

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME: Alumalloy White Powdered Flux 83-1243

MANUFACTURED FOR: Kimball Midwest
4800 Roberts Road
Columbus, OH 43228
Phone: 800-233-1294

EMERGENCY TELEPHONE NUMBER: Chemtrec 800-424-9300

2. HAZARD IDENTIFICATION:

Emergency Overview: This product is normally not considered hazardous as shipped. Avoid eye contact or inhalation of dust from the product. When this product is used in a welding process, the most important hazards are welding fumes and heat.

Classification of the Substance/Mixture

CLP/GHS Classification (1272/2008):

Acute Toxicity – Oral, Category 4
Skin Corrosion, Category 1B
Specific Target Organ Toxicity (Single Exposure), Category 3
Hazardous to the Environment – Long-Term, Category 2

EU Classification (67/548/EEC):

Harmful (Xn), Irritant (Xi), Dangerous for the Environment (N), R22, R36/37/38, R51/53

Hazardous Classification per 29CFR 1910.1200 (Rev. July 1, 2012):

Acute Toxicity – Oral, Category 4
Skin Corrosion, Category 1B
Specific Target Organ Toxicity (Single Exposure), Category 3
Hazardous to the Environment – Long-Term, Category 2

Labelling:



Symbols:

Signal Word: Danger

Hazard-determining components of labelling:

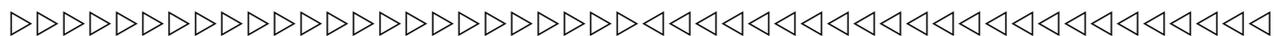
Lithium Chloride
Zinc Chloride
Sodium Fluoride

Hazard Statements:

H302 – Harmful if swallowed.
H314 – Causes severe skin burns and eye damage.
H335 – May cause respiratory irritation.
H411 – Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 – Wash skin and hair thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.



5. FIRE-FIGHTING MEASURES:

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media: Not applicable

Specific Hazards Arising From Chemical: Chloride and fluoride fumes with high heat. Hydrogen Chloride Gas, Zinc/zinc oxides, Potassium Oxides, Sodium Oxides

Protective Equipment: Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions: Refer to section 8.

Environment Precautions: Refer to section 13.

Cleaning Measures: First neutralize with soda ash or sodium bicarbonate, dilute with water and dispose of in accordance with EPA regulations.

7. HANDLING AND STORAGE:

Precautions for Safe Handling: Handle with care to avoid stings or cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Retain all warning and identity labels.

Conditions for Safe Storage: Store in plastic containers in cool area, away from heat. Use safe precautionary practices to avoid spills and exposure to skin and fumes.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

Engineering Controls: The usual precautionary measures for handling chemicals should be followed. Keep away from food, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before break and at the end of the work. Store all protective clothing separately. Maintain an ergonomically appropriate working environment. Wear protective equipment. Keep unprotected persons away. Avoid causing dust.

Exposure limits: Use industrial hygiene equipment to ensure that exposure does not exceed applicable national exposure limits. The limits defined under section 3 can be used as guidance. Unless noted, all values are for 8 hour time weighted average.

Biological limits: No available data

Personal protection:

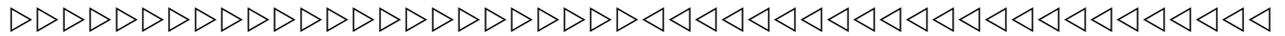
Respiratory protection: Use an air purifying dust respirator when welding or brazing in a confined space, or when local exhaust or ventilation is not sufficient to keep exposure values within safe limits.

Hands protection: Wear appropriate gloves to prevent skin contact.

EN 12477: Protection gloves for welders

Requirements (EN Levels)	Type A	Type B
Abrasion (Cycles)	2 (500)	1 (100)
Cut (Factor)	1 (1.2)	1 (1.2)
Tear (Newton)	2 (25)	1 (10)
Puncture (Newton)	2 (60)	1 (20)
Burning Behaviour	3	2
Contact Heat	1	1
Convective Heat	2	-
Small Splashes	3	2
Dexterity	1 (11)	4 (6.5)

Type B gloves are recommended when high dexterity is required as for TIG welding, while type A gloves are recommended for other welding processes. The contact temp (°C) is 100 and the threshold time (seconds) >15.



Eyes protection: Welder's helmet or face shield with colour absorbing lenses. Shield and filter to provide protection from harmful UV radiation, infra red and molten metal approved to standard EN379. Filter shade to be a minimum of shade 9.

Skin protection: Heat-resistant protective clothing. Wear safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry. Clothing should be selected to suit the level, duration and purpose of the welding activity.

Class 1	
Impact of Spatter	15 Drops
Heat Transfer (radiation)	RHTI 24 ≥ 7 seconds
Process	<p>Manual welding with light formation of spatter and drops</p> <ul style="list-style-type: none"> • Gas Welding • TIG Welding • MIG Welding • Micro plasma welding • Brazing • Spot Welding • MMA Welding (with rutile-covered electrode)
Environmental Conditions	<p>Operation of machines</p> <ul style="list-style-type: none"> • Oxygen cutting machines • Plasma cutting machines • Resistance welding machines • Machines for thermal spraying • Bench welding

Class 2	
Impact of Spatter	25 Drops
Heat Transfer (radiation)	RHTI 24 ≥ 16 seconds
Process	<p>Manual welding with heavy formation of spatter and drops</p> <ul style="list-style-type: none"> • MMA welding (with basic or cellulose-covered electrodes) • MAG welding (with CO2 or mixed gases) • MIG Welding (with high current) • Self shielded flux core arc welding • Plasma cutting • Gouging • Oxygen cutting • Thermal spraying
Environmental Conditions	<p>Operation of machines</p> <ul style="list-style-type: none"> • In confined spaces • At overhead welding/cutting or in comparable constrained positions

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Powder

Color: White

Odour: Odourless

Odour Threshold: Not Available

pH Value: Not Available

Specific Gravity: Not Available

Melting Point/Melting Range: 500° C

Freezing Point: Not Available

Boiling Point/Boiling Range (° F @ 760 mmHg): N/A

Flash point: Not Available

