

WELDING CHEMICALS INC. SAFETY DATA SHEET

Section 1: Identification

MSDS Name: SDS-NUCCAR-A-ENG

Product Identifier: NUCCAR-A CLEANER AND REMOVER - NUCLEAR

Other Means of Identification: None.

Recommended Use: Class 2, Nonhalogenated, Solvent Remover furnished in a ready-to-use condition that does not require mixing or stirring.

Restrictions on Use: No information available.

Item Numbers: NUCCAR-A

Bar Codes: 8 10048 30027 3

Chemical Name/Synonyms: Dye Penetrant Inspection

Supplier Identification and Address:

Welding Chemicals Inc.,

2236 Liberty Drive

Niagara Falls, NY 14304

(716) 402-6906

570 Industrial Drive

Fort Erie, Ontario L2A 5M4

(905) 963-3339

Email: qc@weldingchemicalsinc.com

Web: www.weldingchemicalsinc.com

In emergency call 911.

Emergency Telephone Number (M-T 8:30 to 4:30 EST): 716-402-6906

For CHEMTREC assistance, call: 800-424-9300

For Canada only: 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone.

Section 2: Hazard(s) Identification

GHS Classification:

Flammable Aerosol: Category 1

Aspiration Hazard: Category 1

Hazardous to the aquatic environment: Acute Hazard Category 2

Hazardous to the aquatic environment: Chronic Hazard Category 2

GHS Label Elements:



Signal Word(s): Danger

Hazard Statement(s):

H222 Extremely flammable aerosol.

H304 May be fatal if swallowed and enters airways.

H401 Toxic to aquatic life.

H402 Harmful to aquatic life.

H411 Toxic to aquatic life with lasting effects.

Precautionary Statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
 P264 Wash hands, forearms and face thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a poison center or doctor.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF EXPOSED OR CONCERNED: Get medical advice/attention.
 P312 Call a poison center or doctor if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P321 Specific treatment (see supplemental first aid instruction on this label).
 P331 Do not induce vomiting.
 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.
 P391 Collect spillage.

Description of Other Hazards: None.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F

Disposal:

P501 Dispose of contents / container to an approved waste disposal plant.

Section 3: Composition/ Information on Ingredients

Chemical Name	CAS No.	% Conc. WT
Hydrotreating Light Process Distillate	68410-97-9	>= 60
Propane	74-98-6	5 - 10
N-Butane	106-97-8	5 - 10
N-Heptane	142-82-5	1 - 5
Octane	111-65-9	1 - 5
Isobutane	75-28-5	1 - 5

Section 4: First-Aid Measures

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.

INGESTION: Unlikely due to being in aerosol form. Should actual ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

EYE CONTACT: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment.

SKIN CONTACT: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.

Most Important Symptoms and Effects, Acute and Delayed: Eye irritation, dermatitis, confusion, skin irritation, headache, dizziness, narcosis, drowsiness, mucous membrane.

Immediate Medical Attention and Special Treatment: Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: For warehouse and storage conditions, use NFPA Class B extinguishers (CO₂, dry chemical or universal aqueous film forming foam).

Unsuitable Extinguishing Media: Water jet.

Specific Hazards Arising from the Product / Chemical: Decomposition products may include: oxides of carbon, smoke, vapors. See also Section 10. CONTENTS EXTREMELY FLAMABLE UNDER PRESSURE. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapors heavier than air may spread along the ground and travel to an ignition source.

Explosion Data

Sensitivity to Mechanical Impact: N/Av

Sensitivity to Static Discharge: N/Av

Special Protective Equipment and Precautions for Firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to cool fire exposed aerosol containers for containers can rupture violently from heat developed pressure. Combustion generates toxic fumes. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Prevent spilled material from entering sewers, storm drains, and natural waterways.

Methods and Materials for Containment: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable containers. Keep all sources of ignition away from spill/release.

Measures for Cleaning Up: Clean up spills immediately, observing precautions in Section 8. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

Special Instructions: In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal considerations.

Section 7: Handling and Storage

Precautions for Safe Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Conditions for Safe Storage, Including Incompatibilities

Storage: Store in area below 120°F (49°C). Do not incinerate (burn) containers. Assure can is in a secure place to prevent knocking over and accidental rupture. Always replace over cap when not in use. For store of pallet quantities, compliance with ANSI/NFPA 30B is recommended.

Incompatibilities: Strong acids. Strong bases. Strong oxidizing agents.

NFPA 30B Classification: Product is classified as a Level 3 Aerosol per NFPA 30B.

