# Jet A Aviation Fuel

Version 2.0 Revision Date 2013-05-10

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product information**

| | | |
|---|---|---|
| Trade name | : | Jet A Aviation Fuel |
| Material | : | 1102484, 1103429, 1102481, 1103418, 1102485, 1102483, 1102482, 1024254, 1024255, 1024256, 1024257, 1104981, 1104992 |
| Use | : | Fuel |
| **Company** | : | Specialty Chemicals<br>10001 Six Pines Drive<br>The Woodlands, TX 77380 |

**Emergency telephone:**

**Health**:
866.442.9628 (North America)
1.832.813.4984 (International)
**Transport**:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255)
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

| | | |
|---|---|---|
| Responsible Department | : | Product Safety and Toxicology Group |
| E-mail address | : | MSDS@CPChem.com |
| Website | : | www.CPChem.com |

## SECTION 2: Hazards identification

**Emergency Overview**

**Form**: Liquid **Physical state**: Liquid **Color**: Clear light yellow

OSHA Hazards : Carcinogen, Harmful by ingestion., Aspiration hazard, Delayed target organ effects

**GHS Classification**

: Flammable liquids, Category 3
Skin irritation, Category 2
Carcinogenicity, Category 2
Specific target organ systemic toxicity - single exposure, Category 3
Specific target organ systemic toxicity - repeated exposure, Category 1, Eyes, Blood
Aspiration hazard, Category 1
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

**GHS-Labeling**

Symbol(s) :

Signal Word : Danger

Hazard Statements :
H226: Flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.
H372: Causes damage to organs (Eyes, Blood) through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements :

**Prevention:**
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces. - 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 precautionary measures against static discharge.
P260: Do not breathe dust/fume/gas/mist/vapor/spray.
P264: Wash skin 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.

**Response:**
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313: IF exposed or concerned: Get medical advice/ attention.
P321: Specific treatment (see supplemental first aid instructions on this label).
P331: Do NOT induce vomiting.
P332 + P313: If skin irritation occurs: Get medical advice/ attention.
P362: Take off contaminated clothing and wash before reuse.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P391: Collect spillage.

**Storage:**
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.
**Disposal:**
P501: Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity:**

| | | |
|---|---|---|
| **IARC** | Group 2B: Possibly carcinogenic to humans | |
| | Naphthalene | 91-20-3 |
| **NTP** | Reasonably anticipated to be a human carcinogen | |
| | Naphthalene | 91-20-3 |
| **ACGIH** | Confirmed animal carcinogen with unknown relevance to humans | |
| | Kerosene C9-C16 | 8008-20-6 |

## SECTION 3: Composition/information on ingredients

Synonyms : Aviation Turbine Fuel A
Kerosene Turbine Fuel
Kerosene
Jet A-1 Fuel
Jet A Fuel

Molecular formula : UVCB

| Component | CAS-No. | Weight % |
|---|---|---|
| Kerosene C9-C16 | 8008-20-6 | 100 |
| Naphthalene | 91-20-3 | 0 - 3 |

## SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

## SECTION 5: Firefighting measures

| | | |
|---|---|---|
| Flash point | : | 37.8 °C (100.0 °F) |
| Autoignition temperature | : | 210 °C (410 °F) |
| Suitable extinguishing media | : | Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. |
| Unsuitable extinguishing media | : | High volume water jet. |
| Specific hazards during fire fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Special protective equipment for fire-fighters | : | Wear self contained breathing apparatus for fire fighting if necessary. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. |
| Fire and explosion protection | : | Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition. |
| Hazardous decomposition products | : | Hydrocarbons. Carbon oxides. |

## SECTION 6: Accidental release measures

| | | |
|---|---|---|
| Personal precautions | : | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. |
| Environmental precautions | : | Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods for cleaning up | : | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

## SECTION 7: Handling and storage

**Handling**

| | | |
|---|---|---|
| Advice on safe handling | : | Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. |
| Advice on protection against fire and explosion | : | Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition. |

