

NITRAZINE YELLOW

GHS Safety Data Sheet

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

NITRAZINE YELLOW

OTHER NAMES

C16-H8-N4-Na2-O11-S2, "C.I. 14890", "Nitrazol Yellow", Phenaphthazine, "2, 4--dinitrobenzeneazo-1-naphthol-3, 6-disulfonic acid disodium salt", "disodium;3-[(2, 4-dinitrophenyl)hydrazinylidene]-4-oxonaphthalene-2, 7-disulfonate", "2-(2, 4-dinitrophenolazo)-1-hydroxynaphthalene-3, 6-disulfonic acid, disodium salt", "disodium 2-(2, 4-dinitrophenolazo)-1-hydroxynaphthalene-3, 6-disulfonate", "2-(2, 4-dintrophenylazo)naphthol-3, 6-disulfonic acid, disodium"

PROPER SHIPPING NAME

FLAMMABLE SOLID, ORGANIC, N.O.S.(contains Nitrazine Yellow)

PRODUCT USE

■ Colourant.
Indicator

SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315- 317, T.V.Ind.Estate,

248, Worli Road,

Mumbai- 400030, India

www.sdfine.com

Telephone: 91- 22 24959898/99

Fax: 91- 22 2493 7232

Email: technical@sdfine.com

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Carcinogen Category 2

Flammable Solid Category 2

Skin Sensitizer Category 1



EMERGENCY OVERVIEW

HAZARD

WARNING

Determined by using GHS criteria

H228

Flammable solid.

H317

May cause an allergic skin reaction.

H351

Suspected of causing cancer.

PRECAUTIONARY STATEMENTS

Prevention

Code

P201

Phrase

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.

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Section 2 - HAZARDS IDENTIFICATION

P240	Ground/bond container and receiving equipment.
P241	Use explosion- proof electrical/ventilating/lighting/ ... /equipment
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
Response Code	Phrase
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
Storage Code	Phrase
P405	Store locked up.
Disposal Code	Phrase
P501	Dispose of contents/container to ...

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
Nitrazine Yellow	5423-07-4	>98

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

- If this product comes in contact with eyes:
- Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

- Treat symptomatically.

Periodic medical surveillance should be carried out on persons in occupations exposed to the manufacture or bulk handling of the product and this should include hepatic function tests and urinalysis examination. [ILO Encyclopaedia].

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- For SMALL FIRES:
Dry chemical, CO2, water spray or foam.
- For LARGE FIRES:
Water-spray, fog or foam.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

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Section 5 - FIRE FIGHTING MEASURES

- Fight fire from a safe distance, with adequate cover.

FIRE/EXPLOSION HAZARD

- Flammable solid which burns and propagates flame easily, even when partly wetted with water.
- Any source of ignition, i.e. friction, heat, sparks or flame, may cause fire or explosion.
- May burn fiercely
- May form explosive mixtures with air.

Combustion products include: carbon dioxide (CO₂), nitrogen oxides (NO_x), sulfur oxides (SO_x), metal oxides, other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Remove all ignition sources.
- DO NOT touch or walk through spilled material.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- DO NOT touch or walk through spilled material.
- Control personal contact with the substance, by using protective equipment.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)
- Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.
- Establish good housekeeping practices.
- Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.

SUITABLE CONTAINER

- For low viscosity materials and solids:

Drums and jerricans must be of the non-removable head type.

Where a can is to be used as an inner package, the can must have a screwed enclosure.</>.

STORAGE INCOMPATIBILITY

- Toxic gases are formed by mixing azo and azido compounds with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, halogenated organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidising or reducing agents.
- Flammable gases are formed by mixing azo and azido compounds with alkali metals.
- Explosive combination can occur with strong oxidising agents, metal salts, peroxides, and sulfides
- Azo, diazo and azido compounds can detonate especially where organic azides have been sensitised by the addition of metal salts or strong acids.
- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- FOR MINOR QUANTITIES:

- Store in an indoor fireproof cabinet or in a room of noncombustible construction.
- Provide adequate portable fire-extinguishers in or near the storage area.

FOR PACKAGE STORAGE:

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.

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Section 7 - HANDLING AND STORAGE

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- Nitrazine Yellow:

CAS:5423- 07- 4

MATERIAL DATA

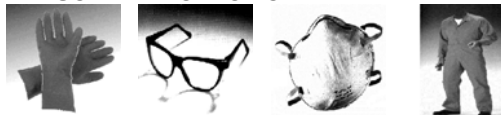
NITRAZINE YELLOW:

■ It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience).

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

PERSONAL PROTECTION



RESPIRATOR

- Particulate dust filter. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

■ NOTE:

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:.

- Wear physical protective gloves, e.g. leather.
- Wear safety footwear.

OTHER

- Overalls.
- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

ENGINEERING CONTROLS

■ For large scale or continuous use:

- Spark-free, earthed ventilation system, venting directly to the outside and separate from usual ventilation systems
- Provide dust collectors with explosion vents.

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Red orange to brown powder; mixes with water.

