

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

1.1. Identification

Product form : Mixture
 Product name : IRMCO INTERNATIONAL COMPOUND #2 ®
 Product code : 970-000
 Other means of identification : IC #2, IRMCO 970-000, DD P/N 07Y00002, 5198563

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

Use of the substance/mixture : Petroleum-based metalworking lubricant/anti-seize compound.
 Use of the substance/mixture : Industrial use

1.3. Details of the supplier of the safety data sheet

IRMCO
 2117 Greenleaf Street
 Evanston, IL 60202 - USA
 T 847-864-0255 - F 847-864-0012
SDS@irmco.com - www.IRMCO.com

1.4. Emergency telephone number

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

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315 - Causes skin irritation
 Eye Irrit. 2B H320 - Causes eye irritation

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : H315 - Causes skin irritation
 H320 - Causes eye irritation
 Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling
 P280 - Wear eye protection, protective gloves
 P302+P352 - If on skin: Wash with plenty of 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
 P332+P313 - If skin irritation occurs: Get medical advice/attention
 P337+P313 - If eye irritation persists: Get medical advice/attention
 P362+P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%
potassium oleate	(CAS No) 143-18-0	5 - 10

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of 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 victim 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 : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Obtain medical attention if pain, blinking or redness persist.
- 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 and effects, both acute and delayed

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

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- 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

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

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

6.2. Environmental precautions

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

6.3. Methods and material 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.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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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 contacts 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 any 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 : Oxidizing agent. Strong bases. Strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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NIOSH	NIOSH REL (TWA) (mg/m ³)	Not Applicable
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8.2. Exposure 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.
- 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.
- Environmental exposure controls : Avoid release to the environment.
- 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. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Paste.
- Color : light brown
- Odor : characteristic
- Odor threshold : No data available
- pH : 8 - 9 1% solution
- Melting point : No data available
- Freezing point : No data available
- Boiling point : > 347 °F
- Flash point : > 200 °F
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : No data available
- Explosion limits : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Vapor pressure : No data available
- Relative density : 1.26

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Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 10.5 lb/gal
Solubility	: Poorly soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 750 cP @ 200 °F
Viscosity, dynamic	: No data available

9.2. Other information

VOC content : Not Applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions. No polymerization.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; Inhalation

Acute toxicity : Not classified

potassium oleate (143-18-0)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)

Skin corrosion/irritation : Causes skin irritation.
pH: 8 - 9 1% solution

Serious eye damage/irritation : Causes eye irritation.
pH: 8 - 9 1% solution

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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

Symptoms/injuries after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/injuries after eye contact : Causes eye irritation.

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Symptoms/injuries after ingestion : Irritation of the gastric/intestinal mucosa. nausea, vomiting.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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potassium oleate (143-18-0)

Persistence and degradability	Biodegradability in water: no data available.
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12.3. Bioaccumulative potential

IRMCO INTERNATIONAL COMPOUND #2 ®

Bioaccumulative potential	Not established.
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potassium oleate (143-18-0)

Bioaccumulative potential	Not bioaccumulative.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not re-use empty containers.

Additional information : Non hazardous waste per Resource Conservation and Recovery Act (RCRA).

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

IRMCO INTERNATIONAL COMPOUND #2 ®

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

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

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All components of this product are listed, or excluded from listing, 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

All components of this product are listed, or excluded from listing, on the AICS (Australian Inventory of Chemical Substances)

15.3. US State regulations

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

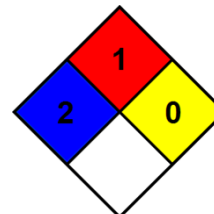
SECTION 16: Other information

Revision date	: 07/14/2015
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 H-phrases:

Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H315	Causes skin irritation
H320	Causes eye irritation

NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 1 - Must be preheated before ignition can occur.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
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 B - Safety glasses, Gloves

IRMCO SDS US

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.