**Storage**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. |

## SECTION 8: Exposure controls/personal protection

### Ingredients with workplace control parameters

**US**

| Ingredients | Basis | Value | Control parameters | Note |
|---|---|---|---|---|
| Kerosene C9-C16 | ACGIH | TWA | 200 mg/m3 | P, A3, Skin, varies, |
| | NIOSH REL | TWA | 100 mg/m3 | |
| | OSHA Z-1 | TWA | 500 ppm, 2,000 mg/m3 | (b), |
| | OSHA Z-1-A | TWA | 400 ppm, 1,600 mg/m3 | |
| Naphthalene | ACGIH | TWA | 10 ppm, | A4, Skin, |
| | ACGIH | STEL | 15 ppm, | A4, Skin, |
| | OSHA Z-1 | TWA | 10 ppm, 50 mg/m3 | (b), |
| | OSHA Z-1-A | TWA | 10 ppm, 50 mg/m3 | |
| | OSHA Z-1-A | STEL | 15 ppm, 75 mg/m3 | |

(b) The value in mg/m3 is approximate.
A3 Confirmed animal carcinogen with unknown relevance to humans
A4 Not classifiable as a human carcinogen
P Application restricted to conditions in which there are neglible aerosol exposures
Skin Danger of cutaneous absorption
varies varies

### Immediately Dangerous to Life or Health Concentrations (IDLH)

| Substance name | CAS-No. | Control parameters | Update |
|---|---|---|---|
| Naphthalene | 91-20-3 | Immediately Dangerous to Life or Health Concentration Value<br>250 parts per million | 1995-03-01 |

### Engineering measures

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection. |
| Hand protection | : | The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Eye protection | : | Eye wash bottle with pure water. Tightly fitting safety goggles. |
| Skin and body protection | : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear. |
| Hygiene measures | : | When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. |

## SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

**Appearance**

| | | |
|---|---|---|
| Form | : | Liquid |
| Physical state | : | Liquid |
| Color | : | Clear light yellow |

**Safety data**

| | | |
|---|---|---|
| Flash point | : | 37.8 °C (100.0 °F) |
| Lower explosion limit | : | 0.6 %(V) |
| Upper explosion limit | : | 4.7 %(V) |
| Oxidizing properties | : | no |
| Autoignition temperature | : | 210 °C (410 °F) |
| Molecular formula | : | UVCB |

| | | |
|---|---|---|
| Molecular Weight | : | Not applicable |
| pH | : | Not applicable |
| Pour point | : | No data available |
| Boiling point/boiling range | : | 149 - 300 °C (300 - 572 °F) |
| Vapor pressure | : | 0.40 MMHG |
| Relative density | : | 0.775, 20 °C(68 °F) |
| Density | : | 806.5 g/l |
| Water solubility | : | Negligible |
| Partition coefficient: n-octanol/water | : | No data available |
| Viscosity, kinematic | : | 1.5 cSt<br>at 20 °C (68 °F) |
| Relative vapor density | : | 4.5<br>(Air = 1.0) |
| Evaporation rate | : | 1 |
| Percent volatile | : | > 99 % |

## SECTION 10: Stability and reactivity

| | | |
|---|---|---|
| Chemical stability | : | This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |

**Possibility of hazardous reactions**

| | | |
|---|---|---|
| Conditions to avoid | : | Heat, flames and sparks. |
| Materials to avoid | : | May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc. |
| Other data | : | No decomposition if stored and applied as directed. |

## SECTION 11: Toxicological information

**Jet A Aviation Fuel**
**Acute oral toxicity** : LD50: > 5,000 mg/kg
Species: rat

**Acute inhalation toxicity**

Kerosene C9-C16 : LC50: > 5.28 mg/l
Exposure time: 4 h
Species: rat

| | |
|---|---|
| Naphthalene | LC50: >0.38 mg/m3Exposure time: 4 h |

**Acute dermal toxicity**

| | | |
|---|---|---|
| Kerosene C9-C16 | : | LD50: > 2,000 mg/kg<br>Species: rabbit |
| Naphthalene | | LD50: > 2,000 mg/kg<br>Species: rabbit |