PHYSICAL PROPERTIES

Mixes with water.

State	DIVIDED SOLID	Molecular Weight	542.36
Melting Range (°C)	Not Available	Viscosity	Not Applicable
Boiling Range (°C)	Not Applicable	Solubility in water (g/L)	Miscible
Flash Point (°C)	Not Available	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Negligible
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	Not Available
Lower Explosive Limit (%)	Not Available	Relative Vapour Density (air=1)	Not Applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not Applicable

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

Health hazard summary table:

Acute toxicity	Not applicable
Skin corrosion/irritation	Not applicable
Serious eye damage/irritation	Not applicable
Respiratory or skin sensitization	Skin Sens. 1
Germ cell mutagenicity	Not applicable
Carcinogenicity	Carc. 2
Reproductive toxicity	Not applicable
STOT- single exposure	Not applicable
STOT- repeated exposure	Not applicable
Aspiration hazard	Not applicable

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

- The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.

EYE

- Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.

SKIN

- The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models).

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Section 11 - TOXICOLOGICAL INFORMATION

Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

- The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).

Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.

CHRONIC HEALTH EFFECTS

- There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Many azo dyes (aromatic amines) have been found to cause cancer in laboratory animals, affecting the liver, bladder and gut. Specific toxicity effects in humans have not been established, but some dyes are known to cause mutations. Benzidine and its metabolic products have been detected in the urine of workers exposed to direct azo dyes. An epidemiological study of silk dyers and painters with multiple exposures to benzidine-based and other dyes indicate a strong association with bladder cancer.

Not all azo dyes cause genetic damage; only those that contain either phenylenediamine or benzidine in the molecule cause mutations. Also, the potential to cause genetic toxicity is affected by many function groups such as NO₂, CH₃ and NH₂.

Many aromatic amines cause cancer and/or mutations. This appears to involve bioactivation by various tissues and / or bacteria.

The azo dyes which are simpler in structure have a specific group that is the responsible for any cancer-causing activity - this group undergoes biochemical oxidation and further reaction to form reactive electrophiles. The DNA adducts formed in this way have been identified. However, this activity is not found in all azo compounds, and, subtle changes to structure can change the cancer-causing activity of the compound, thereby reducing or eliminating it. Complex dyes with more than one azo linkage (double bond between two nitrogen atoms) may be metabolised to produce toxic cancer-causing aromatic amines, such as benzidine.

The bioactivation of the cancer-causing aromatic amines is generally believed to occur in two steps: N-hydroxylation catalysed by cytochrome P450 (a liver enzyme) to give N-hydroxylarylamines, and subsequent o-acetylation dependent on acetyl-CoA. The N-acetoxy esters formed by acetylation. The N-acetoxy esters formed by acetylation of hydroxylamines are reactive species with affinity for electrons, which give rise to covalent DNA-adduct, probably via the loss of a negative ion, yielding a nitrenium ion.

In the past, azo colourants based on benzidine, 3,3'-dichlorobenzidine, o-tolidine (3,3-dimethylbenzidine) and o-dianisidine (3,3'-dimethoxybenzidine) have been synthesized in large amounts and numbers. Studies in exposed workers have demonstrated that the azoreduction of benzidine-based dyes occurs in humans. The metabolic conversion of benzidine-, 3,3'-dimethylbenzidine and o-tolidine-based dyes to their cancer-causing amine precursors in animal testing is a general phenomenon which must be considered for all members in this class of chemicals.

Azo dyes containing phenylenediamine cause mutations in certain experiments, most likely due to the formation of oxidised p-phenylenediamine. P-phenylenediamine is oxidised in the liver by microsomal enzymes (S9). Pure p-phenylenediamine does not cause mutations, but once oxidized, it does. Changing the moieties that can be metabolized to p-phenylenediamine by sulfonation, carboxylation or forming a complex with copper eliminates the mutation-causing properties.

The bioavailability of azo dyes also determines whether they are converted metabolically to cancer-causing substances. As most azo pigments are based on 3,3'-dichlorobenzidine, much of the experimental data are focused on this group. Long-term animal testing did not show that 3,3-dichlorobenzidine-based pigments caused cancer. Therefore, it is very unlikely that occupational exposure to insoluble azo pigments would be associated with a substantial risk of bladder cancer in humans. According to current EU regulations, azo dyes based on benzidine, o-dianisidine and o-tolidine have been classified as Category 2 cancer-causing substances, that is, "substances which should be regarded as causing cancer in humans". This is not so for 3,3'-dichlorobenzidine-based azo pigments.

It is also postulated that some of the aromatic amines metabolically produced from azo dyes may be responsible for inducing autoimmune diseases such as lupus. This is probably because lupus-inducing drugs are amines in nature. They also have similar metabolic activation pathways as the precursors of bladder cancer-causing agents, the difference being that the latter interact with DNA to form covalent adducts which produce mutations, while the former interact with DNA to provoke immune responses.

