect the workers. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter. If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The odor and irritancy of this material is inadequate to warn of excessive exposure.

Hygiene Measures: An eye wash station or portable eye wash station should be in the area. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees/Users should be educated and trained in the safe use and handling of this product.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
General Physical Form	Amber to dark brown liquid.
Odor	Slight amine odor
Odor Threshold	No data available
pH	>=7
Freezing Point	<0°C
Boiling Point	>49°C (120°F), liquid phase
Flash Point	Closed Cup >200°F (93.3°C)
Flammability	Not flammable
Lower Flammability/Explosive Limit	Not available
Upper Flammability/Explosive Limit	Not available
Vapor Pressure	<10 mbar (20°C)
Vapor Density	No data available
Relative Density/Specific Gravity	~ 1.15 @ 20°C (Water = 1)
Solubility	Slightly soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	>250°C

Self-ignition Temperature	Not self-igniting
Decomposition Temperature	No decomposition if stored and handled as indicated.
Oxidizing Properties	Not fire-propagating
Viscosity, dynamic	350-650 mPA.s (21°C)
Evaporation rate	Value can be approximated from vapor pressure

SECTION 10- STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use. No corrosive effect on metal.

10.2 Chemical stability

Stable under normal conditions of use and recommended storage conditions. See Section 7 for storage recommendations.

10.3 Possibility of hazardous reactions

Exposure to elevated temperatures can cause containers to rupture or explode. Contents are under pressure.

10.4 Conditions to avoid

Temperatures above 80°F (27°C). Avoid heat and flames. Avoid moisture. Avoid direct sunlight.

10.5 Incompatible materials

Acids, oxidizing agents, isocyanates.

10.6 Hazardous decomposition products

See Section 5.2 for hazardous decomposition products due to combustion.

SECTION 11- TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Signs and Symptoms of Exposure based on test data and/or information on the components, this material may produce the following health effects:

Inhalation (When combined with A-side Component):

Mist or vapor may cause irritation of the nose, throat and respiratory tract. Symptoms may include sore throat, coughing, headache, nausea and shortness of breath. Inhalation of propellant may cause lightheadedness, headache and lethargy.

Skin Contact:

Skin contact causes irritation. Symptoms may include localized redness and discomfort.

Eye Contact:

May cause serious eye damage. Symptoms may include redness, swelling, stinging, and tearing. May cause temporary corneal injury. Product vapor may cause eye irritation with symptoms of burning and tearing.

Ingestion:

May cause gastrointestinal irritation: stomach distress, nausea, or vomiting. Repeated ingestion may be harmful.

Acute toxicity:

Primary irritant effect:

On the skin: Irritant to skin and mucous membranes.

On the eye: May cause severe damage to the eyes

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

Carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Genetic: Assessment of mutagenicity. The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive: Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity: Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Probable routes of exposure: Inhalation, Ingestion, eye contact and skin contact.

Acute effects (acute toxicity, irritation and corrosivity): Irritating to skin. May cause severe damage to the eyes.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity: Based on available data, the classification criteria are not met

Specific organ toxicity- single exposure

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Specific organ toxicity- repeated exposure

Kidneys

Aspiration hazard

No aspiration hazard expected.

Other: This product has not been tested. The above information has been derived from the properties of the individual components.

Information on: diethylene glycol

Symptoms: Overexposure may cause: vomiting, coma, abdominal cramps, lethargy, nausea, diarrhea, headache

Information on: 2-dimethylaminoethanol

Symptoms: Overexposure may cause: shortness of breath, restlessness, coughing, headache

SECTION 12- ECOLOGICAL INFORMATION

12.1 Ecotoxicity

The ecotoxicity of this product has not been experimentally determined. However, it is expected to have low acute aquatic toxicity based on the acute aquatic toxicity of the individual components and their concentrations in this composition.

12.2 Persistence and degradability

Product is poorly biodegradable.

12.3 Bioaccumulation potential

Product is not expected to bioaccumulate

12.4 Mobility

Adsorption to solid soil phase is not expected.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Additional ecological information: Do not allow material to run into surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13- DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste disposal of substance:

Dispose of in a licensed facility. Do not discharge substance/product into sewer system.

Container disposal:

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers). Decontaminate containers prior to disposal. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Do not reuse empty containers.

SECTION 14- TRANSPORTATION

Note: Transportation information is for reference only. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

Ground	Not classified as a dangerous good under transport regulations
Air	Not classified as a dangerous good under transport regulations
Water	Not classified as a dangerous good under transport regulations

SECTION 15- REGULATORY

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

U.S. Federal Regulations:

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: See SDS Section 2 for GHS Hazard Classes applicable for this product.

SARA 313 Information: No components of the product are subject to reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by these sections of the Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) report levels established by these sections of the Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): None of the substances in this product are contained in levels that exceed the threshold (de minimis) reporting levels established by CERCLA

Clean Air Act (CAA) – This product does not have any components listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 or Class 2 Ozone depleters.

Clean Water Act (CWA) – This products does not have any components listed as a Hazardous Substance under the CWA. None of the chemicals in these products are listed as Priority Pollutants under the CWA. None of the chemicals listed in these products are listed as Toxic Pollutants under the CWA.

U.S. State Regulations:

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:  **WARNING:** Cancer- www.P65Warnings.ca.gov

Other U.S. State Inventories:

Diethylene glycol (CAS#111-46-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: MN, PA

2-Dimethylaminoethanol (CAS #108-01-0) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: PA, NJ

Dipropylene glycol (CAS#25265-71-8) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: PA, NJ

Triethylenediamine (CAS#280-57-9) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: NJ

15.2 Chemical safety assessment: For this product a chemical safety assessment was not carried out

SECTION 16- OTHER



NFPA: Health Hazard 3; Flammability 1; Reactivity 1

HMIS: Health Hazard 3; Flammability 1; Physical Hazard 1

Hazard Rating: 0=minimal, 1= slight, 2=moderate, 3=severe, 4= extreme

The information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof. The manufacturer makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will the manufacturer be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability or fitness for a particular use are made hereunder with respect to this information or the product to which information refers.

Information contained herein is deemed to be reliable, conservative and accurate. ICP Building Solutions Group reserves the right to change the design, specifications or any other features at any time and without notice, while otherwise maintaining regulatory compliance.

Revision- February 26, 2019 (Date of Preparation) Version 1.0