**Jet A Aviation Fuel**
**Skin irritation** : May cause skin irritation in susceptible persons.

**Jet A Aviation Fuel**
**Eye irritation** : Vapors may cause irritation to the eyes, respiratory system and the skin.

**Jet A Aviation Fuel**
**Sensitization** : No adverse effects expected.

**Repeated dose toxicity**

| | | |
|---|---|---|
| Kerosene C9-C16 | : | Species: rabbit<br>Application Route: Dermal<br>Dose: 0, 200, 1000, 2000 mg/kg<br>Exposure time: 28 day<br>Number of exposures: 3 times/wk<br>Lowest observable effect level: 1,000 mg/kg |

**Carcinogenicity**

| | | |
|---|---|---|
| Kerosene C9-C16 | : | Species: mouse<br>Dose: 0, 28.5, 50, 100%<br>Exposure time: 104 wks<br>Number of exposures: 2, 4, or 7 times/wk<br>Remarks: Weak dermal carcinogen |
| Naphthalene | | Species: mouse<br>Sex: male<br>Dose: 10, 30 ppm<br>Exposure time: 105 weeks<br>Number of exposures: 6 hours/day, 5 days/week<br>Test substance: yes<br>Print Date: No information available.<br>Remarks: No evidence of carcinogenicity |

Species: mouse
Sex: female
Dose: 10, 30 ppm
Exposure time: 105 weeks
Number of exposures: 6 hours/day, 5 days/week
Test substance: yes
Print Date: No information available.
Remarks: increased incidence of alveolar/bronchiolar adenomas

Species: rat
Sex: male and female
Dose: 10, 30, 60 ppm
Exposure time: 105 weeks
Number of exposures: 6 hours/day, 5 days/week
Test substance: yes
Print Date: No information available.
Remarks: nose respiratory epithelial adenoma, increased incidence of olfactory neuroblastomas

**Teratogenicity**

Kerosene C9-C16 : Species: rat
Application Route: Inhalation
Dose: 0, 106, 364 ppm
Exposure time: 6 hrs/d
Test period: GD 6-15
NOAEL Teratogenicity: 364 ppm
NOAEL Maternal: 364 ppm

Naphthalene Species: rabbit
Application Route: oral gavage
Dose: 40, 200, 400 mg/kg
Test period: 29 d, GD 6-18
NOAEL Teratogenicity: 400 mg/kg

**Jet A Aviation Fuel**
**Aspiration toxicity** : May be fatal if swallowed and enters airways.
Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

**Jet A Aviation Fuel**
**Further information** : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

## SECTION 12: Ecological information

**Toxicity to fish**

Kerosene C9-C16 : LL50: 2 - 5 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD Test Guideline 203

| | |
|---|---|
| Naphthalene | LC50: 3.2 mg/l<br>Exposure time: 96 h<br>Species: Pimephales promelas (fathead minnow) |

**Toxicity to daphnia and other aquatic invertebrates**

| | | |
|---|---|---|
| Kerosene C9-C16 | : | EL50: 1.4 mg/l<br>Exposure time: 48 h<br>Species: Daphnia magna (Water flea)<br>Method: OECD Test Guideline 202 |
| Naphthalene | | LC50: 2.16 mg/l<br>Exposure time: 48 h<br>Species: Daphnia magna (Water flea) |

**Toxicity to algae**

| | | |
|---|---|---|
| Kerosene C9-C16 | : | EL50: 1 - 3 mg/l<br>Exposure time: 72 h<br>Species: Raphidocellus subcapitata (algae)<br>Method: OECD Test Guideline 201 |
| Naphthalene | | EC50: 2.96 mg/l<br>Exposure time: 48 h<br>Species: Selenastrum capricornutum (algae) |

Elimination information (persistence and degradability)

| | | |
|---|---|---|
| Biodegradability | : | Expected to be ultimately biodegradable |
| Additional ecological information | : | Toxic to aquatic life with long lasting effects.<br><br>An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.<br>Toxic to aquatic life with long lasting effects. |

## SECTION 13: Disposal considerations

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

| | | |
|---|---|---|
| Product | : | The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. |

