



Material Safety Data Sheet

MSDS: CQS-11GAL

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Company:

IDQ Operating, Inc.
2901 W Kingsley Rd.
Garland, Texas 75041
Phone No.: 1-888-396-0422
CHEMTREC Phone No.: 1-800-424-9300

HAZARD RATING

Health	2	0 = Insignificant
Fire:	2	1 = Slight
Reactivity:	0	2 = Moderate
Special:	--	3 = High
		4 = Extreme

Product Description: A/C Solvent Flush & Clean (standard package contains 1 gallon)

Part Number: CQS-11GAL

MSDS Date: 6-15-2010

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

No.	Description	CAS Reg. No.	Units	Amount
1	Aliphatic Petroleum Distillates	8052-41-3	% vol	70-80
2	d-Limonene	5989-27-5	% vol	20-30

SECTION 3: HAZARDS INFORMATION

EMERGENCY OVERVIEW:

Appearance: Liquid, water-white

DANGER! HARMFUL OR FATAL IF SWALLOWED. CALL PHYSICIAN IMMEDIATELY. FLAMMABLE LIQUID AND VAPOR. MAY AFFECT CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS. MAY CAUSE ALLERGIC REACTION.

Portals of Entry: Ingestion, inhalation, eye contact, and skin contact.

Ingestion: May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: Effects are typically those of most hydrocarbons, dizziness and euphoria leading to unconsciousness in severe cases due to high concentrations. Breathing of vapor and mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8).

Eye Contact: Can cause eye irritation. Potential symptoms include stinging, tearing, redness and swelling of eyes.

Skin Contact: Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of the skin. May cause allergic skin reaction.

Delayed Effects: Prolonged and repeated overexposure can cause irritation of the respiratory tract and mucous membranes, and kidney effects.

HEALTH EFFECTS FROM OVEREXPOSURE:

Primary Routes of Exposure: Skin and inhalation. Chronic exposure may lead to central nervous system complications and dermatitis.

SECTION 4: FIRST AID MEASURES

Inhalation: Inhalation under normal exposure should not cause problems; however if inhalation has resulted in symptoms, move patient to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

Eye Contact: Immediately flush eyes gently with a large amount of water for at least 15 minutes. If symptoms exist and/or persist, get prompt medical attention.

Skin Contact: Wash affected skin areas thoroughly with soap and water. Remove contaminated clothing. If skin irritation persists, see a physician.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

SECTION 5: FIRE FIGHTING MEASURES

Unusual Hazards: Toxic fumes are generated when material is exposed to fire and fire conditions.

Extinguishing Agents: Use the following extinguishing media when fighting fires involving this material: polar solvent foam, carbon dioxide, dry chemical, and water spray.

Personal Protective Equipment: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Special Precautions: If product is heated above its flashpoint it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near container (even empty) because product, even at residual quantities, can ignite explosively. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

FIRE AND EXPLOSIVE PROPERTIES:

Flash Point (°C): 46°C (114.8°F)

Auto-Ignition Temperature (°C): No Data

Lower Explosive Limit (°C): No Data

Upper Explosive Limit (°C): No Data

SECTION 6: ACCIDENTAL SPILL OR LEAK RELEASE INFORMATION

Personal Protection: For personal protection see Section 8. Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to spreading of gases especially at ground level (heavier than air) and to the direction of the wind. If exposed to material during clean-up operations, see the FIRST AID PROCEDURES Section for actions to follow.

Environmental Precautions: Prevent spreading over a wide area by containment barrier. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for Cleaning Up: Contain spillage, and then collect with non-combustible absorbent material (earth, sand, diatomaceous earth, vermiculite) and place in container for disposal according to local and national regulations.

Other information: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapors/mists with a water spray jet.

SECTION 7: HANDLING AND STORAGE

Storage Conditions: Store in a cool, well ventilated place. Keep containers dry. Store product away from reactive and corrosive materials.

Handling Procedures: Containers of this material may be hazardous even when empty. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aliphatic Petroleum Distillates / Stoddard Solvent (CAS 8052-41-3)	100 ppm TWA	350 mg/m ³ TWA 20,000 mg/m ³ IDLH	500 ppm TWA; 2900 mg/m ³ TWA

OSHA Vacated PELs: Stoddard Solvent: 100 ppm TWA; 525 mg/m³ TWA

PERSONAL PROTECTIVE EQUIPMENT:

Eyes: 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 EN166.

Skin: Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

FACILITY CONTROL MEASURES:

Ventilation: Use normal local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution.

