MATERIAL SAFETY DATA SHEET

ELAN CHEMICAL COMPANY, INC

Date Printed: October 23, 2007 Date Updated: August 1, 2005

1. Product /Company Identification

Product Name: AMYL FORMATE (ISO)

Manufacturer: Elan Chemical Co. Inc.

268 Doremus Ave. Newark, NJ 07105

U.S.A.

Phone: (973)344-8014 Fax: (973)344-5880

Emergency: 800-424-9300 (Chemtrec)

2. Composition/Information on Ingredient

Synonyms: 1-Butanol, Iso amyl formate, isopentyl formate

CAS Number: 110-45-2 FEMA: 2069

Molecular Formula: $C_6H_{12}O_2$ Molecular Weight: 116.16

3. Hazards Identification

Emergency Overview

Harmful by inhalation and if swallowed.

Irritant. Irritating to eyes, respiratory system and skin.

Flammable.

	HMIS	<u>NFPA</u>
Health	1	1
Flammability	2	2
Reactivity	0	0

TT3 /TC

4. First Aid Measures

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious.

Call a physician.

Inhalation Exposure: If inhaled, move to fresh air. If not breathing give artificial respiration. IF

breathing is difficult, give oxygen.

Skin Exposure: In case of contact, immediately wash skin with soap and copious amounts

of water.

Eye Exposure: In case of contact, immediately flush eyes with copious amounts of water

for at least 15 minutes

5. Fire Fighting Measures

Flammable Hazards: YES

Vapor may travel considerable distance to source of

ignition and flash back.

Flash Point: 26 °C (78.8 °F)

Extinguishing Material: Water Spray

Carbon Dioxide

Dry Chemical Powder

Foam

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to

prevent contact with skin and eyes.

Specific Hazard: Flammable liquid. Vapor may travel significant distance to source

of ignition and flash back. Emits toxic under fire conditions.

6. Accidental Release Measures

Procedure to be followed in case of leak or spill:

Evacuate Area. Shut off sources of ignition.

Personal Protection: Wear respirator, chemical safety goggles, rubber boots, and heavy rubber

gloves.

Clean up Methods: Cover with dry lime, sand or soda ash, pick up, keep in a closed container,

and hold for waste disposal. Ventilate area and wash spill site after clean

up is complete.

7. Handling and Storage Procedures

Handling: Do not breathe vapor. Avoid contact with eyes, skin and clothing. Avoid

prolonged or repeated exposure.

Storage: Keep container tightly closed. Keep away from heat, sparks, and open

flame. Store in a cool, dry place.

8. Exposure Controls/ PPE

Respiratory: At a minimum, workers should wear a NIOSH-approved full-face air-

purifying respirator.

Eyes: Chemical Safety goggles
Skin: Chemical resistant gloves.
Ventilation: Mechanical exhaust required.

General Hygiene Measures: Wash contaminated clothing before reuse. Wash thoroughly after

handling.

9. Physical/Chemical Properties

Appearance: Very faintly yellow liquid Odor: fruity, plum-like odor.

Boiling Point: 121-123 ° C

Melting Point: N/ A

Flash Point: 26°C (78.8° F)

Vapor Density: N/A Specific Gravity: 0.882 Refractive Index: 1.397

10. Stability and Reactivity

Stability: Stable

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide.

11. Toxicological Information

Exposure Effects:

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Material is irritating to mucous

membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. Ecological Information

No Data Available.

13. Disposal Considerations

Disposal: This combustible material may be burned in a chemical incinerator

equipped with an afterburner and scrubber. Dispose of in accordance with

local, state, and federal regulations.

14. Transportation Information

Ground (DOT) & Air (IATA)

Proper shipping Name: Amyl Formates

UN#: 1109 Hazard Class: 3 Packing group: III

15. Regulatory Information

EU Classifications: Symbol of Danger: Xi

Indication of Danger: Irritant

R: 10 36/37

Risk Statements: Flammable. Irritating to eyes, respiratory system and skin

S: 24

Safety Statements: Avoid contact with skin.

US Classifications:

Indication of Danger: Flammable, Irritant.

Risk Statements: Irritating to eyes, respiratory system and skin

Safety Statements: Keep away from sources of ignition- no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective

clothing.

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

Canada:

WHMIS Classification: This product has been classified in accordance with the hazardous criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes NDSL: No

16. Additional Information

This material safety data sheet is intended to meet the specific requirements of 29 CFR 1910.1200 and should be used accordingly. While the information has been obtained from sources believed to be accurate and reliable, no warranty, expressed or implied, can be made with regard to its completeness, correctness or accuracy. Any users or handlers of this product who are not under the direct control of Elan Chemical Co., Inc. are responsible for evaluating this information in light of their particular situation and are responsible for all losses, damages or expenses that result while this material is under their control. It is also the responsibility of the users and handlers to observe any and all laws and regulations (Federal, State and Local) concerning the transportation, use, handling, storage and disposal of this product.