Azo dyes are widely used in industry. A large amount of these dyes are discharged into streams and rivers, and they are considered environment pollutants. Some of these compounds may accumulate into food chains, and eventually reach the human body through swallowing. Intestinal bacteria and to a lesser extent, the liver enzymes, are responsible for the breakdown of azo dyes into aromatic amines. Some of the normal bacteria that reside in the bladder can metabolically activate aromatic amines that are produced from azo dyes which are precursors of cancer-causing substances. The addition of the nitro-group to these aromatic amines would convert them into direct mutation-causing substances.

These findings may also partly explain the close relationship between chronic infection and cancer development.

Skin bacteria are thought to be responsible for the breakdown of certain azo dyes to produce cancer-causing substances; of importance are dye-stuffs found in cosmetics, hair dyes, textiles and tattoo inks.

Several laboratory and animal studies suggest that certain azo dyes may be reductively broken down when applied to the skin in the presence of oxygen. Results obtained with the various azo dyes suggest that reductive breakdown to aromatic amines must be considered a significant degradation pathway. It is generally thought about 30% of the dye may be broken down in this manner. From the available literature on this chemical class of azo dyes, it can be deduced that all azo dyes which are split into cancer-causing arylamines have the potential to cause cancer.

Both water-soluble and fat-soluble azo dyes of this class have been shown experimentally to undergo breakdown to potentially

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Section 11 - TOXICOLOGICAL INFORMATION

cancer-causing substances.

TOXICITY AND IRRITATION

■ The following information refers to contact allergens as a group and may not be specific to this product.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.

No significant acute toxicological data identified in literature search.

Detailed analysis of molecular structure indicates that the azo colourant can split off cancer-causing arylamines.

The azo linkage, a double bond between two nitrogen atoms, is considered the most unstable part of an azo dye. This bond is easily broken down by not only enzymes, but heat or light. Breakdown results in the release of component amines. The ultimate degradation pathway of the dyes is dependent on solubility in water. For example, the azo linkage in many azo pigments is not available for breakdown by enzymes in the cell due to its poor water solubility, but is broken down by normal bacteria in the gut. After the azo linkage is broken, the component aromatic amines. Of these, 22 are recognised as potentially causing cancer in humans, and several in animals. Sulfonation of the dye promotes excretion, thus reducing toxicity.

The component amines which may be released by azo dyes are mostly aromatic amines (compounds where an amine group or amine-generating group (s) are connected to an aryl moiety). In general, aromatic amines known to cause cancer may be grouped into five groups:

- anilines, e.g. o-toluidine.
- Extended anilines, e.g. benzidine.
- Fused ring amines, e.g. 2-naphthylamine.
- Aminoazo and other azo compounds, e.g. 4-(phenylazo)aniline.
- Heterocyclic amines.

The aromatic amines containing moieties of anilines, extended anilines and fused ring amines are components of most industrially important azo dyes.

Reductive fission of azo group, by bacteria in the gut or by enzymes in and outside the liver can cause benzidine-based aromatic amines to be released, which have been detected in the urine in humans. The release of these amines has been associated with mutations and cancer in laboratory animal testing. Research shows that there are indications that occupational exposure to benzidine-based azo colourants can increase the chances of developing bladder cancer.

The acute toxicity of azo dyes is low. Red azoic dyes have been linked to allergic contact dermatitis in heavily exposed workers. Furthermore, textiles coloured with disperse azo dyes have caused allergic dermatitis in a few cases.

Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Nitrazine Yellow	HIGH	No Data Available	LOW	LOW

Section 13 - DISPOSAL CONSIDERATIONS

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.

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Section 13 - DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE SOLID

HAZCHEM:

1Z

Land Transport UNDG:

Class or division:	4.1	Subsidiary risk:	None
UN No.:	1325	UN packing group:	III
Shipping Name: FLAMMABLE SOLID, ORGANIC, N.O.S. (contains Nitrazine Yellow)			

Air Transport IATA:

ICAO/IATA Class:	4.1	ICAO/IATA Subrisk:	None
UN/ID Number:	1325	Packing Group:	III
Special provisions:	A3		

Shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (contains Nitrazine Yellow)

Maritime Transport IMDG:

IMDG Class:	4.1	IMDG Subrisk:	None
UN Number:	1325	Packing Group:	III
EMS Number:	F- A, S- G	Special provisions:	223 274 915
Limited Quantities:	5 kg		
Shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (contains Nitrazine Yellow)			

Section 15 - REGULATORY INFORMATION

REGULATIONS

Nitrazine Yellow (CAS: 5423-07-4) is found on the following regulatory lists;

"FisherTransport Information", "Sigma-AldrichTransport Information"

Section 16 - OTHER INFORMATION

Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
Nitrazine Yellow	5423- 07- 4	Carc3; R40 R43

- Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.

- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

•The following is a list of Aryl Amines that may be formed by reductive cleavage of Nitrazine Yellow(5423- 07- 4)
AMINE CAS

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Section 16 - OTHER INFORMATION

beta- naphthylamine

91-59-8

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

Issue Date: 29-May-2018