



IRMCO PRE-MIX ® 435-COB

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 6/1/2015 Revision date: 6/6/2025 Supersedes: 8/29/2018 Version: 2.1

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : IRMCO PRE-MIX ® 435-COB
Product code : 435-COB

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Industrial use

1.4. Supplier's details

IRMCO 2117 Greenleaf Street Evanston, IL, 60202 USA T 847-864-0255 - F 847-864-0012 SDS@irmco.com - www.IRMCO.com Contact: IRMCO Technical Compliance	US Distributor Fuchs Lubricants Co. 17050 Lathrop Avenue Harvey, IL 60426 (708) 333-8900 (800) 255-3924 24 hrs Emergency
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1.5. Emergency phone number

Emergency number : 847-864-0255
Monday-Friday 8:30 AM - 4:30 PM Central Standard Time (CST)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H302 - Harmful if swallowed H319 - Causes serious eye irritation
Precautionary statements (GHS US)	: P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves, protective clothing, eye protection. P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P330 - Rinse mouth.

P337+P313 - If eye irritation persists: Get medical advice.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
1,2,3-Benzotriazole ; 1H-Benzotriazole	CAS-No.: 95-14-7	30-50

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: May cause respiratory irritation. May cause damaging effects to central nervous system, metabolism and gastrointestinal tract.
Symptoms/effects after skin contact	: May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: Irritation of the gastric/intestinal mucosa. On ingestion, may affect the liver and kidneys.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Intense heat may cause container to burst.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

See Heading 8, Exposure controls and personal protection

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Avoid contact with skin and eyes. Prolonged or repeated contact with the skin may cause dermatitis. Ensure adequate ventilation. Avoid breathing mist, spray.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Do not freeze. The liquid may freeze if stored outside. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
Incompatible products : Do not add nitrites or other nitrosating agents. Strong bases. Strong acids. Oxidizing agent.

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SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA	0.5 mg/m ³ (total particulate mass) - General Recommended Exposure Limit for Metalworking Fluids (NIOSH, 1998).
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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station to maintain airborne concentrations below exposure limits identified in Section 8.1. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Safety glasses.

Hand protection:

Wear chemically resistant gloves

Eye protection:

Chemical goggles or safety glasses. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



Other information:

Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: clear.
Color	: Colorless to Amber
Odor	: characteristic
Odor threshold	: No data available
pH	: ≈ 7.03
Melting point	: No data available
Freezing point	: ≈ 32 °F
Boiling point	: ≈ 212 °F
Flash point	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available

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Relative vapor density at 20°C	: No data available
Relative density	: ≈ 1.09
Density	: ≈ 9.06 lb/gal
Solubility	: Soluble in water. Water: 100 %
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: ≈ 47.3 mm²/s @ 40°C
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content	: Not Applicable
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SECTION 10 Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. No polymerization. Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Under fire conditions, fumes may contain the original material in addition to unidentified toxic and/or irritating compounds.

SECTION 11 Toxicological information

Likely routes of exposure	: Skin and eye contact. Dermal. Inhalation.
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11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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ATE US (oral)	1428.571 mg/kg body weight
1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)	
LD50 oral rat	500 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 1000 mg/kg Source: Corporate Solution From Thomson Micromedex

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1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)	
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s))
LC50 Inhalation - Rat	1.43 mg/kg Source: Corporate Solution From Thomson Micromedex
ATE US (oral)	500 mg/kg body weight
ATE US (vapors)	1.945 mg/l/4h
ATE US (dust, mist)	1.945 mg/l/4h

Skin corrosion/irritation : Not classified
pH: ≈ 7.03

1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)	
pH	No data available in the literature

Serious eye damage/irritation : Causes serious eye irritation.
pH: ≈ 7.03

1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)	
pH	No data available in the literature

Respiratory or skin sensitization : Not classified (The product may be a skin sensitizer. It may also be a skin irritant and repeated contact may increase this effect.)

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Viscosity, kinematic	≈ 47.3 mm²/s @ 40°C
1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)	
Viscosity, kinematic	Not applicable (solid)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : May cause respiratory irritation. May cause damaging effects to central nervous system, metabolism and gastrointestinal tract.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes eye irritation.

Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa. On ingestion, may affect the liver and kidneys.

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

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1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

LC50 - Fish [1]	180 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	8.58 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia galeata, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	75 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
EC50 72h - Algae [2]	29 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

Persistence and degradability	Not readily biodegradable in water.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

Partition coefficient n-octanol/water (Log Pow)	1.34 (Experimental value, Equivalent or similar to OECD 117, 22.7 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

Surface tension	No data available in the literature
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No
Other information	: Avoid release to the environment.

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not re-use empty containers without proper cleaning or reconditioning.
Additional information	: Non hazardous waste per Resource Conservation and Recovery Act (RCRA).
Ecological waste information	: Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

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14.1. UN number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not regulated
Proper Shipping Name (TDG)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT)	: Not regulated
Packing group (TDG)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

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Not subject to reporting requirements of the United States SARA Section 313

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SARA Section 311/312 Hazard Classes

Delayed (chronic) health hazard
Immediate (acute) health hazard

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

All the constituents of this preparation are registered in the EINECS inventory or in the ELINCS list

1,2,3-Benzotriazole ; 1H-Benzotriazole (95-14-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
1,2,3-Benzotriazole ; 1H-Benzotriazole(95-14-7)	U.S. - Massachusetts - Right To Know List

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 6/6/2025

Issue date : 6/1/2015

Data sources : This material is classified as hazardous under OSHA regulations. This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Other information : IRMCO products are mixtures protected as trade secrets according to 29 CFR 1910.1200(i). As per GHS regulation, ingredients that contribute to the classification and exceed cut-off values are listed in section 3. For more information contact IRMCO.

Full text of hazard classes and H-statements

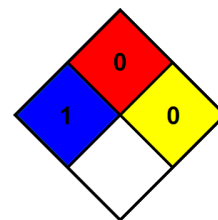
H302	Harmful if swallowed
H319	Causes serious eye irritation

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NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: B - Safety glasses, Gloves

Safety Data Sheet (SDS), USA

We believe all the information contained in this document to be reliable, though the accuracy or completeness is not guaranteed. IRMCO FLUIDS®, IRMCO GEL® and IRMCO EXTREME® products have been used extensively throughout the world in a variety of manufacturing and production applications. It is the responsibility of users of IRMCO products to meet the component surface quality, process compatibility or cleanliness requirements of their customers. Given the complexity and variety of users applications and processes, IRMCO cannot predict all user conditions and results. If surface quality, process compatibility or cleanliness is a user concern, then IRMCO recommends removing/cleaning off the IRMCO product film from the components before final assembly and distribution of such components. User assumes all risk and liabilities associated with the products used.