Section 8: Exposure Controls/Personal Protection

Control Parameters:

N-Butane (106-97-8)		
ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	1000 ppm
OSHA	OSHA PEL (TWA) (ppm)	800 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900

NIOSH	NIOSH REL (TWA) [ppm]	800 ppm
California	California PEL (TWA) (mg/m ³)	1900 mg/m ³
California	California PEL (TWA) (ppm)	800 ppm

Propane (74-98-6)

OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
NIOSH	US IDLH (ppm)	2100 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1800 mg/m ³
NIOSH	NIOSH REL (TWA) [ppm]	1000 ppm
California	California PEL (TWA) (mg/m ³)	1800 mg/m ³
California	California PEL (TWA) (ppm)	1000 ppm

Isobutane (75-28-5)

ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
NIOSH	NIOSH REL (TWA) [ppm]	800 ppm

N-Heptane (142-82-5)

ACGIH	ACGIH TWA (mg/m ³)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	2000 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	500 ppm
NIOSH	US IDLH (ppm)	750 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	350 mg/m ³
NIOSH	NIOSH REL (TWA) [ppm]	85 ppm
NIOSH	NIOSH REL (ceiling) (mg/m ³)	1800 mg/m ³
NIOSH	NIOSH REL (Ceiling) [ppm]	440 ppm
California	California PEL (TWA) (mg/m ³)	1600 mg/m ³
California	California PEL (TWA) (ppm)	400 ppm
California	California PEL (STEL) (mg/m ³)	2000 mg/m ³
California	California PEL (STEL) (ppm)	500 ppm

Octane (111-65-9)

ACGIH	ACGIH TWA (mg/m ³)	300 ppm
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Appropriate Engineering Controls: Good ventilation using local exhaust should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Individual Protection Measures



Eye / Face protection: If required, wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA'S eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

Skin and Body Protection: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex® gloves or other clothing impervious to the ingredient listed in Section 2.

Respiratory Protection: Respiratory protection program meeting OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed when workplace conditions warrant respirator use.

Hygiene Measures: Standard precautionary measures for safe chemical handling. PVC, Neoprene or Nitrile rubber gloves. Do not eat, drink, or smoke when using this product.

Section 9: Physical and Chemical Properties

Physical state: Liquid / Gas

Color: Clear

Odor: Solvent

Odor threshold: N/Av

pH: N/Av

Melting Point: > -73 °C

Freezing Point: N/Av

Initial Boiling Point/Boiling Range: >56 °C

Flash Point: >14 °C liquid / >-104 °C propellant

Evaporation Rate (BA=1): N/Av

Flammability (solid, gas): Extremely flammable aerosol.

Upper/Lower Flammability or Explosive Limits: LEL 0.60 UEL 12.00 vol %

Vapor Pressure (mm HG): N/Av

Vapor Density(AIR=1): N/Av

Relative Density (@ 21°C): N/Av

Solubility in/Miscibility with water (% by weight): N/Av

Partition Coefficient: n-Octanol/Water: N/Av

Auto-ignition Temperature: >240 °C

Decomposition Temperature: N/Av

Viscosity: N/Av

Explosive Properties: None known.

Oxidizing Properties: None known.

Section 10: Stability and Reactivity

Reactivity: No dangerous reactions known.

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions: None under normal processing.

Conditions to Avoid: Incompatible materials, excess heat, sources of ignition.

Incompatible Materials: Oxidizing agents, strong acids, halogen compounds, aluminum chloride.

Hazardous Decomposition Products: Oxides of carbon, aldehydes, formaldehyde, unstable peroxides.

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

N-Butane (CAS: 106-97-8 / EC: 203-448-7)

LC50 Inhalation (Rat)	658 mg/l/4h (ChemInfo)
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LC50 Inhalation (Rat)	276000 ppm/4h (ChemInfo)
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Propane (CAS: 74-98-6 / EC: 200-827-9)

LC50 Inhalation (Rat)	658 mg/l/4h (Lit.)
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Isobutane (CAS: 75-28-5 / EC: 200-857-2)

LC50 Inhalation (Rat)	368000 ppm/4h (ChemInfo)
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N-Heptane (CAS: 142-82-5 / EC: 205-563-8)	
LD50 Oral (Rat)	15000 mg/kg (Cheminfo)
LD50 Dermal (Rabbit)	> 3160 mg/kg (Lit.)
LC50 Inhalation (Rat)	25132 mg/l/4h 103 gm/m3 (RTECS)

Hydrotreating Light Process Distillate (CAS: 68410-97-9 / EC: 270-093-2)	
LD50 Oral (Rat)	5170 mg/kg (RTECS)
LC50 Inhalation (Rat)	> 12408 ppm/4h (RTECS)

Octane (CAS: 111-65-9 / EC: 203-892-1)	
LD50 Oral (Rat)	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Read-across, Oral (one dose))
LD50 Dermal (Rabbit)	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 2 / female, Read-across, Dermal)
LC50 Inhalation (Rat)	> 24.88 mg/l (Equivalent or similar to OECD 403, 4 h, Rat Experimental value, Inhalation (vapors))

Likely Routes of Exposure: Inhalation [Y] Skin Contact [Y] Skin Absorption [Y] Eye Contact [Y] Ingestion [N]

Inhalation: N/Av

Ingestion: N/Av

Skin Corrosion / Irritation: Not classified.

