

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product Name: REDUX™ 210 Universal Bonding Agent
Synonym: N.A.
Product Code: SR90715
Revision Date: Oct 14, 2021 **Date Printed:** Jun 16, 2022
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Hawk Research Laboratories, LLC
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Product/Recommended Uses: Professional use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Eye Irritation - Category 2A

Flammable Liquids - Category 2

These classifications were evaluated according to United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms



Signal Word

Danger

Hazardous Statements - Health

H319 - Causes serious eye irritation

Hazardous Statements - Physical

H225 - Highly flammable liquid and vapor

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical/ventilating/lighting equipment.
- P242 - Use only non-sparking tools.
- P243 - Take action to prevent static discharges.

Precautionary Statements - Response

- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P370 + P378 - In case of fire: Use carbon-di oxide, alcohol foam, water spray or dry chemical to extinguish.

Precautionary Statements - Storage

- P403 + P235 - Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

- P501 - Dispose of contents/container in accordance with local/national/international regulations.

Physical Hazards Not Otherwise Classified (PHNOC)

None.

Health Hazards Not Otherwise Classified (HHNOC)

None.

Acute toxicity of less than one percent of the mixture is unknown

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000067-64-1	ACETONE	10% - 30%

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so. Get medical advice/attention if you feel unwell or are concerned.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Take off immediately contaminated clothing. Store contaminated clothing under water and wash before re-use or discard.

Ingestion

Rinse mouth. If you feel unwell/If concerned: Call a POISON CENTER/doctor.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment is required. No action shall be taken involving any personal risk or without suitable training.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fires involving this product may release oxides of carbon and nitrogen, reactive hydrocarbons, and irritating vapors. Fire will produce irritating gases. Most vapors are heavier than air. Vapors may form explosive mixtures with air. Vapors will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back. Many liquids are lighter than water. Containers may explode in fire. May form an ignitable vapor/air mixture in closed tanks or containers.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. The material, if discarded or spill, may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14. Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Ventilate area after clean-up is complete. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid contact with skin, eye or clothing. Avoid breathing vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored. All containers must be properly labelled. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Store in approved containers and protect against physical damage. Take precautionary measures against electrostatic discharge. To avoid fire or explosion, dissipate static electricity during transfer by ground and bonding containers and equipment before transferring material. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatri® (KCL 730 / Aldrich Z677442, Size M) The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US). If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	OSHA TWA (mg/m3)
ACETONE		250		500	A4	URT & eye irr; CNS impair	A4; BEI	2400

Chemical Name	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
ACETONE	1000					1	590	250

Chemical Name	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen	CAN_ONtmg	CAN_ONtppm	CAN_ONsmg	CAN_ONsppm
ACETONE							

(C) - Ceiling limit, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, impair - Impairment, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.22 lb/gal
Specific Gravity	0.98
% VOC	0.00%
Density VOC	0.00 lb/gal
% HAPS	0.00%
Density HAPS	0.00 lb/gal
% VHAPS	0.00%

Density VHAPS	0.00 lb/gal
% Solids By Weight	10.30%

Appearance	N/A
Odor Threshold	N/A
Odor Description	N/A
pH	N/A
Water Solubility	N/A
Flammability	
Flash Point Symbol	N/A
Flash Point	16.70 °F
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
High Boiling Point	N/A
Auto Ignition Temp	N/A
Decomposition Pt	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid all possible sources of ignition, heat, sparks, flame, build up of static electricity and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Based on available data, the classification criteria are not met.

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

0000067-64-1 ACETONE

Can irritate the nose and throat causing coughing and wheezing.

Serious Eye Damage/Irritation

Causes serious eye irritation

0000067-64-1 ACETONE

Exposure can irritate the eyes.

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

0000067-64-1 ACETONE

Can cause skin irritation.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

0000067-64-1 ACETONE

May affect the kidneys and liver.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000067-64-1 ACETONE

Substance can be absorbed into the body by inhalation.

Potential Health Effects - Miscellaneous

0000067-64-1 ACETONE

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

0000067-64-1 ACETONE

LC50 (male rat): 30000 ppm (4-hour exposure); cited as 71000 mg/m³ (4-hour exposure) (29)

LC50 (male mouse): 18600 ppm (4-hour exposure); cited as 44000 mg/m³ (4-hour exposure) (29)

LD50 (oral, female rat): 5800 mg/kg (24)

LD50 (oral, mature rat): 6700 mg/kg (cited as 8.5 mL/kg) (31)

LD50 (oral, newborn rat): 1750 mg/kg (cited as 2.2 mL/kg) (31)

LD50 (oral, mouse): 3000 mg/kg (32,unconfirmed)

LD50 (dermal, rabbit): Greater than 16000 mg/kg cited as 20 mL/kg (30)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Based on available data, the classification criteria are not met.

Persistence and Degradability

0000067-64-1 ACETONE

91% readily biodegradable, Method: OECD Test Guideline 301B

Readily biodegradable.

Bioaccumulative Potential

No data available.

Mobility in Soil

000067-64-1 ACETONE

The substance is not PBT / vPvB.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268, and 270. Chemical additions, processing, and otherwise altering this material, may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information	Canada TDG Information
UN number:	UN1263	UN1263	UN1263	UN1263
Proper shipping name:	Paint related material	Paint related material	Paint related material	Paint related material
Hazard class:				3
Hazard class:	3	3	3	
Packaging group:	II	II	II	II
Hazardous substance (RQ):	No Data Available			
Marine Pollutant:	No Data Available	No Data Available		No Data Available
Note / Special Provision:	No Data Available	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available			

SECTION 15) REGULATORY INFORMATION

Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	Regulation List
000067-64-1	ACETONE	DSL,CERCLA,SARA312,TSCA

The information in this Section does not list non-hazardous components that might have relevant DSL, SARA312, TSCA regulatory values, if they are present at less than 100%. Please contact manufacturer for more information.

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

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