## SECTION 14: Transport information

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III, (37.8 °C)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III, (D/E)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**
UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

## SECTION 15: Regulatory information

**National legislation**

**SARA 311/312 Hazards** : Acute Health Hazard
Chronic Health Hazard

**EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO – KNOW**

CERCLA Reportable Quantity : 3333 lbs

Naphthalene

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

SARA 302 Threshold Planning Quantity : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA 313 Ingredients : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Naphthalene - 91-20-3

**Clean Air Act**

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

**US State Regulations**

Pennsylvania Right To Know
: Kerosene C9-C16 - 8008-20-6
Naphthalene - 91-20-3

New Jersey Right To Know
: Kerosene C9-C16 - 8008-20-6
Naphthalene - 91-20-3

California Prop. 65 Ingredients : WARNING! This product contains a chemical known in the State of California to cause cancer.

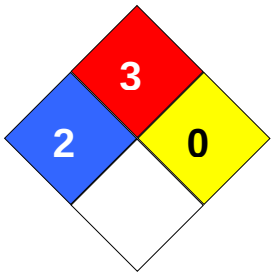
WARNING! This product contains a chemical known in the State of California to cause cancer.
Naphthalene 91-20-3

**Notification status**

| | | |
|---|---|---|
| Europe REACH | : | This mixture contains only ingredients which have been subject to a pre-registration according to Regulation (EU) No. 1907/2006 (REACH). |
| United States of America US.TSCA | : | On TSCA Inventory |
| Canada DSL | : | All components of this product are on the Canadian DSL. |
| Australia AICS | : | On the inventory, or in compliance with the inventory |
| New Zealand NZIoC | : | On the inventory, or in compliance with the inventory |
| Japan ENCS | : | On the inventory, or in compliance with the inventory |
| Korea KECI | : | On the inventory, or in compliance with the inventory |
| Philippines PICCS | : | On the inventory, or in compliance with the inventory |
| China IECSC | : | On the inventory, or in compliance with the inventory |

## SECTION 16: Other information

**NFPA Classification** : Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0




**Further information**

Legacy MSDS Number : 1975

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

| Key or legend to abbreviations and acronyms used in the safety data sheet | | | |
|---|---|---|---|
| ACGIH | American Conference of Government Industrial Hygienists | LD50 | Lethal Dose 50% |
| AICS | Australia, Inventory of Chemical Substances | LOAEL | Lowest Observed Adverse Effect Level |
| DSL | Canada, Domestic Substances List | NFPA | National Fire Protection Agency |

| | | | |
|---|---|---|---|
| NDSL | Canada, Non-Domestic Substances List | NIOSH | National Institute for Occupational Safety & Health |
| CNS | Central Nervous System | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service | NZIoC | New Zealand Inventory of Chemicals |
| EC50 | Effective Concentration | NOAEL | No Observable Adverse Effect Level |
| EC50 | Effective Concentration 50% | NOEC | No Observed Effect Concentration |
| EGEST | EOSCA Generic Exposure Scenario Tool | OSHA | Occupational Safety & Health Administration |
| EOSCA | European Oilfield Specialty Chemicals Association | PEL | Permissible Exposure Limit |
| EINECS | European Inventory of Existing Chemical Substances | PICCS | Philippines Inventory of Commercial Chemical Substances |
| MAK | Germany Maximum Concentration Values | PRNT | Presumed Not Toxic |
| GHS | Globally Harmonized System | RCRA | Resource Conservation Recovery Act |
| >= | Greater Than or Equal To | STEL | Short-term Exposure Limit |
| IC50 | Inhibition Concentration 50% | SARA | Superfund Amendments and Reauthorization Act. |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| IECSC | Inventory of Existing Chemical Substances in China | TWA | Time Weighted Average |
| ENCS | Japan, Inventory of Existing and New Chemical Substances | TSCA | Toxic Substance Control Act |
| KECI | Korea, Existing Chemical Inventory | UVCB | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials |
| <= | Less Than or Equal To | WHMIS | Workplace Hazardous Materials Information System |
| LC50 | Lethal Concentration 50% | | |