Serious Eye Damage / Eye Irritation: Not classified.

Respiratory or Skin Sensitization: N/Av

Acute Toxicity Estimates: N/Av

STOT – Single Exposure: Not classified.

Aspiration Toxicity: Not classified.

STOT – Repeated Exposure: Not classified.

Carcinogenicity: None of the ingredients in the product are listed with OSHA, IARC, NTP or ACGIH as being a suspected or known carcinogen in a concentration greater than 0.1% by weight.

Reproductive Toxicity: N/Av

Mutagenic Effects: Not classified.

Sensitization: No effects known.

Target Organs: N/Av

Section 12: Ecological Information

n-Butane (106-97-8)	
Persistence and Degradability	Readily biodegradable in water.
Bioconcentration Factor	33.52
Log Pow	2.89
Bioaccumulation Potential	Low potential for bioaccumulation (Log Kow < 4).
Log Koc	1.641

Propane (CAS: 74-98-6 / EC: 200-827-9)	
LC50 Inhalation (Rat)	658 mg/l/4h (Lit.)

Isobutane (75-28-5)	
Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. Not applicable (gas).
BCF Fish	26.62
Log Pow	2.76
Bioaccumulation Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	1.545

n-Heptane (142-82-5)	
LC50 Fish	375 mg/l 96h, Mozambique Tilapia (Lit.)
EC50 Daphnia	0.2 mg/l 48h, Leach (Lit.)
Persistence and Degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil.
Biochemical Oxygen Demand	1.92 g O ₂ /g substance
Chemical Oxygen Demand	0.06 g O ₂ /g substance
Theoretical Oxygen Demand	3.52 g O ₂ /g substance
Log Pow	4.66 (Experimental value)
Bioaccumulation Potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

Octane (111-65-9)	
LC50 Fish	2.587 mg/l (96 h, Oncorhynchus mykiss, Fresh water, QSAR)
EC50 Daphnia	0.38 mg/l (Other, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
Persistence and Degradability	Biodegradable in the soil. Readily biodegradable in water.
Theoretical Oxygen Demand	3.5 g O ₂ /g substance
BCF Fish	776 - 5129 (Pisces, Literature study)
BCF Other Aquatic Organisms	198.7 (105 minutes, Mytilus edulis, Static system, Salt water, Experimental value, Fresh weight)
Log Pow	5.18 (Experimental value)
Bioaccumulation Potential	High potential for bioaccumulation (BCF > 5000).
Log Koc	2.64 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Section 13: Disposal Considerations

Disposal Methods: An aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6) and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations. Collected rinsate materials from spills may be hazardous wastes, and therefore subject to local, state and federal regulations. Chemical waste generators must determine whether discarded materials are classified as hazardous waste.

Contaminated Packaging: Dispose of in accordance with all applicable federal, state, and local regulations.

Section 14: Transport Information

DOT Regulations:

PROPER SHIPPING NAME: Aerosols, Limited Quantity

HAZARD CLASS NUMBER and DESCRIPTION: 2.1

UN IDENTIFICATION NUMBER: UN 1950

PACKING GROUP: None

DOT LABEL(S) REQUIRED: None

Section 15: Regulatory Information

TSCA (Toxic Substances Control Act):

This product or mixture is not known to contain a chemical or chemicals subject to the export notification requirements of section 12(b) of the Toxic Substances Control Act (TSCA) and 40 CFR Part 707, subpart D

SARA Section 313:

This product or mixture is not known to 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.

CERCLA Reportable Quantity:

This product or mixture is not known to contain a chemical or chemicals subject to the release reporting requirements of section 102 of the comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

California Prop 65:

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

State Right-to-Know Lists :

n-Butane (106-97-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
Propane (74-98-6)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isobutane (75-28-5)	U.S. - New Jersey - Right to Know Hazardous Substance List

Section 16: Other Information**Abbreviations:**

N/Av Not Available

N/Ap Not Applicable

N/D Not Determined

MSHA (Mine Safety and Health Administration)

NIOSH (National Institute for Occupational Safety and Health)

NFPA (National Fire Protection Association)

STOT (Specific Target Organ Toxicity)

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicity Program)

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act

SARA (The Superfund Amendments and Reauthorization Act)

WHMIS (Worker Hazardous Materials Information System)

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