Other Protective Equipment: Facilities storing and utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES:

PROPERTY	METRIC UNITS	ENGLISH UNITS
Appearance:	Product in Plastic Container	Product in Plastic Container
Color:	Colorless	Colorless
State:	Liquid	Liquid
Odor Characteristics:	Citrus-like	Citrus-like
Flashpoint (° C); [° F]:	46°	114.8°
Viscosity, as Liquid (CP 20° C); [CP 68° F]:	No Data	No Data
Density (g/cm ³ @20°C); [lb/gal@68°F]	0.776	6.470
Vapor Density (Air = 1.0):	4.8	4.8
Vapor Pressure (mm Hg @ 20° C); [psia]:	No Data	No Data
Melting Point (°C); [°F]:	< -40 °C	< -40 °F
Boiling Point (°C); [°F]:	220°	428°
Solubility in Water (gr/100 cm ³); [lb/100 in ³]:	0; Non-soluble	0; Non-soluble

Evaporation Rate (n-butyl acetate = 1.0):	0.1	0.1
pH (product or water extract)	No Data	No Data
Percent Volatility (% wt):	100	100
Molecular Weight (gr/mol); [lb/mol]	No Data	No Data

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide.

Hazardous Polymerization: Product will not undergo polymerization.

Incompatibility: Avoid contact with strong oxidizing and reducing agents.

Conditions to Avoid: Heat sources, flames and sparks.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute oral toxicity

Aliphatic Petroleum Distillates : LD 50 Rat: > 5 g/kg
d-Limonene : LD 50 Rat: > 5 g/kg

Acute inhalation toxicity

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

Acute dermal toxicity

Aliphatic Petroleum Distillates : LD 50 Rabbit: (>) 3 g/kg
d-Limonene : LD 50 Rabbit: > 5 g/kg

SECTION 12: ECOLOGICAL INFORMATION

Biodegradability

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

Bioaccumulation

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

Ecotoxicity Effects

To fish:

Aliphatic Petroleum Distillates : no data available
d-Limonene : 96 h flow-through test LC 50 Fathead minnow
(Pimephales promelas): 0.61 - 0.79 mg/l
Method: Flow through
Mortality

To daphnia and other aquatic invertebrates:

Aliphatic Petroleum Distillates : no data available
d-Limonene : 48 h static test EC 50 Water flea (Daphnia pulex):
69.60 mg/l
Method: Static
Intoxication

Biochemical Oxygen Demand (BOD)

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

Chemical Oxygen Demand (COD)

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

Additional Ecological Information

Aliphatic Petroleum Distillates : no data available
d-Limonene : no data available

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL:

Procedure: Dispose of this material in accordance with all applicable local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT GROUND Hazard Description

Proper Shipping Name: NA
Hazard Class: NA
Identification Number: NA
Packing Group: NA
Documentation Required: NA

Domestic Shipment by Air

Proper Shipping Name: CONSUMER COMMODITY
Hazard Class: ORM-D-Air*
Identification Number: NA
Markings: ORM-D-Air*, Arrows
Documentation Required: Hazmat shipping papers*

Domestic Shipment by Vessel

Proper Shipping Name: CONSUMER COMMODITY
Hazard Class: ORM-D
Identification Number: NA
Markings: ORM-D, Arrows
Documentation Required: Hazmat shipping papers; indicating Marine Pollutant.

International Shipment Hazard Description (Air/Vessel/Ground)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (ALIPHATIC PETROLEUM DISTILLATES, DIPENTENE)
Hazard Class: 3
Identification Number: UN 1993
Packing Group: III
Markings: Limited Quantity, PSN & UN1993; (No Marine pollutant marking is required**).
Documentation Required: Hazmat shipping papers; Marine Pollutant (DIPENTENE aka D-LIMONENE) must be indicated when offered by vessel.

*Not all domestic air carriers accept ORM-D-Air materials. For those who do not, the shipments must be in compliance with international air regulations.

**Although the individual packages or overpacks are not required to be marked with the marine pollutant mark, Cargo Transport Units or Freight Containers used to transport the materials by sea must be marked with the Marine Pollutant mark.

SECTION 15: REGULATORY INFORMATION

EPA Regulation:

SARA SECTION 355/370, and 372: This product does not contain any chemicals subject to reporting requirements of SARA 313.

All components of this product are on the TSCA list.

State Regulations: This product meets requirements of Southern California AQMD Rule 443.1 and Similar Regulations California Proposition 65: This product contains the following chemical known to the State of California to cause cancer: None.

SECTION 16: OTHER INFORMATION

All information, recommendations, and suggestions made by IDQ, Inc. ("Company") appearing herein concerning our product are based upon tests and data believed to be reliable. However, because of the variable characteristics of analytical procedures and samples, and the inability to control its customers' uses of the information and recommendations, or the related products or materials, Company makes NO WARRANTY, EXPRESS OR IMPLIED as to the accuracy of the information or recommendations or that such are fit for any general or specific purpose, whatsoever. Company shall have NO LIABILITY arising from the use by its customers or any third parties of the information and recommendations, and it shall be each customer's sole responsibility to determine the suitability for its own use of any information or recommendations provided by Company.