

SAFETY DATA SHEET

Product Name: Insitu® ES2 HH

Product Code: WRA-MC-015

Date issued: 8/24/2023

SECTION 1 : IDENTIFICATION

CONFIDENTIAL

Product Name Insitu ES2 HH
Product Code # WRA-MC-015
Identified Uses Protective Coating
Manufacturer: Modine Mfg Company
 1423 West Ormsby Ave.
 Louisville, KY 40210

Emergency Contact Number: Day: 703-527-3887 CHEMTREC Night: : 703-527-3887 CHEMTREC

SECTION 2 : HAZARDS IDENTIFICATION

GHS Classification

Skin Sensitization 1
Eye Damage/Irritation 2b

GHS Label Elements

Hazard Symbols



Signal Word Warning

Hazard Statements

H317 May cause an allergic skin reaction
H320 Causes eye irritation

Precautionary Statements

Prevention

P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapor/spray.
P264 Wash hands and/or face thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear PPE to protect skin/eyes.

Response

P363 Wash contaminated clothing and wash before reuse.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage/ Disposal

P501 Dispose of contents/container in accordance with federal, state, provincial, and local regulations.

Other Hazards

OSHA Regulatory Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 3 : COMPOSITION INFORMATION

Chemical Designation	CAS No.	% by Weight
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butoxy dipropanol	29911-28-2	3.40
propylene glycol	57-55-6	1.44
chromium	7440-47-3	0.86
2-butoxyethanol	111-76-2	0.62
nickel	7440-02-0	0.53
4-ethylmorpholine	100-74-3	0.27
carbon black	1333-86-4	0.15

SECTION 4 : FIRST AID MEASURES

General Advice	Show this safety data sheet to the doctor in attendance
Eyes:	Flush with plenty of cool water for at least 15 minutes, holding eyelids apart for thorough irrigation. If irritation persists, get immediate medical attention.
Skin:	Wash affected area thoroughly with soap and water. If skin irritation persists, get immediate medical attention.
Inhalation:	Move to fresh air. Restore breathing. If breathing is difficult, get immediate medical attention.
Ingestion:	Do not induce vomiting – seek immediate medical attention.
Notes to Physician	Treat symptomatically

SECTION 5 : FIRE FIGHTING MEASURES

Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific Hazards arising from the Chemical	Closed containers may rupture if exposed to fire or extreme heat.
Special protective Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
Methods for Clean-up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.
Other Information	None known

SECTION 7 : HANDLING & STORAGE

Handling:	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage:	Keep container tightly closed. Keep out of the reach of children.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

HMIS is a Health, Flammability and Reactivity rating: **1*10**

HMIS CODE: **4** – SEVERE HAZARD, **3** – SERIOUS HAZARD, **2** – MODERATE HAZARD, **1** – SLIGHT HAZARD, **0** – MINIMAL HAZARD,
* – Chronic Hazard

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual conditions of use.

Exposure Limits

Hazardous Components

OSHA PEL

ACGIH TLV

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butoxy dipropanol	NE	NE
propylene glycol	NE	NE
nickel	1.0 mg/m3 (I)	1.5 mg/m3 (I)
carbon black	3.5 mg/m3	3 mg/m3 (I)

NE = None established NA = Not available (C) = Ceiling limit (I) = Inhalable fraction (IFV) = Inhalable fraction and vapor STEL = Short term exposure limit (R) = Respirable fraction

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eyes/Face: Safety goggles or full face shield
Skin: Protective gloves and impervious clothing.
Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene Practices: Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	liquid		
Odor:	Little or no odor	Odor threshold:	Not determined
VOC lb/gal	0.49	VOC (g/L)	59.31
VOC (lb/gal) less exempt	1.07	VOC (g/L) less exempt	128.58
Relative Density (LB/GAL):	9.03	Specific Gravity (g/L):	1.08
Flash Point (F):	Greater than 201		
Flammability:	Not applicable	Upper/lower flammability limits:	Not applicable
Auto-ignition temperature:	Not applicable	Decomposition temperature:	Not determined
Evaporation rate :	Not available		
Vapor Pressure (mmHg) :	Not available	Vapor Density :	Not available
Initial Boiling Point (F):	212	Boiling Point Range (F):	Not available
Freezing Point (F):	32	Melting Point (F):	Not determined
pH	Not available	Viscosity	Not available
Solubility (ies):	Not determined		
Partition coefficient: n-octanol/water	Not determined		

SECTION 10 : STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Prevent from freezing
Materials to Avoid: No materials to be especially mentioned.
Hazardous Decomposition Products: None under normal use.
Possibility of Hazardous Reactions: None under normal conditions of use.

SECTION 11 : TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	LD50 Oral mg/kg (Rat)	LD50 Dermal mg/kg (Rabbit)	LC50 Inhalation mg/L (Rat, 4 hr.)
butoxy dipropanol	NA	NA	NA
propylene glycol	NA	NA	NA
nickel	9,000	NA	NA
carbon black	15,400	3,000	NA

Chronic Toxicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:

Component	IARC	NTP	OSHA
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nickel	2B – Possible Human Carcinogen	Probable Human Carcinogen	Listed
carbon black	2B – Possible Human Carcinogen	Not listed	Listed

Per IARC Summary of Data Reported, Subsection 5.1: No significant exposure to carbon black is thought to occur during the use of products in which carbon black is bound to other materials, such as rubber, printing ink or paint.

SECTION 12 : ECOLOGICAL INFORMATION

No ecological information available

SECTION 13 : DISPOSAL CONSIDERATION

Waste Disposal Method

Dispose of in accordance with federal, state, provincial, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

SECTION 14 : TRANSPORT INFORMATION

Contact the manufacturer for shipping information.

SECTION 15 : REGULATORY INFORMATION

US TSCA: Yes – All components are listed or exempt

Federal Regulations

SARA 311/312 hazardous categorization

Acute Health Hazard	YES
Chronic Health Hazard	YES
Fire Hazard	NO
Sudden Release of Pressure Hazard	NO
Reactive Hazard	NO

SARA 313

Section 313 OF Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). If listed below, this product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Designation	Cas No.	Weight %
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Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

Chemical Designation	Cas No.	Weight %
chromium	7440-47-3	0.86
nickel	7440-02-0	0.53

Any Target HAP listed in this section is not an OSHA Carcinogen unless listed as such in Section 11 under Chronic Toxicity.

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

SECTION 16 : OTHER INFORMATION

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VER Primary

The above Information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith. No warranty is implied with respect to the quality or the specification of the product and the user must satisfy himself that the product is entirely suitable for his purposes.